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

FEED THE FUTURE NIGERIA AGRICULTURAL POLICY PROJECT

Quarterly Report – Year 5

Second Quarter: January 1- March 31, 2020

Associate Cooperative Agreement Number AID-620-LA-15-00001
Activity Period: July 1, 2015 to June 30, 2020
AOR Name: Samba Kawa, PhD

Submitted April 30, 2020

Submitted by: Dr. Saweda Liverpool-Tasie, Principal Investigator
Michigan State University
Morrill Hall of Agriculture

MSU Principal Investigator	Dr. Saweda Liverpool-Tasie	**IFPRI Chief of Party**	Dr. Kwaw Andam
Email:	lliverp@anr.msu.edu	**Email:**	k.andam@cgiar.org
Telephone:	+001- 517-432-5418	**Telephone:**	+234-9087998911

ACRONYMS

A4NH	Agriculture for Nutrition and Health
ADAN	Association of Deans of Agricultural Universities
AGRA	Alliance for a Green Revolution in Africa
ANOVA	Analysis of variance
AOR	Agreement Officer's Representative
APP	Agricultural Promotion Policy
ARCN	Agricultural Research Council of Nigeria
ATA	Agricultural Transformation Agenda
AU	African Union
BR	Biannual Review
CAADP	Comprehensive Africa Agriculture Development Program
CAPI	Computer Assisted Personal Interviewing
CBD	Central Business District
CGIAR	Consultative Group for International Agricultural Research
DC	District of Columbia
ERGP	Economic Growth Recovery Plan
FCT	Federal Capital Territory
FDAE	Federal Department of Agricultural Extension
FG	Federal Government
FGD	Focus Group Discussion
FMARD	Federal Ministry of Agriculture and Rural Development
FTF	Feed the Future
FY	Fiscal Year
GHSP	Nigeria General Household Survey Panel
GON	Government of Nigeria
IBB	Ibrahim Badamasi Babangida
IFDC	International Fertilizer Development Center
IFPRI	International Food Policy Research Institute
JSR	Joint Sector Review
KII	Key Informant Interview
LGA	Local Government Area
LSMS	Living Standards Measurement Study
LSMS – ISA	Living Standards Measurement Study - Integrated Surveys
M&E	Monitoring and Evaluation
MANR	Ministry of Agriculture and Natural Resources
MEL	Monitoring, Evaluation & Learning
MELP	Monitoring, Evaluation & Learning Plan
MSU	Michigan State University
NAERLS	National Agricultural Extension and Research Liaison Services
NAPP	Nigerian Agricultural Policy Project
NASC	National Agricultural Seeds Council
NASS	National Assembly
NCDs	Non-Communicable Diseases
NDHS	Nigeria Demographic and Health Survey
NGO	Non-Governmental Organization

NSSP	Nigeria Strategy Support Program
OPI	Organizational Performance Index
PCU	Project Coordinating Unit
PIND	Partnership Initiatives in the Niger Delta
SAPRC	State Agricultural Policy Review Committee

Contents

1. PROGRAM OVERVIEW / SUMMARY

Program Name:	Feed the Future Nigeria Agricultural Policy Project
Activity Start Date and End Date:	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:	January 1, 2020 – March 31, 2020
Project personnel mentioned in this report and their project role:	Dr. Saweda Liverpool-Tasie (Principal Investigator, MSU) Dr. Kwaw Andam (Chief of Party, IFPRI) Dr. Bedru Balana (Research Fellow, IFPRI) Mr. Hyacinth Edeh (Country Program Manager, IFPRI) Dr. Mulubrhan Amare (Associate Research Fellow, IFPRI) Dr. Suresh Babu (Senior Research Fellow, IFPRI) Dr. Olivier Ecker (Senior Research Fellow, IFPRI) Mr. Steve Longabaugh (Specialist, MSU) Dr. Michael Olabisi (Assistant Professor, MSU) Dr. Tom Reardon (Distinguished Professor, MSU) Dr. Laura Schmitt Olabisi (Associate Professor, MSU) Dr. Hiroyuki Takeshima (Senior Research Fellow, IFPRI) Dr. Oyinkan Tasie (Assistant Professor, MSU) Dr. Todd Benson (Senior Research Fellow, IFPRI)

This progress report summarizes the key activities undertaken by the Feed the Future Nigeria Agricultural Policy Project for the second quarter (January 1- March 31, 2020) of fiscal year 2020.

1.1 Summary of Results to Date (Y5)

Table 1: Quarter 2 Progress actuals against FY 2020 targets

Below are the results obtained during the second quarter of FY 2020 for each indicator showing progress made in contributing to the FY 2020 target.

Project Indicator Title	Baseline Data	Project Annual Target (Oct 1, 2019- Mar 31. 2020	Project Annual Actual at Q1 + Q2	Comment If yearly actual is 10% more or less than target	Annual Performance Achieved to End of Reporting Period (%)	Project Target[1]	Project Actual[2]	LOP Performance achievement (%)
1. Number of high-quality research reports published having undergone peer review (internal/external) and disaggregated by type (working papers and journal articles) (Annex A). Custom Indicator	N/A	12	9			55	78	142

[1] Project Target: These are numbers or percentages targeted for each indicator from Y1 – Y5 i.e. (Y1+Y2+Y3+Y4+Y5). It is important to note that some of the project indicators have been changed over the years, where some indicators were being dropped some were added in year 3 (indicator 6, 7&8 and Year 4 (indicator 3). This accounts for the significant increase in the target set for Y4.

[2] Project Actual: These are the actual numbers achieved for each indicator from Y1- Y5 i.e. (Y1+Y2+Y3+Y4 + Y5 (Q1)). Actual data for indicators 6, 7 & 8 are from Y3 & Y4 (Q1, Q2 & Q3) while actual for indicator 3 is from Y4 which is an annual indicator.

Project Indicator Title	Baseline Data	Project Annual Target (Oct 1, 2019-Mar 31. 2020	Project Annual Actual at Q1 + Q2	Comment If yearly actual is 10% more or less than target	Annual Performance Achieved to End of Reporting Period (%)	Project Target[1]	Project Actual[2]	LOP Performance achievement (%)
2. Number of participants attending project organized research and policy events. (Annex B). Custom Indicator	N/A	673	12,374	See comment below		4356	16,598	381.04
3. Number of agricultural and nutritional enabling environment policies analyzed, consulted on, drafted or revised, approved and implemented with USG assistance Custom Indicator	N/A	2	Annual indicator		NA			
4. Number of individuals participating in USG food security programs. (Annex C) Standard Feed the Future (FTF) Indicator EG.3.2	N/A	842	615		NA	5639	5108	90.58
5. Number of individuals who have received USG supported degree-granting non-nutrition-related food security training. (Annex D).	N/A	0	3			13	13	100

Project Indicator Title	Baseline Data	Project Annual Target (Oct 1, 2019-Mar 31. 2020	Project Annual Actual at Q1 + Q2	Comment If yearly actual is 10% more or less than target	Annual Performance Achieved to End of Reporting Period (%)	Project Target[1]	Project Actual[2]	LOP Performance achievement (%)
Standard Feed the Future Indicator (FTF) EG.3.2-2								
6. Percent of USG-assisted organizations with improved performance Standard Feed the Future (FTF) indicator 3.2-29	N/A	12	Annual indicator		NA	63		
7. Number of agriculture policy communications developed and/or written for stakeholder consumption disaggregated by: Type of communication (policy brief, newspaper article, white paper, radio program, television program), main stakeholder group targeted (GON, private sector, civil society), and Lead in policy communication developed or written: GON, USG, private sector, civil society. (Annex F). Custom Indicator	N/A	18	15		0	83	128	152

Project Indicator Title	Baseline Data	Project Annual Target (Oct 1, 2019-Mar 31. 2020	Project Annual Actual at Q1 + Q2	Comment If yearly actual is 10% more or less than target	Annual Performance Achieved to End of Reporting Period (%)	Project Target[1]	Project Actual[2]	LOP Performance achievement (%)
8. Number of public private advocacy dialogues focused on policy that supports private sector investment. Custom Indicator	N/A	2	0			12	7	58
9. 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. Custom Indicator	1.206	20 % point positive change	Semi Annual Indicator Biennial indicator		Semi Annual Indicator Biennial indicator	30% positive change from baseline result	1.44	
10. 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. Custom Indicator	1.342	20 % point positive change	Semi Annual Indicator Biennial indicator		Semi Annual Indicator Biennial indicator	30% positive change from baseline result	1.74	

Indicator 2 comment: The project made an extensive effort to disseminate the dual message of Maize Handling and the Dangers of Aflatoxins into the hands of everyday Nigerians. This entailed 1) NAPP scholar Mrs. Toyin Adebowale and her Nigerian advisor (Dr. Obadina, University of Agriculture,

Abeokuta) training people to disseminate information on safe maize production and handling practices to avoid Aflatoxin contamination (74 trained in Q2 alone). Those so trained (including those trained last quarter) then launched out for 4-6 weeks of dissemination. These disseminations took place in Niger State, Benue State, Ogun State and Ebonyi State. This was extremely successful and resulted in this outcome. For additional information, please see section 1.2.2, Appendix B and Appendix G of the Y5 Q2 report.

2. ACTIVITY IMPLEMENTATION PROGRESS

2.1 Progress Narrative

This narrative documents the progress made in the second quarter of Year 5 by the Feed the Future Nigeria Agricultural Policy Project (NAPP) in the implementation of the Year 5 work plan. The work plan was approved by the United States Agency for International Development (USAID)/Nigeria on October 24, 2019. The Year 5 work plan is broken down into the three main Project components: 1) Enhancing national agriculture and food security policy capacity; 2) Policy – driven collaborative research and analysis; and 3) Strengthening evidence-based policy process and promoting impact.

As shown in this report, the Project continues to make good progress towards achieving objectives of supporting policy-making at the federal and state levels with evidence-generation through collaborative research and analysis, capacity building, and communications. The Project is currently due to expire on June 30, 2020. On March 17, 2020, the Project submitted a request for a no-cost extension until December 31, 2020. The Project will use the extension period to complete and document planned activities. The Project will also explore effective mechanisms to meet new demands through a future follow-on activity. Building on the impacts of the current activity, stakeholders in Nigeria have identified key issues in agricultural policy formulation, implementation, and evaluation that require evidence-based analysis and capacity building to support Nigeria's path to self-reliance. These include areas such as food and nutrition security (including food safety), trade restrictions, agricultural input policies, and value chain development. The Project has also received requests for training and mentoring along the lines of the Project Scholars Program.

During the quarter, the global pandemic COVID-19 spread to Nigeria, the federal and state governments responded quickly with a range of polices to combat the spread of the virus, and Nigeria (along with most other countries) experienced unprecedented disruptions to travel, business, and development activities. At the time of writing this report, the Nigeria Center for Disease Control (NCDC) had confirmed 141 COVID-19 cases in the Abuja Federal Capital Territory (FCT) and a total of 47 cases in seven states where the Project undertakes activities (Benue, Delta, Ebonyi, Kaduna, Kebbi, Niger, and Oyo). The only Project state with no case was Cross-River. On March 29, 2020, the federal government imposed movement restrictions in the FCT, Lagos, and Ogun States for five weeks until May 2, 2020, when a planned gradual removal of the restrictions will start. Other states and local governments have adopted similar measures to restrict movements and to ban large gatherings. While some planned activities are therefore necessarily delayed, the Project is using digital technologies to maintain communications with partners and stakeholders, and to continue with several activities in order to minimize disruptions to achieving set objectives.

Component 1: A Strategy for Enhancing National Agriculture and Food Security Policy Capacity

1. Capacity building-training courses organized

In Year 5, capacity-building activities for the Project's targeted beneficiaries continue to be demand-driven. The Project received capacity building demands from its target beneficiaries during the development of the Year 5 workplan. These demands form the basis for the organized trainings during the quarter under review.

The Project organized training courses in this quarter on "Nigeria Agricultural Policies and Strategies", "Agricultural Policy Formulation, Presentation and Analysis", "Survey Design and Implementation", "Introduction to Policy Communication" "Monitoring, Evaluation and Learning (MEL)", "Data Analysis using R Statistical Software" and " Best Practices for Maize Production and Handling". The training on the 'Nigeria Agricultural Policies and Strategies' is aimed at increasing the understanding of the beneficiaries, especially at the state-level, on the various national agricultural policies. This understanding is considered important for improving the synergy between the states and the federal agricultural ministries in the implementation of national agricultural policies.

The training on "Agricultural Policy Formulation, Presentation and Analysis" is part of efforts of the Project to strengthen the understanding of agricultural policy makers and implementers at the state level by 1) highlighting the relationship between and among related concepts such as policy, program, project, modalities for their presentation; and 2) showing the modalities for policy targeting, monitoring and evaluation. The 'Introduction to Policy Communication' training focused on the concepts of policy communications including the effective use of social media for disseminating and measuring impact, as well as how and when to use policy briefs. Further, the 'Survey Design and Implementation' training was designed to equip policy researchers with key principles and procedures for planning, designing and implementing statistical sample surveys such as economic and household statistics. Similarly, the MEL training course addresses the capacity needs of the participants towards the improvement of the overall performance of their organizations in achieving set goals.

The training courses on Data Analysis using the free "R" statistical software is part of the Project's response to challenges faced by previous Nigerian scholars with purchasing the software licenses for other statistical software. The trainings on "R" in this quarter were all offered by the Project Scholars who have been trained and mentored on the free "R" software over the last two years. In recognition of the different needs for and application of data analysis, different versions of the trainings were provided for academic faculty and staff of State Ministries of Agriculture. Following each training, a WhatsApp group was formed to provide a platform for the facilitating Project scholars to continue mentoring the participants as they apply their new skills in their respective research and data analysis endeavors.

The training course 'Best Practices for Maize Production and Handling' was organized by the Project's aflatoxin research team. It was designed as a training of trainers. First participants, including extension agents were trained on how to manage maize, from the farm to the consumer to ensure food safety is preserved. The second goal of the program was to ensure that in the immediate future, the participants would be able to disseminate the findings and train others in their communities about aflatoxin and maize management.

Following the Project's guide on gender mix and relevance of training to work schedule, the Project partners managed the selection of course participants. As was the case in Year 4, the Project in Year 5 continues to mentor previous beneficiaries by engaging them in trainings for new beneficiaries. The Project scholars who had spent time at Michigan State University and other Project beneficiaries are now leading or facilitating various training efforts for diverse stakeholders including private sector, ministries of agriculture and academic institutions in Nigeria. While this approach directly addresses capacity building needs of the target organizations, it also helps to ensure the sustainability of the Project activities beyond the life of the Project. The major activities undertaken in Q2 under Component 1 are summarized in Table 2 and narrated below the table.

Table 2: Indicator 4. Number of individuals participating in USG food security programs

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
1.1 FMARD/National Trainings **1.1.1 FMARD/National Capacity Building and Mentoring Activities**							
February 17 – 18, 2020	FADAMA House, Abuja	Survey Design and Management	FMARD	18	6	0	24
February 27 – 28, 2020	IFDC Conference Room Abuja	Nigeria Agricultural Policies and Strategies	NASS Press	9	4	0	13
1.1.2 Universities							
January 15 – 17, 2020	Federal University of Technology, Minna, Niger State	Introduction to Monitoring, Evaluation and Learning	Academia	19	6	0	25
January 15 – 16, 2020	University of Calabar, Cross River State	Survey Design and Management	Academia	24	2	0	26
January 27-31, 2020	Ebonyi State University	Training Workshop on R	Academia	17	6	0	23
February 17-21, 2020	Ibrahim Badamasi Babangida (IBB) University, LAPAI, Niger State	Training Workshop On R	Research and academic	22	3	0	25
March 17-21, 2020	Ahmadu Bello University, Zaria	Training Workshop On R	Research and academic	18	3	1	20
March 18 – 20, 2020	Delta State University, Asaba, Delta State	Introduction to Monitoring, Evaluation and Learning	Academia	16	7	0	23
1.2. State trainings and capacity building efforts							

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
January 13 -14, 2020	State Ministry of Agriculture and Natural Resources, Calabar, Cross River State	Survey Design and Management	State Ministry of Agriculture	16	9	0	25
January 16 – 17, 2020	State Ministry of Agriculture and Natural Resources, Abakaliki, Ebonyi State	Agricultural Policy Formulation, Presentation and Analysis	State Ministry of Agriculture	16	15	0	31
January 20-24, 2020	Ministry of Agriculture, Abakaliki, Ebonyi State.	R Training for staff of Ministry of Agriculture	Government sector	14	4	0	18
January 21 – 23, 2020	Ministry of Agriculture and Natural Resources, Asaba, Delta State	Introduction to Monitoring, Evaluation and Learning	State Ministry of Agriculture	21	6	0	27
January 21 – 22, 2020	Ministry of Agriculture, and Natural Resources, Makurdi Benue State	Nigeria Agricultural Policies and Strategies	State Ministry of Agriculture	17	9	0	26
January 27-28, 2020	State Ministry of Agriculture and Rural Development, Mina, Niger State Secretariat	Nigeria agricultural project policy (NAPP) maize management dissemination training programme	Government sector (27), Civil Society (22)	40	10	16	34
January 30-31, 2020	Federal Ministry of Agriculture, Makurdi	Aflatoxin Training for Dissemination in Benue State	Government Sector (18), Research and Academic	7	17		24

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
			organizations (6)				
February 5 – 6, 2020	Ministry of Agriculture, and Forestry, Kaduna State	Nigeria Agricultural Policies and Strategies	State Ministry of Agriculture	17	8	2	23
February 11 – 12, 2020	Asaba, Delta State	Policy Communication Training	Journalist	15	5	0	20
February 24-28, 2020.	Ministry of Agriculture and Natural Resources Minna, Niger State	Training Workshop On R	Government sector (24)	19	5	0	24
Activity 1.3: Nigerian Graduate Student Capacity Building							
Please note that all of the Capacity Building/Trainings that the Scholars provided are recorded in 1.1.2 and 1.2							

Activity 1.1 FMARD/National Trainings

1.1.1 FMARD/National Capacity Building and Mentoring Activities

In line with the project strategies and goal, the Project continues to assist stakeholders to improve on their performance and service delivery. This was demonstrated on February 17 – 18, 2020 when the Project strengthened the capacity of staff of FMARD on statistical data collection through capacity building training on survey design and management. Segun Fadare and Oyeyemi Motunrayo, Project Research Analysts, facilitated the 2-day training. In attendance were 24 participants including 18 males and 6 females who learned about the various steps involved in planning, implementation and management of statistical survey. The training features sampling techniques, questionnaire design, data collection process with strong emphasis on data auditing and quality standards at every stage of data collection. The participants also learned about preliminary data cleaning procedures. Generally, the training exposed participants to methods to effectively coordinate survey data collection. The lessons learned are now been utilized to make decisions on data needs and use as exemplified in the follow-on request for further Project support in management of Fisheries Statistics and Data Management in Nigeria by the Federal Department of Fisheries through Mrs. I. P. Okonji (Assistant director) and Mr. Ibrahim Bako (Chief fisheries officer), both beneficiaries of the capacity building activity.

The Project extended its capacity building training on the Nigeria Agricultural Policies and Strategies to the National Assembly press who are remarkably important stakeholders in policy formulation and dissemination in Nigeria. The training held in Abuja between February 27 – 28, 2020 and had 13

journalists including 9 males and 4 females in attendance. Ogunniyi Adebayo, Project Research Analyst and Crystal Aghadi, a postgraduate intern with IFPRI from University of Nairobi jointly facilitated the training. Participants were taken through the key features, achievements and challenges of the past and present agricultural policies in Nigeria including Agricultural Transformation Agenda (ATA), Agricultural Promotion Policy (APP) and Economic Recovery and Growth Plan (ERGP) and the expectations of present agricultural policies being implemented. Also discussed are the regional (Africa) agricultural policies including Comprehensive Africa Agriculture Development Programme (CAADP). It is expected that the knowledge gained during the training will assist the participants to have better understanding of national and regional policies and promote evidence-based reportage necessary to influence policy making, implementation and accountability. The journalists appreciated the Project for the well-delivered training. They promised to enlighten the citizens, based on data evidence, on the existing agricultural policies and encourage them to hold the office holders accountable using the press as a tool.

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

On January 15 – 17 2020, the Project delivered a training course on Monitoring, Evaluation and Learning (MEL) to 25 staff members (19 males, 6 females) of the Federal University of Technology, Minna, Niger State. The MEL training was anchored by the Project's M&E Officer, Tunji Fasoranti and an FMARD staff, Omolola Onoolapo Mary, who had previously benefited from such Project's-organized training. The training highlighted the concepts of MEL and various steps involved in the MEL system. Specifically, the training focused on development hypothesis, data collection and management, the development of result and logical frameworks, and the development of Performance Indicator Reference Sheet (PIRS). The training was facilitated in a style with evidence-based examples to assist the targeted beneficiaries improve on their understanding of the subject-matter. The knowledge imparted to the participants is expected to lead to an improved implementation and monitoring of academic and research works in the participating institutions. Also, an efficient academic institution can assist in driving evidence-based collaborative research to support both federal and state government agricultural policy formulation and improve food security in Nigeria.

In line with the Project goal, a total of 26 (24 males and 2 females) staff of University of Calabar, Cross River State were trained on Survey Design and Management. The training, which held on January 15 – 16, 2020, introduced participants to the various steps involved in planning, implementation and management of statistical surveys. This training featured sampling techniques, questionnaire design, data collection process with strong emphasis on data auditing and quality standards at every stage of data collection. Participants also learned about the preliminary data cleaning procedures for further data analysis. Generally, the training exposed participants to methods to effectively coordinate survey data collection. Overall, the training is expected to help improve the data system particularly the quality of data collection for evidence-based analysis. The participants appreciated the PROJECT for such an elaborate training which was practical and relevant to their job descriptions. They acknowledged that the training was worth their time and confirmed that they will apply their new skillsets in their future activities on statistical surveys.

From January 27-31, 2020, the Project organized a training on Data analysis using "R" statistical software at Ebonyi State University in Ebonyi State. The 5-day training for 25 (17 males and 6 females) was led by Project scholars who had been trained and mentored on the program by the project. The training was divided into six (6) labs to cover several topics including a statistical refresher, data

management techniques in R and regression analysis in R. A typical training day included a presentation, followed by practice sessions where participants worked on different codes and syntaxes introduced to them. The trainers provided on the spot support for participants with challenges during the practice sessions. Assessment of participants was done using quizzes to measure the understanding of the concepts and competence with the new skills acquired. A WhatsApp group was also created to provide a platform for the facilitating NAPP scholars to continue mentoring the participants as they apply their new skills in their respective research endeavors. Participants expressed their joy and gratitude for the training on the unique Free and Open Source Software, adding that the skills acquired will go a long way in improving their professional careers in the ever-changing technological world of today. Some participants solicited a second training session for their group of participants in the future.

The Project also organized another training on Data Analysis using "R" Statistical Software at Ibrahim Badamasi Babangida (IBB) University, LAPAI, Niger State. The training attended by 25 academics (22 males and 3 females) took place between February 17-21. The trainers were: Dr. Charles Olumba, Mrs. Hephzibah Obekpa and Mrs. Balaraba Sule (all three were project scholars, trained at Michigan State University under the NAPP Visiting Scholar Program). The participants were from four universities: IBBU, Lapai, the Federal University of Technology Minna, the Nasarawa State University, Keffi, and the University of Ilorin in Kwara State, all in the North Central zone of Nigeria. Each day, the training began with a presentation from a one of the trainers. This was followed by practical hands-on sessions in which participants utilized the different syntaxes they were introduced to. The training concluded with group presentations of the results of the analysis carried out by the participants using their newly acquired knowledge in R. Appreciating the need for continued interaction between the facilitators and the participants, a WhatsApp group was also formed. The platform is expected to serve as an avenue to discuss participants' challenges and provide further assistance as they explore data analysis with their newly gained competences in R. This training approach, through which Nigerian scholars are trained and mentored to be able to train others, demonstrates the value that training and mentoring a few scholars intensely can have on other Nigerians. It also demonstrates an approach to sustainably train Nigerian scholars and State Ministry workers by fellow Nigerians.

From March 17-21, the Project organized a third training on Data Analysis using "R" Statistical Software at Ahmadu Bello University, Zaria. This training for 21 academics (18 male and 3 females) was led by project scholars (Dr. Charles Olumba, Mrs. Balaraba Sule, Dr. Iveren Agada and Mr. Phillip Hegarty). Similar to the other trainings for academia, the 5-day training composed of the training sessions, complemented with practical hands-on sessions for participants to practice the syntaxes they had been introduced to during the training sessions. Participants were assessed during the program and each participant was part of a group that made a presentation to the class (on the final day) applying the skills learned during the training. Despite rising concerns about the corona virus during the week of training, all participants completed the training and expressed appreciation to the team for the training. The training is expected to help improve the data analysis skills of the trainees in the absence of cost concerns for proprietary software.

The Project organized a Monitoring, Evaluation and Learning training for staff of Delta State University between March 18 – 20, 2020 and the training had 23 (16 males and 7 females) high profiled lecturers in attendance. The training was participatory and took participants through the basic concepts of M&E with emphasis on the development of frameworks and M&E plans as they relate to improved service delivery in the academic sector, which was the goal of the training. There were

breakout sessions where participants had hands-on practical exposure to the development of frameworks with technical assistance from the facilitators. The results were afterwards presented in plenary and feedbacks/corrections were given on each presentation. The facilitators further emphasized the importance of teamwork in the group assignment as it promotes effective synergy in achieving organization goals. Irrespective of the participants' academic qualifications/status, they all participated fully and found the training very useful and helpful for their academic and research activities. Many of them acknowledged that the new knowledge and skills acquired will enhance their on the job performance.

Activity 1.2 State Trainings and Capacity Building Efforts

1.2.1 Nigeria Agricultural Policies and Strategies for Ministry Staff and Academics in the 7 FTF states

The Project continues to work closely with the State Ministries of Agriculture and Natural Resources in the Project-targeted states on skills and techniques that will promote organizational learning and performance. These skills and techniques are expected to impact positively on the agriculture and food sector of the states. In this quarter, several staff members of these Ministries benefited from Project organized events including capacity building with the expectation that the skills gained would enhance their job performance. For example, on January 13 – 14, 2020, the project trained staff of the Ministry of Agriculture and Natural Resources, Calabar, Cross River State on Survey Design and Management. In attendance were 25 participants including 16 males and 9 females who demonstrated excellent understanding of the concept of statistical survey management. Prior to the post training assessment, the trainers took participants through the various steps involved in planning, implementation and management of statistical survey. Key features of the training also included sampling techniques, questionnaire design, data collection process with strong emphasis on data auditing and quality standards at every stage of data collection. Participants also learned about preliminary data cleaning procedures in preparing data for further statistical data analysis. The training exposed the participants to methods to effectively coordinate survey data collection. The post assessment indicated that participants had improved knowledge on survey design and management.

On January 16 – 17, 2020, the staff of the Ministry of Agriculture and Natural Resources, Abakaliki, Ebonyi State benefited from the training on Agricultural Policy Formulation, Presentation and Analysis. Hyacinth Edeh, Country Program Manager, and a consultant (Professor Jonathan Alimba, Ebonyi State University, Abakaliki facilitated the training in a participatory style to 31 participants (16 males and 15 females) who acknowledged that they learned the basic concept of policy formulation, presentation and analysis. Key features of the training module included concept of policy and agricultural policy, pre-conditions for agricultural policy formulation, imperative of agricultural policy objectives, conflicts in agricultural policy objectives, and Nigeria agricultural policy objectives. Others were guiding principles for agricultural and food policy formulation and presentation, techniques for agricultural policy presentation and analysis, and agricultural policy instruments. It is worthy of note that the members of the State agricultural policy review committee (SAPRC) currently reviewing the state agriculture policy document were mainly staff members who participated in the two-day training activity.

Furthermore, on January 21 – 23, 2020, the Project also trained 27 staff (21 males, 6 females) of Ministry of Agriculture and Natural Resources, Asaba, Delta State on the concept of Monitoring,

Evaluation and Learning. The MEL training was intensive and highly participatory with specific focus on resource management, service delivery, data collection, data management and presentation for decision making. There were hands-on practical assignments which were managed in groups to ensure effective understanding of the MEL courses and promote teamwork in achieving organizational goals. A generally observed gap among the participants is the familiarity with MEL terminologies without the skillsets for actual practice. The Project recognized this and intensified effort towards the processes of actual practice of MEL activities. This was in addition to deepening the participants' knowledge in MEL concepts/terminologies. It is envisaged that with improved MEL skills, beneficiaries can effectively and efficiently implement project related activities. As the state is currently developing its agricultural policy document, the skillset gained is expected to help guide the ministry on smart objective setting and implementation. Consequently, resources are expected to be better managed and utilized in the process and afterwards.

On January 21-22, 2020, the Project trained 26 staff of the Ministry of Agriculture and Natural Resources, Makurdi Benue State including 17 males and 9 females on the concepts of the Nigeria Agricultural Policies and Strategies. A similar training was replicated to 25 (17 males and 5 females) staff of Ministry of Agriculture, and Forestry, Kaduna State between February 5–6, 2020. The training delved into the Agricultural Transformation Agenda (ATA), the Agriculture Promotion Policy (APP), the Economic Recovery and Growth Plan (ERGP) of the Muhammadu Buhari-led government as well as the Comprehensive Africa Agricultural Development Programme (CAADP) driven by the African Union, among others. The training aims to improve the participants' understanding and ability to engage in the various national agriculture policy discourse. This is in addition to promoting the mainstreaming of national level agriculture policies at the sub-national levels and thus, improve policy synergy and better implementation.

From January 20-24, 2020, the Project organized a training on Data Analysis using R Statistical Software at the Ministry of Agriculture, Abakaliki, Ebonyi State. The training was attended by 18 (14 males and 4 females). From those trained, only one had prior experience with a statistical software (SPSS). The ministry therefore articulated a big gap in the area of analysis. The trainers thus introduced R to the staff being careful to demonstrate how it can be relevant to the kind of work they do at the Ministry of Agriculture. Training participants expressed their gratitude for the training requesting for a longer duration. In response to this and as part of the project strategy to ensure that skills acquired during trainings are applied, a "WhatsApp group was formed as a strategy to further guide and provide assistance to participants with any challenges faced in their use of R.

Between February 24 and 28th, the project organized a training on Data Analysis using R at the Ministry of Agriculture and Natural Resources Minna, Niger State. The training was led by three project scholars (Hephzibah Obekpa, Balaraba Sule and Dr. Charles Olumba). Twenty-four participants (19 males and 5 females) from six different ministries, departments and agencies in Niger State (Ministry of Agriculture and Rural Development, Ministry of Livestock and Fisheries, Niger State Agricultural and Mechanization Development Authority, Fadama, Women Affairs, Planning Commission and Bureau for Statistics) were trained. None of the participants had previous exposure to R software. Some had used Excel, SPSS and STATA but the licensing cost posed a challenge to their legal acquisition. The training included an introduction to R, basic R structures and commands, managing R packages, data management in R, graphics in R, Regression, correlation and ANOVA amongst others. After training participants to use R, they were given assignments that covered modules taught in class to work through for 2 weeks after the training as a strategy to encourage experiential learning. The participants were thrilled and indicated that they would appreciate if the

training lasted more than a week. It is expected that trained staff at the various ministries would be able to use R to conduct relevant data analysis to support the production of evidence-based policy documents in their various departments and ministries.

1.2.2 Project scholars

The Policy project has brought Nigerian scholars (13 Masters and PhD students) and their advisors to Michigan State University (MSU) for courses, research training and support combined with long term mentoring. Mentoring started in Nigeria, (once the scholars were selected before coming to MSU). It continues now that the scholars have completed their tenure at MSU and have returned to Nigeria. So far, the Project Scholars have produced 30 publicly available research publications and 54 program highlights. Project Scholars returning home have so far trained over 1200 Nigerians on data collection and analysis over the life of the project. There is currently an increasing demand for these trainings across the country. Below, we summarize the main highlights of this program for the second quarter of year 5.

Training of trainers

In this second quarter (January-March 2020), NAPP scholar Mrs. Toyin Adebowale and her Nigerian advisor (Dr. Obadina, University of Agriculture, Abeokuta) continued to train Nigerians to disseminate information on safe maize production and handling practices to avoid Aflatoxin contamination in selected FtF states. In this quarter, 74 additional trainees (from Niger [50] and Benue [24] Sates) joined with the 46 trainees (in 4 LGAs in Ogun State [22], and Ebonyi [26,]) from Q1 to disseminate information about how to prevent the incidence and growth of aflatoxins along the maize value chain to 12,204 others (6,551 females and 5,6523 males).

The first training during this quarter was held at the Ministry of Agriculture, Minna, Niger State January 27-28, 2020. The two-day program was used to disseminate findings from a set of research studies conducted by the project on "aflatoxin along the maize value chain in Nigeria". The program was designed as a "Training of Trainers". The participants were trained and mentored so that they were prepared to disseminate the information about aflatoxin and maize management to others in their communities.

Mrs. Adebowale and an MSU Mentor monitored those trained as they disseminated the findings in their communities. Each participant shared videos of their own dissemination activities every week via WhatsApp. This was used to track the number of individuals reached and also to monitor the activities of those trained.

From January 30-31, 2020, another training took place at the Ministry of Agriculture and Natural Resources (MANR), Makurdi, Benue State. Trainees included 24 extension agents (17 males and 7 females), from across Benue State, using the Niger State approach. Trainees were supported to train others in their communities after the training. Each participant shared videos of their own dissemination activities every week via WhatsApp. This was used to track the number of individuals reached and also to monitor the activities of those trained.

Still along the lines of the training the trainers, five Project scholars; (Dr. Blessing Agada, Dr. Olumba Chukwudi, Mrs. Obekpa Hephzibah Mr. Hegarty Philip and Mrs. Sule Balaraba) provided five (5) sessions of training on the free statistical software "R" for data analysis (described above). Following their training at Michigan State University, the Project scholars have been mentored on

the use of "R" for data analysis as well as on how to train others. Over the last year, the Project Scholars have been increasingly training other Nigerians on the use of the software. In the last quarter, 111 participants took R training (Male-90, Female-21) including State Ministry officials (42), researchers and academics (69) (Table 3).

Table 3. Number of Individuals Participating USG Food Security Programs Led by Project Scholars (Indicator 4)

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
January 20-24, 2020	Ministry of Agriculture, Abakaliki, Ebonyi State.	R Training for staff of Ministry of Agriculture	Government sector	14	4	0	18
January 27-28, 2020	State Ministry of Agriculture and Rural Development, Mina, Niger State Secretariat	Nigeria agricultural project policy (NAPP) maize management dissemination training programme	Government sector (27), Civil Society (22)	40	10	16	34
January 27-31, 2020	Ebonyi State University	Training Workshop on R	Academic	17	6	0	23
January 30-31, 2020	Federal Ministry of Agriculture, Makurdi	Aflatoxin Training for Dissemination in Benue State	Government Sector (18), Research and Academic organizations (6)	7	17	0	24
February 17-21, 2020	Ibrahim Badamasi Babangida (IBB) University, LAPAI, Niger State	Training Workshop On R	Research and academic (25)	22	3	0	25
February 24-28, 2020.	Ministry of Agriculture and Natural Resources Minna, Niger State	Training Workshop On R	Government sector (24)	19	5	0	24
March 17-21, 2020	Ahmadu Bello	Training Workshop On R	Research and academic (21)	18	3	1	20

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
	University, Zaria						

Table 4. Dissemination activities of the Project Scholars

	Location	Participants[3]
Second Quarter		
1. How to prevent the incidence and growth of aflatoxins along the maize value chain	Ebonyi State	Total: 4340 (Male: 1734, Female: 2606)
2. How to prevent the incidence and growth of aflatoxins along the maize value chain	Niger State	Total: 6138 (Male: 3254, Female: 2884)
3. How to prevent the incidence and growth of aflatoxins along the maize value chain	Benue State	Total: 1391 (Male: 509, Female: 882)
4. How to prevent the incidence and growth of aflatoxins along the maize value chain	Ogun State	Total: 355 (Male: 156, Female: 179)

Table 5. Number of Agriculture Policy Communications Developed and/or Written for Stakeholder Consumption by Project Scholars. (For complete list, please see ANNEX F: Indicator 7)

Full citation of the communication			
Authors	**Date**	**Title**	**Publication Venue**
Hephzibah O. Obekpa.	2020	Nigerian Scholars train staff of the Ministry of Agriculture and Natural Resources in Ebonyi State.	Nigeria Highlights 66, East Lansing: MSU
Philip Hegarty James.	2020	Project Scholars Train Staff of Faculty of Agriculture and Natural Resources Management, Ebonyi State University, Abakaliki on "R" For Statistical Computing.	Nigeria Highlights 67, East Lansing: MSU
Oluwatoyin Adebowale.	2020	Aflatoxin Dissemination and Training Programme in Niger State.	Nigeria Highlights 68, East Lansing: MSU

Full citation of the communication Authors	Date	Title	Publication Venue
Oluwatoyin Adebowael.	2020	Aflatoxin Dissemination and Training Programme in Benue State.	Nigeria Highlights 69, East Lansing: MSU
Balaraba Sule	2020	Reaping the Benefit of the Visiting Scholar Program of the Nigeria Agricultural Policy Project: Training on R Statistical Software.	Nigeria Highlights 70, East Lansing: MSU
Hephzibah Onyeje Obekpa.	2020	Training and Mentoring on R Now Extended to state of Ministry of Agriculture and Natural Resources, Minna, Niger State.	Nigeria Highlights 71, East Lansing: MSU

Activity 1.4: Media engagement and Training at Federal and the State Level (Agricultural Communication and Policy Advocacy)

Media engagement (Federal and State Levels)

Journalist are key players in the policymaking space which makes it essential for them to be well equipped with adequate knowledge/information to effectively drive public conversations around agricultural policy issues. On this basis, the Project delivered a Policy Communication training to 20 (15 males, 5 females) journalists from various media houses (including print and television) in Delta State. The training, which took place in Asaba, Delta State on February 11-12, 2020 was jointly facilitated by Bisola Oyediran, Communications Assistant with the Project and Daniel Atori, a Chief Correspondent at the New Telegraph Newspaper, Minna, Niger State. Mr. Atori was a beneficiary of earlier policy communications training delivered by the Project in 2017 and 2018. The involvement of the earlier beneficiaries underscores the importance the Project places on sustainability beyond its life. The training introduced participants to the concepts of policy communications, design and implementation of communication strategies and plans, use of social media for both disseminating and tracking agricultural policy communications in the Nigerian environment. It is therefore expected, that trainings such as this would equip journalist to advocate, share and use evidence to influence sound policymaking and implementation in the state and the country at large.

Activity 1.5: Engagement with non-government stakeholders (e.g. civil society, NGOs, and think tanks) with particular focus on FTF states #1

The Project continues to engage with the Association of Deans of Agriculture in Nigerian Universities (ADAN) in the execution of its activities targeted at stakeholders within the academic community in the FtF focus states. This engagement includes joint development of the schedule and implementation of capacity building activities for benefiting ADAN members within the FtF states. This collaboration aims to increase the reach of the Project more broadly to the agriculture community in Nigeria.

Component 2: Policy driven collaborative research and analysis.

In Year 5 this Component is building upon previous analyses on some of the key topics for which there is demand from the government (state or federal) and USAID to provide policy support through

research. The goal is to further strengthen the Project contributions towards evidence-based decision-making in agriculture and rural development policy. The development of the research topics as contained in the workplan is progressing and are at various stages as indicated below:

Activity 2.1. Food and Nutrition Security

2.1.1: The Impact of Agricultural Productivity Changes on Child Nutritional Outcomes

This study has explored the linkages between agricultural productivity change and child nutritional outcomes in Nigeria using LSMS panel data from Nigeria. In the quarter under review (January - March), the team re-estimated the econometric models based on a new concept (Growing Degree Days) identified which effectively captures the linkages of the two key variables (agricultural productivity change and child nutritional outcomes). Additionally, the team worked on the revised version of the review of relevant literature. The team has discussed the results generated from the study and recommended policy options based on the findings. Based on the aforementioned, we have a first draft of a Working Paper currently under review.

2.1.2: Differences and drivers of rural-rural vs rural-urban youth migration

This study has explored drivers that attract (pull) youth migrants in Nigeria using LSMS panel data from Nigeria. In the quarter under review (January - March), we re-estimated the econometric models based on a new concept of dyadic regression which effectively captures the migrant choice destination using difference in urban growth, land availability and living expense between migrant origin and destination before migration takes place. Additionally, we have worked on the revised version of the review of relevant literature. We have discussed the results generated from the study. We will produce a first draft of a Working Paper to be submitted for a review by end of April.

2.1.3 Analysis of Food Consumption Patterns and Policy Options for Improving Food and Nutrition Security in Nigeria

The work progress of the analysis is well advanced, but it is slightly behind the timeline of the workplan because of work challenges related to the lockdown and travel restrictions due to the Covid-19 pandemic. According to the workplan, the sub-activities for Q1 and Q2 are to conduct descriptive and econometric analyses. The work plan further specifies the components as follows: "(1) The descriptive analysis will document food consumption patterns by agricultural seasons in urban and rural areas in North and South Nigeria, as well as by economic strata (with a focus on the poor). (2) The econometric analysis will use Quadratic Almost Ideal Demand System models to estimate income and price elasticities." The descriptive analysis was completed in Q1. The estimations for the econometric analysis are nearly completed.

The outputs specified in the workplan include a policy note (Output 2) and a workshop presentation (Output 3). The Activity Leader Olivier Ecker and team prepared a draft policy note to be published as Policy Research Brief (Feed the Future Innovation Lab for Food Security Policy). The draft draws from the descriptive analysis of this Activity. The draft is expected to enter the publication process within the next two weeks. Olivier Ecker also prepared and delivered a virtual presentation (entitled "Diets, Food Systems, and Agriculture-Nutrition Linkages") for the USAID/Nigeria and Partners Nutrition Interactive Workshop on February 19, 2020. The presentation summarized some of the key

results of the Activity's analysis. Olivier Ecker's contribution was greatly appreciated by the workshop participants and acknowledged by USAID/Nigeria (see Annex G)

2.1.4 Impact of smallholder farmers commercial orientation on rural economic development

The objective of this analysis is to empirically assess the importance of commercially oriented smallholder farming households for agricultural and rural economic development. A household typology based on the commercial orientation of agricultural households has been developed to categorize sample households in the Nigeria General Household Survey Panel (GHSP) series. Of the GHSP datasets, we have focused on the GHSP-3 from 2015/16. For our indicator of the commercial orientation of households engaged in agricultural production, we used the share of the value of all crops reported produced by the household that were sold. Three agricultural commercialization categories were created:

- Those households that reported no sales of the crops they produced,
- Those that sold some crops, but less than one-third of their value, and
- Those that sold more than one-third of the value of the crops they produced.

Disaggregating the agricultural households by geo-political zone, agricultural households are more likely to be commercially oriented in the Southeast and Southwest zones. Subsistence orientation is the dominant orientation of agricultural households in the Northwest, which also has the highest share of agricultural households in Nigeria. Households with a somewhat-commercial orientation are the largest category in North Central and Northeast zones. The three categories are of similar size in the South South zone, which, like Southwest, has a relatively small share of agricultural households.

In terms of the crops produced by each category of agricultural households, subsistence households are significantly less likely than farmers in the commercial categories to produce maize, rice, yam, cassava, and banana and more likely to produce millet. Somewhat-commercial households are significantly more likely than commercially oriented households to produce sorghum, millet, cowpea, groundnut, and cassava and less likely to produce sweet potato and cocoa. There are no significant differences in the share of households in the two commercial categories that produce maize, rice, yam, banana, and soybean.

The final analysis completed to date was to examine the degree to which households move over time between the three agricultural commercialization categories or out of agriculture altogether. This was done by categorizing the panel survey household in each of the three rounds of the GHSP. We find that there was considerable movement into other categories in earlier survey years for agricultural households in the somewhat-commercial category in 2015/16. However, households in the subsistence category in 2015/16 were more likely to have been in the same category in 2010/11 and 2012/13 than in other categories. A similar pattern is seen for commercially oriented households in 2015/16.

Three additional analysis will be done in coming months:

1. What characteristics are associated with households in each household typology category and which household types are most likely to be involved in selected agricultural commodity value chains?
2. What factors might be associated with households increasing or decreasing their level of commercial production over time?
3. We will examine the participation of households, disaggregated by commercialization

category, in three or four agricultural commodity value chains. Our interest in doing so is to better understand how and why these different types of rural households are able to exploit or, alternatively, are excluded from participating in strengthened value chains for these commodities.

Activity 2.2 Constraints and Opportunities in a Key Value Chain (Aquaculture)

In this quarter (Q2), the literature review was completed, and some secondary data analyzed. This informed the need for a key informant interviews (KIIs) and a focus group discussion (FGD) with aquaculture stakeholders in Cross River State where the study is being carried out. Interview guide was developed and selected key informants across the aquaculture value chains are being interviewed via the telephone amidst the lockdown in the major cities in Nigeria. It was not possible to have focus group discussion with more value chain actors and on-site visit as previously planned as a result of the global COVID-19 pandemic. Notes from the interviews are being synthesized, and a value chain mapping approach is being used as a tool to guide the assessment of the sector.

Preliminarily understating from the interviews shows that farmers require more knowledge and skills in fish production management techniques, fish breeding, and feeds formulation with locally available materials. Extension services to fish farmers are limited in the state, with few successes in farm practices and productivity largely credited to the presence of development partners. A sustainable growth in the sector will be predicated upon a public policy for more robust extension service delivery.

2.3. Micro-level analyses on the impacts of agricultural public investments on selected indicators of broad development outcomes

During this quarter, significant progress has been made on the empirical analyses using LSMS-ISA data ((2010/11, 2012/13, and 2015/16)) and the data on State and LGA-level public expenditure described in the previous quarter's progress report. Preliminary analyses suggest a number of findings that are robust and are likely to be similar in the final results. Specifically, fairly robust results have been found so far, which indicate that both the size of public expenditures and the share of spending allocated to agricultural sector between 2008 – 2015 have significantly positively affected the agricultural production, adoption of modern inputs, and access to public extension services. Furthermore, greater public expenditure and greater expenditure share allocated to agricultural sector have also positively affected overall economic outcomes of the household, including overall household-level consumption, as well as capital investments for non-farm household enterprises. These findings are consistent with the hypotheses that greater public support for the agricultural sector can have broader economic benefits. Differential effects between the size of expenditure and the agriculture's share within expenditure have also been observed. In some cases, the share has significant effect, but the size has insignificant effects. These indicate that the theory of Ricardian Equivalence holds, where increased public spending has no effect because households understand that such increase in public spending must be financed by future increase in taxes. Altogether, these findings so far have provided important insights that also contribute to the literature on public expenditure. More in-depth analyses are on-going, which estimate more disaggregated effects (for example, the effects of spending by state vs. spending by LGAs, recurrent expenditure vs. capital expenditure, effects of spending by neighboring LGAs, etc.). The analyses will be completed in the next quarter.

2.3.2 Credit Access and Agricultural Technology Adoption

Household survey for primary data collection and analysis was planned in Q2 and the first few weeks of Q3. Questionnaire development was completed; the questionnaire was inputted into the CAPI (CSPro software program); field preparation (sampling design was completed; identification of enumerators and local field facilitators in four selected States were completed). Due to the COVID-19 disruption, field work could not proceed as planned. Currently, the Project is exploring the potential utilization of LSMS-ISA survey data in Nigeria (esp. Waves 2 and 3) and other relevant secondary data from various sources and examining the most recent LSMS Wave 4 data for possible ways to potentially utilize the data, and also developing STATA 'do files' for later use, and preparing the CSpro program for use at any time when the situation allows for field work.

2.3.3 Gap analysis and investment plan for extension reform

The team continued its engagement with the National Agricultural Extension and Research Liaison Services, Ahmadu Bello University and the Federal Department of Agricultural Extension (FDAE) and other relevant stakeholders towards sharing of the results from the state level extension implementation of national extension policies. It has also planned to conduct state level consultations in the remaining two states (Ebonyi and Kebbi states). Due to the incidence of COVID-19 and consequential restrictions, it couldn't visit the states, and this has been postponed till Q3 depending on the lift of the restrictions. In Q2, the team revised and improved the initial zero drafts prepared in Q1 which contain concise and synthesized recommendations on the best approaches and strategies for implementation of the National Extension Policies at the state level. The final draft of the Discussion Paper will be submitted in first few weeks of Q3. Additionally, during the quarter under review, the team has been involved in the planning of high-level outreach event on Agricultural Extension in Nigeria which will focus on Grassroots Extension Approach and Public-Private extension process. Also, this event has been put on hold in the meantime due to the novel COVID-19 pandemic.

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

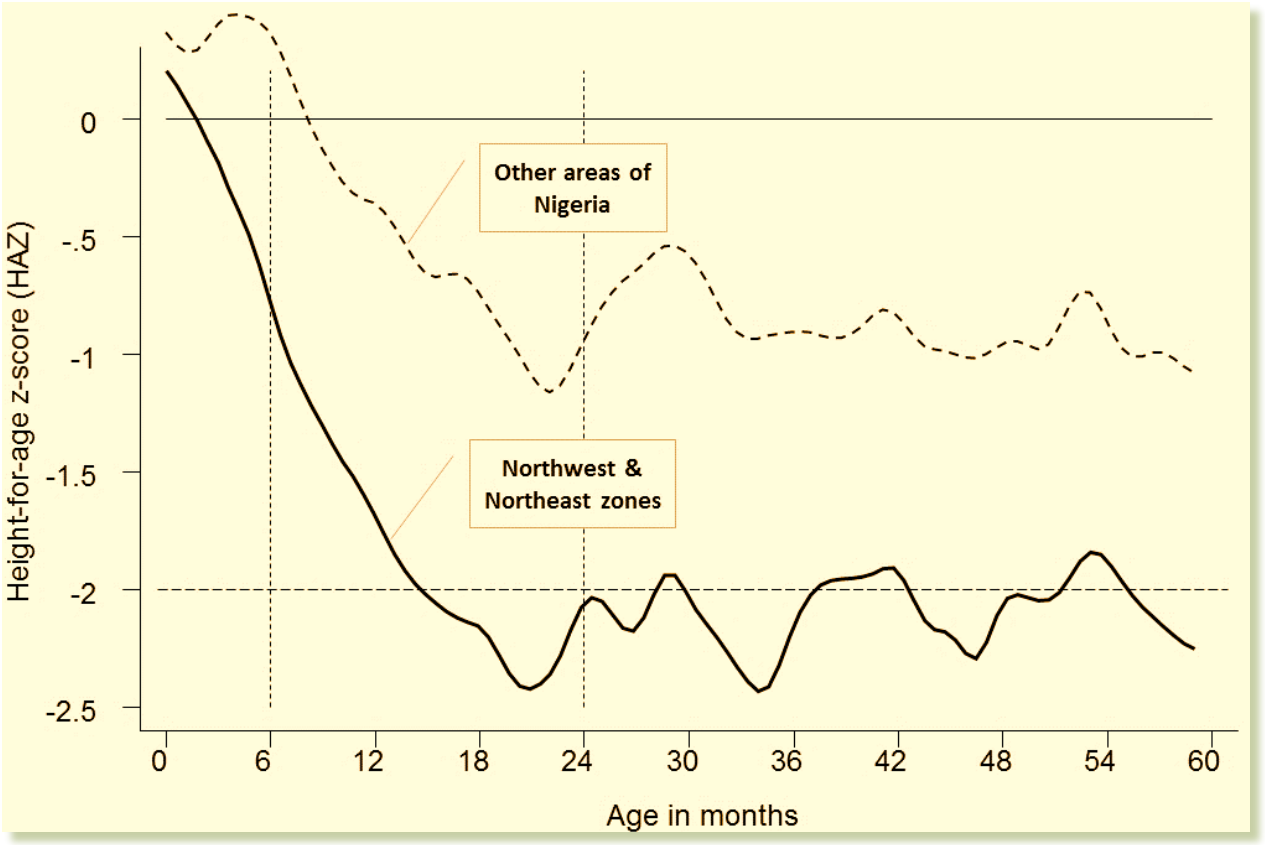
Activity 3.1: Strengthening Policy Process by bridging the gap between "knowledge providers" and "knowledge users": Outreach, engagement and Dissemination of Results from component 2

Under this component, the Nigeria Agricultural Policy Project seeks to systematically bring together various stakeholders and actors in the policy process to share knowledge that can contribute to improved policy processes. It also seeks to participate in relevant fora which help to influence agriculture and food policy process and programming in the country. On February 20, 2020, the Project actively participated in a one-day interactive workshop on nutrition programming organized by USAID/Nigeria and tagged, "USAID/Nigeria and Partners Nutrition Interactive Session". The Project organized a session on "Nutrition, Food Systems and Food" with three seminal presentations. Key findings are presented below.

- **Driving down chronic undernutrition in young children in northern Nigeria (by Mulubrhan Amare)**

This study was motivated by the high rates of undernutrition in children under five years of age in northern Nigeria, and the sharp differences in nutritional outcomes between northern Nigeria and other parts of the country (Figure 1). The study assessed the immediate, underlying, and basic drivers of chronic undernutrition with a focus on challenges associated with infant and young child feeding. The analysis was based on a rapid scoping study conducted in early 2017 (key informant interviews in Bauchi and Kebbi states and in Abuja), a literature review, quantitative analysis of child-level data from the 2008 and 2013 Nigeria Demographic and Health Surveys (DNS)

Figure 1. Mean height-for-age z-score (HAZ) by m onth of age for Nigerian children from birth to 5 years of age.



Source: Nigeria Demographic and Health Survey (NDHS, 2013)

Key messages:

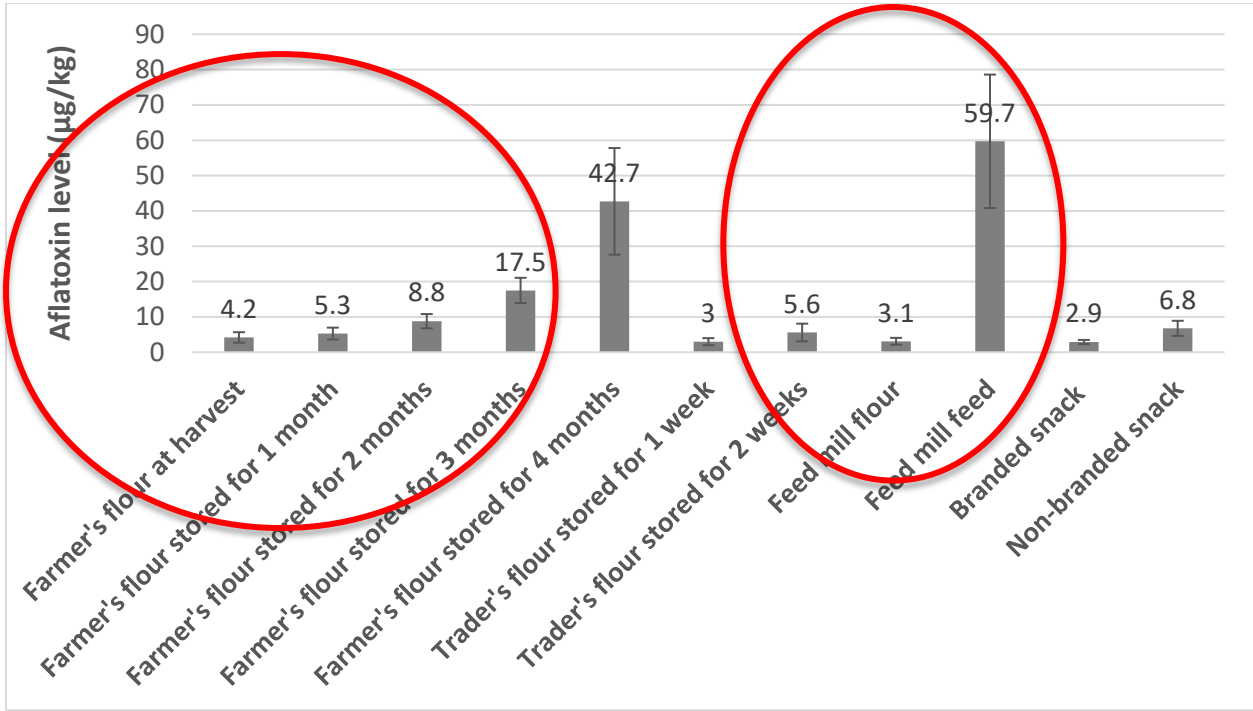
1) In northern Nigeria, poor nutrition caring practices are the underlying determinant of nutritional status. Poor caring practices include the low rate of exclusive breastfeeding in first six months of life, with caregivers providing liquids other than breastmilk within days or hours of birth, thus increasing risk of diarrhea; the fact that complementary foods provided during weaning are not nutrient-dense; poor health care seeking behaviors by mothers; and social barriers constraining mothers' engagement with health services.

2) Parents' education level is a significant determinant of nutritional status of young children: Poorly educated parents cannot access information on good nutritional care and act on it, and only about a quarter of women and half of men in northern Nigeria are literate.
3) Poor nutritional outcomes are also driven by social and cultural barriers within the household and community that make it difficult for mothers to directly access the knowledge or resources that they require to provide good care. Therefore, a central element in the design of any new programs should be to deliver to the requisite knowledge to mothers.
4) However, given the marginal position of young mothers within the community, a whole community approach to nutrition knowledge strengthening is required, providing the young mothers in an indirect way with the needed information. Efforts to reach young mothers through their own mothers, through their husbands, through community volunteers, through community and religious leaders, and any other channels should be enhanced. Addressing undernutrition will also require continued efforts at political and social mobilization, and specifically working with traditional and religious leaders.
5) There is a need for better data and evidence-based policy to guide nutrition programs in northern Nigeria. The capacity to undertake public health related efforts to prevent chronic undernutrition needs strengthening across Nigeria. This will require an expansion of public health nutrition training at all levels of education.

- **Food safety for food and nutrition security: The case of aflatoxin along Nigeria's maize value chain (by Dr. Saweda Liverpool-Tasie)**

This presentation was motivated by the insight that although food safety is a critical component of food and nutrition security, it tends to be an afterthought or is simply forgotten in many food security and nutrition policies. The presentation reported findings from studies based on assessments of the occurrence of aflatoxin and fumonisin along the maize value chain in southwest Nigeria, effects of processing practices on mycotoxin reduction in maize-based products, and choice experiments on the introduction of food safety labels.

Figure 2. Aflatoxin contamination along the maize value chain in southwest Nigeria



Source: The occurrence and co-occurrence of aflatoxin and fumonisin along the maize value chain in southwest Nigeria (2019). Food and Chemical Toxicology. 129, 458-465 by Liverpool-Tasie L.S.O, Saha Turna N, Ademola O, Obadina A, Wu F

Key messages

1) When food is scarce or perceived to be scarce, hygiene, safety and nutrition are often ignored as people shift to less nutritious diets and consume more 'unsafe foods' — in which chemical, microbiological, zoonotic and other hazards pose a health risk.
2) Unsafe food, whether arising from poor quality supplies or inadequate treatment and preparation, increases the risk of foodborne infections such as diarrhea and aflatoxicosis. These infections have a much higher impact on populations of poor nutritional status.
3) In Nigeria, Aflatoxin contamination in maize extends beyond production to storage and final maize-based human and animal food products. Adequately addressing aflatoxin contamination requires consideration of the entire maize value chain as well as associated value chains such as animal feed.
4) There are potential market mechanisms that could be introduced in Nigeria. Nigerian consumers respond to information about the health effects of aflatoxin, and maize traders respond to the attributes that their consumers care about. Thus, the introduction of an aflatoxin certification scheme could be implemented in Nigeria. Given the low level of awareness about aflatoxin such a policy should be preceded or accompanied by an information campaign as a campaign would increase awareness and demand for aflatoxin safe products. However, there is still a strong need for regulation enforcement.
5) The Nigeria Agricultural Policy Project has disseminated these findings through training with extension workers. An initial 124 trainees have now trained more than 6,000 extension workers on practices to reduce aflatoxin contamination. This work is being led by Toyin Adebowale, a

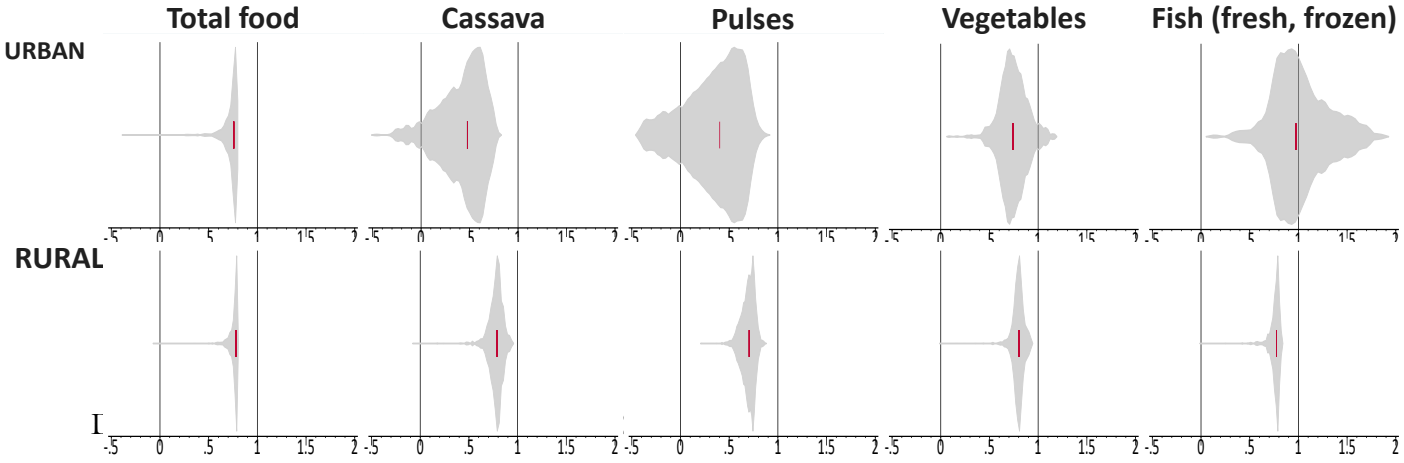
Project scholar on the Aflatoxin Research Team, who spent a semester at MSU in 2017 taking classes, working in a toxicology laboratory, and receiving mentoring from MSU professors.

6) In Nigeria, addressing food safety for enhanced nutrition will require an integrated approach to food where food safety and nutrition are systematically introduced into mainstream food system policies and interventions. Evidence from future research on food safety in maize and other commodities such as groundnuts will inform this approach of linking food safety and nutrition in policies and interventions.

- **Diets, Food Systems, and Agriculture-Nutrition Linkages (by Dr. Olivier Ecker)**

This ongoing study is motivated by the recognition that poor dietary quality is the root cause of Nigeria's growing triple burden of malnutrition (chronic child undernutrition, micronutrient deficiencies, especially among children and women, and rapidly rising overweight and obesity among adults). The presentation was based on past and ongoing work supported by USAID's FtF initiative (under NAPP) and the CGIAR A4NH program. The analysis includes a comprehensive descriptive analysis of food consumption patterns and trends and an econometric analysis. The latter is an estimation of income and own- and cross-price elasticities for 15 food groups by location (urban and rural areas) and for two seasons (post-planting, post-harvest) in two years (2013, 2016).

Figure 3. Income elasticities for selected food groups in 2016 at post-harvest (derived from two-stage, censored demand system estimations)



Key messages

1) Nigeria faces a growing triple burden of malnutrition, especially due to rapidly rising overweight/obesity. Undernutrition and micronutrient deficiencies are often aggravated by poor health conditions such as poor access to clean drinking water and sanitation, poor hygiene, and exposure to animal feces. Obesity increases the risk of common non-communicable diseases (NCDs) such as cardiovascular diseases (including heart attack, stroke), type 2 diabetes, and hypertension. Overweight and obesity are rising in BOTH urban and rural areas, because poor dietary quality prevails in both areas. Food budget shares are

remarkably constant across income levels in rural and urban areas (and across time), suggesting similar food preferences (Figure 1).

2) To effectively tackle this burden, it is important to put a strong focus on diets, rather than primarily on (child) nutrition outcomes. For example, regarding undernutrition, policymakers and development practitioners should aim at improving access to and intake of high-quality diets for all household members (and especially for adolescent girls and mothers) rather than on reducing child stunting. The rationale for this approach is that the nutritional status of mothers and mothers-to-be determines the health and survival of young children.
3) It is important to go beyond nutrition-specific interventions and promote nutrition-sensitive policies and programs. This is because nutrition outcomes, especially child anthropometry (height-for-age, weight-for-age) are driven by a large variety of factors, requiring complex interventions. Nutrition-specific interventions (those that tackle immediate causes of malnutrition) have been important but have limited potential. To reduce malnutrition substantially and sustainably, nutrition-sensitive interventions that address the underlying determinants are needed.
4) Programs must target poor urban areas (slums), in addition to rural areas with high density of severe malnutrition (mostly located in the Northwest and Northeast). While current estimates indicate that half of Nigeria's population lives in urban areas, most of the total population growth to 2050 will occur in Nigeria's cities. Expanding cities often struggle to ensure access to affordable and healthy diets, especially for poor residents.
5) Nutrition policy should be linked to other (economic) sectors influencing food consumption and nutrition, especially agriculture and agricultural policy, but go beyond subsistence-oriented farming. Nigeria's nutrition policymakers and development practitioners should consider deepening the adoption of a food (and nutrition) system approach. This approach puts consumers and their diets at the center and understands that diet choices are conditioned by the food environment, which in turn is determined by the food system that drives agricultural production, food trade, processing, and retailing.
6) A stronger evidence based on research will be needed to drive this policy approach. The research should help to identify policies and investments needed across ministries and at different levels of government to transform food systems that promote healthier diets, especially among the urban poor and contribute to inclusive economic transformation. This will include linking consumer demand to farm production, with a focus on value chains that improve food and nutrition security.

Support to FMARD policy processes

<u>Support to Project Coordinating Unit of FMARD</u>

The Project has the mandate to work closely with its stakeholders and assist them in improving on their service delivery. FMARD is one of such stakeholders that the Project has continuously worked to strengthen its partnership since inception. In addition to having a representative on the Policy Project's National Advisory Committee, FMARD has continued to benefit from the Project's activities, including trainings, and the use of the Organization Performance Index (OPI) measurement tool. Also, during the quarter under review, the Project worked closely with the PCU of FMARD in reviewing its MEL plan, while efforts are currently on going in assisting the National Agricultural Seed Council (NASC) to develop its MEL plan.

The Project as a member of the CAADP-Biannual review (BR) and Joint Sector review (JSR) technical committee hosted the first meeting of the committee during the quarter under review. The committee is responsible for developing strategies to support the government of Nigeria, specifically FMARD to improve the BSR/JSR reporting to the AU Assembly.

Equally, the Project continues to provide the needed technical support to sector-specific policies/strategies of FMARD. During this quarter, the Project participated and provided inputs during the National Rice Development Strategy validation workshop organized by FMARD. The inputs provided were based on recent NSSP works in areas of mechanization and plant breeding as they relate to rice development in Nigeria.

During the quarter under review, the Project intensified efforts to support the National Agricultural Extension and Research Liaison Services (NAERLS) and the Federal Department of Agricultural Extension (FDAE) to host a stakeholder learning forum towards strengthening extension service delivery in Nigeria. Several meetings towards achieving this have been held and a 10-member planning committee now constituted to organize the event. The committee members are diverse and come from the Project, NAERLS, FDAE, AGRA, Nigeria Agricultural Forum, SG2000, and the Agricultural Development Program.

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) Delta State and Ebonyi State (FTF states)

Delta State
The Project continues to work with the State Ministry of Agriculture and Natural Resources in Delta State as well as PIND towards the finalization of the agricultural policy document. During the quarter under review, a validation workshop to ensure that data/information gathered for the agricultural policy document reflect the true situation in the state was carried out. The workshop was attended by 30 relevant stakeholders including the State Commissioner and the Permanent Secretary, Delta State Ministry of Agriculture and Natural Resources, the Special Assistant to the Governor on Agriculture, the State Chief job Creation Officer, the Agribusiness and Investment Activity (a USAID-funded Feed the Future Activity), among others. Following feedbacks during the validation workshop, the agricultural policy document is now under review.

Ebonyi State
The inauguration of the Ebonyi State Agricultural Policy Review Committee, which has the Project as member was done by the Permanent Secretary, Ebonyi State Ministry of Agriculture and Natural Resources in January 2020 of this quarter. Following this, committee reviewed the timeline and draft content of the policy document. Data collection and compilation is completed, and a draft of the policy document is now submitted and under review.

3. INTEGRATION OF CROSSCUTTING ISSUES AND USAID FORWARD PRIORITIES

Gender Equality and Female Empowerment

Gender is a critical issue, and this is reflected in capacity building initiatives undertaken by the Project. Capacity building activities in the second quarter considered gender as an important element in the selection of beneficiaries for Project activities. Where possible, the Project made a deliberate attempt, ensuring an equal participation of both males and females to appropriately benefit from capacity building activities. Where recruitment is done by our partners, the Project informs them of its strong interest in gender balance. In this Quarter, 30 per cent of the total participants trained by the project were female while 70 per cent were male. The project will continue to ensure increase in female participation in the Project's activities to ensure gender balance.

4. M&E PLAN UPDATE

During the second quarter, the Project continued with the implementation of the approved Year 5 Monitoring, Evaluation and Learning (MEL) Plan to track project achievements. The MEL plan is scheduled for reviews and updates in the third quarter, subject to the approval of the USAID/Nigeria Mission on the "No Cost Extension" of the Project until December 2020.

The Project also continues to update the USAID dedicated online folder with the evidence of outputs of the capacity building activities conducted at the FtF focal states.

Staff Developments

At the end of this quarter:

- The staff at the IFPRI Office in Abuja includes: 1 Research Fellow (Program Leader/Chief of Party), 1 Research Fellow, 1 Country Program Manager, 3 Research Analysts, 1 Senior Program Assistant, 1 Program Assistant, 1 Communications Assistant, 1 M&E Officer, 1 Postgraduate Intern, 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, 1 Graduate Research Assistant, an Accountant, and a Travel Coordinator.

5. LESSONS LEARNED

General: In this final year of implementation, the Project is continuing to review broader lessons learned throughout the life of the Project. In summary, the Project has helped lay the foundation for Nigeria's Journey to Self-Reliance and supported the emerging resilience of Nigeria's agricultural economy in five main areas: (1) Contributing to the policy process through research and communications (2) Building the capacity and effectiveness of stakeholders via formal trainings (3) Evidence generation via collaborative research with Nigerians (4) Expanded impact of capacity development through the "Train one to train others" approach of the Scholars program, and (5) strengthening of research networks and associations.

Specific to Y5, Q2: During the quarter under review, the Project observed that its stakeholders/beneficiaries are adopting the skills they acquired during capacity building training, mentoring and coaching activities of the Project. Though the project tracks these outcomes with beneficiaries, these outcomes as a result of donor's effort are better tracked and reported through proper collaboration with the leadership of the benefitting organizations. In this quarter and beyond, the project has developed a strategy which will be based on a round table meeting with the stakeholders on mutual agreement and sharing of information about their achievements which are attributable to the donor's effort.

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

Adetunji Fasoranti has worked with the project as M&E Assistant on a consulting basis for 15 months beginning from December 2018. He was hired on a regular contract as the project MEL Officer in the second quarter of FY 2020 to oversee MEL activities. This follows the exit of the former Project M&E specialist Ayuba Fagbemi Medinah in November 2019.

ANNEX A: NUMBER OF HIGH-QUALITY RESEARCH REPORTS PUBLISHED HAVING UNDERGONE PEER REVIEW (INTERNAL/EXTERNAL) AND DISAGGREGATED BY TYPE (WORKING PAPERS AND JOURNAL ARTICLES) (Indicator 1)

Authors	Date	Title	Publication Venue	Type of review: internal/external	Type of Publication: working papers or journal article
Second Quarter					
1. Sanou, A., Liverpool-Tasie, L.S.O. & Kerr, J.	2020	Threshold investment and firm viability: Evidence from commercial poultry farms in Nigeria.	Agribusiness. https://doi.org/10.1002/agr.21639	External	Journal Article
2. Mywish K. Maredia, John Mazunda, Oyinkan Tasie, and Medinah Ayuba	2020	How Do Stakeholders Perceive the Quality of Agriculture and Food Security Policy Processes in Nigeria? Results from Two Rounds of Surveys	Feed the Future Innovation Lab for Food Security Policy Research Paper 166	Internal	Working Paper

ANNEX B: NUMBER OF PARTICIPANTS ATTENDING PROJECT ORGANIZED RESEARCH AND POLICY EVENTS (Indicator 2)[4]

	Location	Participants[5]
Second Quarter		
1. Number of People reached by aflatoxin research team in 8 weeks minus those reached in 2019	Ebonyi State	Total: 4340 (Male: 1734, Female: 2606)
2. USAID/Nigeria Nutrition Interactive Session - 20 Feb 2020;	Fraser Suites, CBD, Abuja	Total: 58 (Male: 32; Female: 26)
3. Number of People reached by aflatoxin research team in 8 weeks	Niger State	Total: 6138 (Male: 3254, Female: 2884)
4. Number of People reached by aflatoxin research team i in 8 weeks	Benue State	Total: 1391 (Male: 509, Female: 882)
5. Number of People reached by aflatoxin research team i in 8 weeks minus those reached in 2019	Ogun State	Total: 335 (Male: 156, Female: 179)

[4] The reported number in Table 1 for indicator 2 is smaller than the sum of this column due to some people attending more than 1 of these 7 events.

ANNEX C: NUMBER OF INDIVIDUALS PARTICIPATING IN USG FOOD SECURITY PROGRAMS (Indicator 4)

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
Second Quarter							
1.1.1 FMARD/National Capacity Building and Mentoring Activities							
February 17 – 18, 2020	FADAMA House, Abuja	Survey Design and Management	FMARD	18	6	0	24
February 27 – 28, 2020	IFDC Conference Room Abuja	Nigeria Agricultural Policies and Strategies	NASS Press	9	4	0	13
1.1.2 Universities							
January 15 – 17, 2020	Federal University of Technology, Minna, Niger State	Introduction to Monitoring, Evaluation and Learning	Academia	19	6	0	25
January 15 – 16, 2020	University of Calabar, Cross River State	Survey Design and Management	Academia	24	2	0	26
January 27-31, 2020	Ebonyi State University	Training Workshop on R	Academia	17	6	0	23
February 17-21, 2020	Ibrahim Badamasi Babangida (IBB) University, LAPAI, Niger State	Training Workshop On R	Research and academic	22	3	0	25
March 17-21, 2020	Ahmadu Bello University, Zaria	Training Workshop On R	Research and academic	18	3	1	20

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
March 18 – 20, 2020	Delta State University, Asaba, Delta State	Introduction to Monitoring, Evaluation and Learning	Academia	16	7	0	23
1.2. State trainings and capacity building efforts							
January 13 -14, 2020	State Ministry of Agriculture and Natural Resources, Calabar, Cross River State	Survey Design and Management	State Ministry of Agriculture	16	9	0	25
January 16 – 17, 2020	State Ministry of Agriculture and Natural Resources, Abakaliki, Ebonyi State	Agricultural Policy Formulation, Presentation and Analysis	State Ministry of Agriculture	16	15	0	31
January 20-24, 2020	Ministry of Agriculture, Abakaliki, Ebonyi State.	R Training for staff of Ministry of Agriculture	Government sector	14	4	0	18
January 21 – 23, 2020	Ministry of Agriculture and Natural Resources, Asaba, Delta State	Introduction to Monitoring, Evaluation and Learning	State Ministry of Agriculture	21	6	0	27
January 21 – 22, 2020	Ministry of Agriculture, and Natural Resources, Makurdi Benue State	Nigeria Agricultural Policies and Strategies	State Ministry of Agriculture	17	9	0	26

Date	Location	Topic	Participants				
			Type	Male	Female	15-29	30+
January 27-28, 2020	State Ministry of Agriculture and Rural Development, Mina, Niger State Secretariat	Nigeria agricultural project policy (NAPP) maize management dissemination training programme	Government sector (27), Civil Society (22)	40	10	16	34
January 30-31, 2020	Federal Ministry of Agriculture, Makurdi	Aflatoxin Training for Dissemination in Benue State	Government Sector (18), Research and Academic organizations (6)	7	17	0	24
February 5 – 6, 2020	Ministry of Agriculture, and Forestry, Kaduna State	Nigeria Agricultural Policies and Strategies	State Ministry of Agriculture	17	8	2	23
February 11 – 12, 2020	Asaba, Delta State	Policy Communication Training	Journalist	15	5	0	20
February 24-28, 2020.	Ministry of Agriculture and Natural Resources Minna, Niger State	Training Workshop On R	Government sector (24)	19	5	0	24
Activity 1.3: Nigerian Graduate Student Capacity Building: Note, trainings given by the NAPP scholars have been included in the above sections. To see those trainings provided by the scholars please see section 1.3.2.							

ANNEX D: NUMBER OF INDIVIDUALS WHO HAVE RECEIVED USG SUPPORTED DEGREE-GRANTING NON-NUTRITION-RELATED FOOD SECURITY TRAINING IN FY 2020. (Indicator 5)[6]

Name	Duration	Gender
Balaraba, Abubakar Sule	Completed	Female
Chukwudi, Charles Olumba	Completed	Male
Obekpa, Hephzibah Onyeje	Completed	Female

[6] These scholars were continuing from the previous project year and have now completed the MSU portion of their training and returned to Nigeria.

ANNEX E: NUMBER OF INDIVIDUALS WHO HAVE RECEIVED USG SUPPORTED DEGREE-GRANTING NON-NUTRITION-RELATED FOOD SECURITY TRAINING DURING THE LIFE OF THE PROJECT.

Name		Institution	Degree Level
Fall 2016			
1-3	Charity Ekerebi	University of Ibadan, Nigeria	MS
Fall 2016, Spring 2017			
1-3	Wale Ogunleye	University of Ibadan, Nigeria	PhD
Spring 2017			
1-3	Aisha Ibrahim	Ahmadu Bello University, Zaria	MS
Fall 2017			
4-5	Ufedo Monday Shaibu	Kogi State University Anyigba	MS
4-5	Oluwatoyin Motunrayo Ademola	University of Agriculture, Abeokuta	MS
Spring 2018			
6-8	Stella Nwawulu Chiemela	University of Nigeria, Nsukka, Enugu State, Nigeria	PhD
Spring and Fall 2018			
6-8	Osayanmon Wellington, Osawe	University of Ibadan, Nigeria	PhD
6-8	Blessing, Agada	Federal University of Agriculture Makurdi	PhD
Fall 2018			
9-10	Choko, Onyinye Prince	University of Port Harcourt	MS
9-10	Philip, Hegarty James	Federal University of Agriculture Makurdi	MS
Spring and Fall 2019			
11-13	Balaraba, Abubakar Sule	Federal University of Technology Minna	PhD
11-13	Chukwudi, Charles Olumba	Ebonyi State University, Abakaliki, Ebonyi	PhD
11-13	Obekpa, Hephzibah Onyeje	University of Agriculture Makurdi	PhD

ANNEX F: NUMBER OF AGRICULTURE POLICY COMMUNICATIONS DEVELOPED AND/OR WRITTEN FOR STAKEHOLDER CONSUMPTION (Indicator 7)

Full citation of the communication Authors	Date	Title	Publication Venue
1. Hephzibah O. Obekpa.	2020	Nigerian Scholars train staff of the Ministry of Agriculture and Natural Resources in Ebonyi State.	Nigeria Highlights 66, East Lansing: MSU
2. Philip Hegarty James.	2020	Project Scholars Train Staff of Faculty of Agriculture and Natural Resources Management, Ebonyi State University, Abakaliki on "R" For Statistical Computing.	Nigeria Highlights 67, East Lansing: MSU
3. Oluwatoyin Adebowale.	2020	Aflatoxin Dissemination and Training Programme in Niger State.	Nigeria Highlights 68, East Lansing: MSU
4. Oluwatoyin Adebowale.	2020	Aflatoxin Dissemination and Training Programme in Benue State.	Nigeria Highlights 69, East Lansing: MSU
5. Balaraba Sule	2020	Reaping the Benefit of the Visiting Scholar Program of the Nigeria Agricultural Policy Project: Training on R Statistical Software.	Nigeria Highlights 70, East Lansing: MSU
6. Hephzibah Onyeje Obekpa.	2020	Training and Mentoring on R Now Extended to state of Ministry of Agriculture and Natural Resources, Minna, Niger State.	Nigeria Highlights 71, East Lansing: MSU

ANNEX G: PROJECT SUCCESS STORIES

USAID/Nigeria Multisectoral Nutrition Strategy:
The Project supported the USAID/Nigeria and Partners Nutrition Interactive Workshop on February 19, 2020 and organized a technical session. The presentations summarized some of the key findings from research conducted under the Project and provided insights for the strategy. Workshop participants appreciated the session and the Project received a commendation from USAID/Nigeria (From email correspondence February 21, 2020: "I sincerely thank you and your team for the outstanding support you provided in organizing and hosting the USAID and Partners Nutrition and Interactive Session yesterday. The presentations by your team were spot-on and, thanks to your efforts, the videoconferencing support and logistics enhanced the effectiveness of the session. I believe the session was very productive and that the success of the interaction was due, in no small part, to support that your team provided" – Dr. Samba Kawa (AOR, NAPP). The Project is continuing to provide insights towards the development of the strategy.

Towards Organization Performance Improvement:
As part of the Project mandates to assist its key stakeholders in improving on their performance, the NAPP built the capacity of stakeholders on the use of the organization performance index (OPI) measurement tool in FY 2019. FMARD and ARCN reported adoption of the tool and its resourcefulness in tracking the performance of various arms of the ministry over time. The organization performance improvement tracking is now included as a component in the ministerial score card for the year.

Towards the Outcome of Capacity Building Activities
The Project continues to demonstrate its effectiveness in disseminating techniques and results at the frontier of knowledge across the targeted states. Daniel Atori – a chief correspondent with the New Telegraph Newspaper in Niger State confirmed that in the last two years, he attended several trainings (including one on policy communication) organized by the Project. He is now unleashing the knowledge from the trainings to other journalists and relevant stakeholders in the agricultural sector in the state. Mr. Atori announced that he had organized workshops, trainings and seminars, where he enlightened participants on the importance of social media for information dissemination. Within the quarter under review, Mr. Atori organized the first Niger State Media Summit for students and youths of the state. He anchored the event using the skills garnered from the Project's trainings. Resulting from his overwhelming achievement, he was given a privileged invitation to deliver a lecture on "How to Pitch", at the Ibrahim Badamasi Babangida (IBB) University, Lapai.

In FY 2019, the NAPP organized a MEL training for the staff of FMARD where Ms. Mary Onaolapo of the Federal Department of Agricultural Extension (FDAE), FMARD was one of the most responsive participants. During this time, Ms. Mary demonstrated high competencies in her understanding of the concept of MEL. This encouraged the Project to involve her in the delivery of MEL trainings to two targeted groups in the quarter under review. Ms. Mary has thereafter trained some of her colleagues on the concept of MEL. She also participated in the development of the 2020 annual workplan and budget for her division within the Federal Department of Agricultural Extension (FDAE) of FMARD using the skills gained during the NAPP MEL training. In line with the FGN overall strategies, Ms. Mary properly reviewed and updated the objectives of the department and introduced indicators to their workplan to enable the department track their achievements over time.

Unlike in the past when the department only tracked output achievements, Mary introduced outcome indicators that the department is now tracking to show its impact on stakeholders. Mary demonstrated to her institution the importance and need to establish a MEL unit in the department (which the Deputy Director - Mr. Ifidon Ohiomona is keen about as the proposal is under discussion) pending approval of the director.

Strengthening the agricultural policy research community: APRNet

The Project continues to support the research and policy communications efforts of local agricultural policy networks. One of such networks is the Agricultural Policy Research Network (APRNet) which has since justified the Project's funding support as indicated by its outputs below.

- Engaged over 7 States in agricultural and food policy dialogues and advocated for positive policy changes in these states regarding food and agriculture in addition to providing platforms for the states to showcase their achievements in agriculture and food sector.
- Trained over 400 farmers, scientists, policy makers, agribusiness leaders and scholars nationwide within 2 years under its capacity building programmes.
- Brought the media to sit and strengthen their integration into the agricultural development process by stimulating their consciousness in reporting food and agricultural issues.
- Produced the Nigerian Agricultural Policy Research Journal which is now at volume 7.
- Conducted and funded a collaborative research to assess the effectiveness of aid to agriculture sector in Nigeria and Ghana.
- Reviewed and made critical inputs to policies of the Federal Government in agriculture using its stakeholders' forums with 3 communiqués from these and 7 communiqués from 7 seminars.
- Provided avenues for over 150 researchers to disseminate their research findings and deepen networking for useful collaborative research in food and agricultural policies in Nigeria while building their research analytical skills.
- Provide enlightenments and opportunities in agribusiness at both physical and online platforms. APRNet's website hits (http://aprnetworkng.org) is on the average, 15,000 hits per month.

Reaping the Benefit of the Visiting Scholar Program of the Nigeria Agricultural Policy Project: Training on R Statistical Software

The Project continues to see encouraging evidence of the value of investing in few young Nigerians to reach many. One of the three principal objectives of the Policy Project is strengthening Nigerian capacity for greater evidence-based policy processes in agriculture. The focus is on increasing the ability of Nigerian analysts to undertake and broadly disseminate relevant evidence-based policy analysis. To do so, it is essential for researchers to acquire the skills to perform rigorous data analysis. To this end, the project delivered a series of trainings on agricultural data analysis using R statistical software for university lecturers and staff of Ministries of Agriculture in FtF focus states across Nigeria. Who better to conduct this training than the NAPP Project scholars! R is an open source (free) programming software used for statistical modelling and analysis. Its expandability allows developers to easily write their own software and distribute it in the form of an add-on package. Its major advantages are that it is free and can be customized.

Scholar Training on R for academics in Feed the Future Focus States

One of such trainings was held at Ibrahim Badamasi Babangida University (IBBU) Lapai. It was a typical illustration of the benefits of NAPP's operational strategy: ***"Training one to train others".*** The trainers were: Dr. Charles Olumba, Mrs. Hephzibah Obekpa and Mrs. Balaraba Sule (all three are NAPP scholars). The 25 participants, comprising three females and twenty-two males, were from four universities: IBBU, Lapai, the Federal University of Technology Minna, the Nasarawa State University, Keffi, and the University of Ilorin in Kwara State, all in the North Central zone of Nigeria. The 5-day training was officially opened by the Vice Chancellor, IBBU, Professor Adamu Abu Kasim. In attendance were the State Commissioner for Tertiary Education, Hon. Mohammed Baba Adamu; the Registrar, the Deputy Vice Chancellor and other members of the IBBU management. Each day, the training began with a presentation from a facilitator. This was followed by practical hands-on sessions in which participants utilized the different syntaxes they were introduced to. The training concluded with group presentations of the results of the analysis carried out by the participants using their newly acquired knowledge in R. Appreciating the need for continued interaction between the facilitators and the participants, a WhatsApp group was also formed. The platform is expected to serve as an avenue to discuss participants' challenges and provide further assistance as they explore data analysis with their newly gained competencies in R. The training was rounded up with the presentation of certificates to the participants by the Dean, Faculty of Agriculture IBBU, Prof. A. F. Lawal. A vote of thanks was given by one of the NAPP scholars, Balaraba Sule. She thanked the participants for their enthusiasm and diligence in carrying out all tasks assigned to them and expressed the hope that the training will mark the beginning of many more collaborations between NAPP and all the universities that were represented. Similar trainings were held at Ebonyi State University and Ahmadu Bello University during this quarter.

Training and Mentoring on R Now Extended to State Ministries of Agriculture and Natural Resources in FtF States

The NAPP Scholars have extended training and mentoring on the use of R (a free and open source software for data analysis) to the staff of the Ministry of Agriculture and Natural Resources in Minna, Niger State, during a workshop held from 24-28th of February 2020. The three Scholars trained at Michigan State University (Hephzibah Obekpa, Balaraba Sule and Dr. Charles Olumba) conducted the training of the staff on the use of R software. The software will be used for statistical analysis to support evidenced based work at the Ministry that will contribute positively to the overall policy process in Niger State and Nigeria at large. The training was held in the ministry's conference hall with the Ministry of Livestock and Fisheries permanent secretary, Dr. Wasa Jonathan K., giving the opening remarks. He encouraged participants to leverage the opportunity to build their capacity for analysis with R. Such capacity will be put in use for work in the ministry and for their personal research. For those who would further their education, the knowledge and skills gained will be put to additional use. The pre-evaluation exercise indicated that participants expected to have the ability to use R for their analysis at the end of the training. The permanent secretary assured all present that the training effort would not be wasted. He challenged his staff to put in their best throughout the period of the training. None of the participants had previous exposure to R software. Some had used Excel, SPSS and STATA but the licensing cost posed a challenge to the legal acquisition of these softwares. Twenty-five participants (21 males and 4 females) from six different ministries, departments and agencies in Niger State were trained. They came from the Ministry of Agriculture and Rural Development, Ministry of Livestock and Fisheries, Niger State Agricultural and Mechanization Development Authority, Fadama, Women Affairs, Planning Commission and Bureau for Statistics. The participants were thrilled and indicated that they would appreciate better a longer training session. The training

included introduction to R, basic R structures and commands, managing R packages, data management in R, graphics in R, Regression, correlation and ANOVA amongst others. They were given assignments that covered modules taught in class, such as graphics and regressions, to work through for 2 weeks after the training as a strategy to encourage experiential learning. A WhatsApp group account to share messages, documents and videos inexpensively was created to further guide and assist participants with challenges as they continue to use R in a mentored mode. The WhatsApp group account is a platform that empowers the trainers to continue mentoring participants as long as they choose to remain in the group. A similar training was also conducted in Ebonyi State during this period.

These stories related to "R" training are further evidence that the NAPP Scholars' Program is an innovative and worthwhile USAID investment. The value of scholars' continued inputs to fill human capacity gaps of many Nigerians will lead to stronger support for the policy process across the country.

Project Scholar uses the "train one to train others approach" to reach over 12,000 other Nigerians on food safety

Food safety is extremely important for food security and there is a dire need for Nigerians to be well informed about the challenge of aflatoxin along the maize value chain in the country. Aflatoxin contamination in maize and maize based products poses a threat to the health of humans and animals in Nigeria. Knowledge about aflatoxins and how to prevent their contamination of maize based products is necessary to prevent Nigerians from consuming bad maize, thus reducing their exposure to the health risks of aflatoxin. One Project scholar (a member of the 'aflatoxin along the maize value chain' research team) reached over 12,000 Nigerians in 4 States indirectly through 125 trainees (including extension agents) she trained. Between January 27-28, 2020, Mrs. Toyin Adebowale and her Nigerian Advisor (Prof. Obadina) led a training that took place at the Ministry of Agriculture, Minna, Niger State. The programme designed as trainer of trainers was twofold. First to disseminate information about aflatoxin in maize and to train the participants how to manage maize, from the farm to consumer, with food safety as the major consideration. The second goal of the programme was to ensure that in the immediate future, the participants would be able to disseminate the findings and train others in their communities about aflatoxin and maize management. Commissioner for Agriculture, Hon. Haliru Zakari Jikantoro kicked off the programme with some welcoming remarks. The dissemination and training was facilitated by Mrs. Oluwatoyin Adebowale (NAPP Scholar), Dr. Obadina Adewale, Professor in the Department of Food Science and Technology, Federal University of Agriculture, Abeokuta (FUNAAB) (Mrs. Adebowale's NAPP advisor) and Ms. Itohan Martins, a FUNAAB graduate student who has joined the aflatoxin research team. The 2-day programme of events was attended by 50 participants (40 males and 10 females), who were extension agents and students from all local government areas in Niger State. Dr. Obadina and Mrs. Oluwatoyin gave presentations on "maize management" and "maize fermentation and safety" respectively. This was followed by model training sessions on how to address related challenges in activities all along the maize value chains from production to sale. Participants took turns to practice disseminating the findings to training groups (made up of fellow participants). This ensured that participants actually understood the contents of the presentations while at the same time demonstrating how they were going to disseminate the information to their communities. Strengths and weaknesses of the practice presentations were discussed and remedies for the weaknesses presented. Participants remained engaged all through the events. The trainers were happy with the interactions and pleased with the opportunity to impart knowledge and skills in a lifesaving programme. Facilitators volunteered to join hands with the participants to further disseminate the findings on aflatoxin in maize as they train

others in local communities to challenge related challenges. By the end of March, 2020, the 50 participants had trained 6138 in Niger State (a subset of the 12,204 total reached). This story shows how investing in the training and mentoring of young Nigerian scholars not only benefits them but also can benefit larger groups of other Nigerians. It also demonstrates how researchers working with extension workers can effectively pass on important information to Nigerian households and businesses. She conducted a similar two-day training workshop in Ebonyi and Benue states. Together she has trained about 125 community champions and extension agents (during Q1 and Q2 of this year) who have gone on to train over 12000 Nigerians. These training and monitoring activities reflect the impact of the Scholar program's "train one to train others" approach.

Policy Project is slowly but surely changing the environment in academic institutions across Nigeria

As part of the Policy Project Scholars program, The Major professors of the young Nigerian Scholars also come to MSU for a month. During that month, they attend classes at MSU and interact with various MSU faculty. The aim is to share teaching and research experiences across institutions in Nigeria and the USA while creating an opportunity for the professors to see what their scholars are doing and to develop new networks and collaborations. We summarize below some insights from the Visiting Nigerian Faculty Supervisors that demonstrate how their participation in the Scholars program is impacting them and their institutions back at home in Nigeria[7].

Professor Ifeyinwa Achike, University of Nigeria, Nsukka, Enugu State, Nigeria, Department of Agricultural Economics

- I am still using the group mentoring approach I learned about at MSU for my graduate students. There is evidence of uptake of the approach in my department as three of my colleagues have also started using it with five others planning to start next session.
- My NAPP Scholar is using the content (both materials and knowledge) of AFRE 874 (a course taken at MSU) to teach AEC 561 (Methods of social research). She has also put the 'R' application in the course outline of her newly assigned PG course (Computer applications).
- I have begun to implement joint data collection (an easy fall-out from the group mentorship) which was also a take away from the MSU visit. However, the students that will jointly collect data are still touching up their proposals and will soon proceed to field. Another fallout from group mentorship is that, I created a WhatsApp platform with my graduate students, where we share pertinent issues on their research and academic matters. We usually schedule progress report presentations twice in a semester. Here the students present their progress reports for review and comments from me and their peers. I occasionally invite some of my colleagues to attend and chip-in ideas to boost the students' research work. This practice has tremendously assisted my students in their departmental seminar presentations. As a matter of fact, after my visit to MSU and participation as NAPP visiting scholar which enabled the knowledge of this group mentorship, my graduate students are now like family with me.

[7] We have tried to keep the words/language used by the professors; only adding text for clarification and flow.

Professor Bolarin Omonona, University Of Ibadan, Oyo State, Nigeria, Department of Agricultural Economics

- Most of the funding support for research work that we have done since I came on exchange visit to MSU were based on personal contact or recommendation by colleagues within and outside MSU. For instance, in September 2018, we were recommended to WorldFish to conduct a meso analysis of the fish value chain in Oyo State. This was concluded in December, 2018. In 2019, we were linked with a team in the US to bid on the Fish Innovation Lab grant that we are almost getting funded. Generally, the search for funding opportunities has not been intense as the working environment has remained unfriendly. Many of our staff have gone on leave and their course loads have been redistributed to those of us left behind since no new staff recruitments have been made. Also, administrative activities have increased and this has taken much of my time.
- I have been practicing some of the teaching styles discussed at the weeklong seminar on teaching we attended at Michigan State University during our visit. The use of digital devices to enhance teaching is limited because of the poor state of our infrastructure. Inadequate mains electricity supply limits the use of power point as projectors require standby generators in case of power outage. Cheap service by internet providers on campus have become unreliable.
- I did a meso level analysis of fish value chains in Oyo State with another local researcher in Ibadan through the nomination of Profs. Reardon and Liverpool-Tasie. I also attended the training of enumerators in the aflatoxin study that took place in Ibadan with Prof. Liverpool-Tasie and others from MSU.
- Through an advert sent by Prof. Liverpool-Tasie, Wale Ogunleye (a NAPP scholar is now employed as a Senior Associate in Poverty Innovation Lab; an international organization that specializes in data collection and analysis in development economics.

Professor Godwin Abu, University of Agriculture Makurdi, Benue State, Agricultural Economics

- The African Agricultural Technology Foundation (AATF)desired a consortium of experts to conduct impact evaluations for the projects. I got the TOR and responded as to how the evaluation should be conducted with inputs from the meetings we held at Justin Morill hall, MSU. After rigorous screening of the applicants for the study, I came out tops for Nigeria. I was selected to partner with a Kenyan Firm - African Research and Economic Development Consultants (AFREDEC)
- While at MSU, we had useful interactions with faculty members including Profs. Bob Myers and Vincenzina Caputo on microeconomic theory and experimental economics respectively. The University of Nigeria Nsukka subsequently invited me to examine a PhD candidate whose thesis was on experimental economics. It was so well-conducted the department thereafter sent me 5 MSc theses for examination. I now have a working collaboration with the University of Nigeria Nsukka. I now want to introduce experimental economics at MSc and PhD levels in my home institution.
- While at MSU, I had participated in drawing up a proposal with MSU Professor. Soji Adelaja for the USAID innovation lab for Markets, Risk and Resilience. We are very hopeful that we will get the grant and deepen our collaboration with MSU.

Damisa Maiyaki, Ahmadu Bello University, Zaria, Kaduna State, Agricultural Economics

- When I got back to Nigeria, I tried to link up with 4H Nigeria, a program geared to encourage youth to engage in agriculture. I sent a message through their Facebook page of which there was no reply. By the close of 2017, I was no longer the coordinator of the adopted village of my research Institute. The adopted village was a platform in which the young ones were encouraged to have interest in Agriculture and or agriculture related activities and services. My successor did not have as much interest in the 4H as I did.
- The creation of long-term linkage with MSU is very much alive in my Department but the drive and vigor to pursue this has slowed down significantly following a change of baton of the headship of the Department. When I visited, I was the Postgraduate Coordinator of my Department and was able to ensure some pushing which a new crop of leadership has been unable to do. My Department is in dire need of partnering with institutions in the outside world for recognition and capacity building and collaborating with your Department is a sure privilege. Sooner or later, I know a move will be made to effect this.
- Aisha Ibrahim, (my NAPP student scholar) was given employment by my University at a sister research institute: The National Agricultural Extension Research Liaison Services (NAERLS). This was because the contribution of MSU to her studies added color to her research and made her research to stand out uniquely. Presently, there is a student in the Department by name Abel Gomina who is being co-supervised by Prof Thomas Reardon of your Department.
- The scholar program has enabled me to supervise and lecture my students properly. For example, one of the areas scholars in my department lack understanding is in the area of research design. It used to be lumped with sampling procedure and as such not well handled. Now, my students treat it as a separate topic in research methodology. Though the Department is yet to take a stand to adopt this method, some of my colleagues, particularly the younger academicians, are already imbibing the method. The exposure has enabled me to also improve student lecturer interaction where we see ourselves as stakeholders and not boss-servant relationship.
- Most of our graduate research is purely academic. As such, they are mostly on shelf research output. My scholar visit opened my eyes to the fact that sometimes we need to tailor our researches to capture the attention of the politicians for funding and out-scaling. Now, their research is being tailored towards the solution of farm problems in farming communities.