**INTRODUCTION**

USAID/Nigeria’s Agricultural Transformation Program’s $64.9 million flagship project — MARKETS II:  
- Five year, demand-driven agriculture market systems facilitation project took place in 26 Nigerian states  
- A year after the project ended, Chemonics evaluated MARKETS II’s approach  
- Data sources included life-of-project M&E data, in-country key informant interviews (12) and focus-group discussions (18) with former beneficiaries and stakeholders a year after project closure

**PURPOSE OF THE STUDY**

Chemonics commitment to learning and critically assessing our projects led to an inaugural self-financed ex-post study of MARKETS II in Nigeria from 2012 to 2017. This ex-post assessed:  
- MARKETS II’s contribution to smallholder farmers (with a focus on women and youths’ resilience)  
- Whether project-recommended agronomic practices continued more than one year after project closure  
- Whether market linkages continued more than one year after project closure

**CONCEPTUAL FRAMEWORK**

The ex-post study used the Feed the Future Gender Integration Conceptual Framework, which includes seven dimensions:  
1. Increased decision-making power in agricultural performance  
2. Increased control over productive resources  
3. Increased control over use of income  
4. Increased social capital and leadership in the community  
5. Improve time use/decreased time poverty  
6. Increased human capital  
7. Increased access to and use of technologies

**SELECT QUANTITATIVE RESULTS**

Propensity score results show that at project close (when the final survey was fielded), participation in a MARKETS II farmers’ group was associated with statistically significant (at the 95 percent confidence level) increases in access to crop-protection training (56 percent higher than non-MARKETS II farmers), as well as increases in using seed tests (8 percent higher), utilizing improved seeds (5 percent more likely), and using irrigation (3 percent higher).

### Propensity Score Matching Results:

| Technology Variable                          | Coefficient | Standard Error | T-STAT | P>|Z| |
|---------------------------------------------|-------------|----------------|--------|-----|
| Receiving training in crop protection in the past year | -0.017671   | 0.02076       | 0.85   | 0.39 |
| Using seed testing                          | -0.007357   | 0.02046       | 0.36   | 0.72 |
| Using improved seeds                        | 0.005419    | 0.02047       | 0.26   | 0.79 |
| Using recommended spacing                   | -0.02583    | 0.02067       | 1.27   | 0.21 |
| Applying inorganic fertilizer               | -0.04955    | 0.02089       | 2.33   | 0.02 |
| Applying operations at recommended times   | -0.07342    | 0.02086       | 3.54   | 0.00 |
| Establishing nurseries                       | 0.004545    | 0.01048       | 0.43   | 0.67 |
| Applying pest management approaches         | -0.02428    | 0.02061       | 1.19   | 0.24 |
| Applying soil/water conservation (fertilizer)| 0.02584     | 0.01715       | 1.49   | 0.14 |
| Using irrigation                            | 0.02314     | 0.01521       | 1.56   | 0.12 |

**REFERENCES**


**SELECT QUALITATIVE RESULTS**

We facilitated 18 focus groups and 12 key informant interviews with farmer associations, extension agents, processors, and service providers in former project zones, a year after project closure:

**Sustained Formal and Informal Extension services**

- “Students on attachment came from Audu Bako College of Agriculture to Kiru farmers for training on sorghum production. They did not pay us. It is part of our social responsibility.” (Male farmer, Kano)
- “I shared what I learned with many non-MARKETS II farmers, and other extension agents have done the same. The farmers are adopting the MARKETS II technologies and on a scale of 10, they score 7. They are still trying to catch up with MARKETS II farmers because the MARKETS II-trained farmers also keep improving. My colleagues...have also acknowledged that non-networked farmers are rapidly adopting technologies like proper fertilizer application and plant spacing.” (Female extension agent, Kaduna)

**Sustained Technology Uptake**

- “We have spread [seed transplanting] technologies even outside Kebbi state. I was one of the lead farmers that was selected by the state to teach farmers in Imo state [southern Nigeria] on rice production.” (Male farmer, Kebbi)
- “I transplant for other farmers at 200 NGN per 20 square meter basin. I earn as much as 1,000 NGN in a day transplanting for people.” (Young male, Kebbi, creates a niche business for himself)

**Evolving Market Linkages**

- “We have actually become competitors with Labana (rice processor), so we have very little to do with them. We also exhaust our paddy that we sometimes must buy from the open market to process... We buy an average of 1 ton per week for processing.” (Female farmer, Kebbi)

**CONCLUSION AND EXTENSION IMPLICATIONS**

Focus group discussions and key informant interviews demonstrated that former networked farmers continue to use agronomic practices and technologies they learned from MARKETS II in Kaduna, Kano, and Kebbi. The discussions also highlighted sustained market linkages and continued extension through formal state channels, private sector actors and informal farmer and community-based networks. These actors value MARKETS II-recommended practices and linkages because they make economic and business sense.

There is variability among states in terms of extension service sustainability: Kaduna and Benue states do not have sufficient funding to maintain extension levels seen on MARKETS II.