



Extension Agents' Experience with PBR cowpea Training and Outreach

Introduction

Since 2019, the African Agricultural Technology Foundation (AATF) has been part of a multilateral partnership to support three seed companies in the commercialization of Pod Borer Resistant (PBR) cowpea in Nigeria. PBR cowpea has been shown to increase yields by up to 70% for farmers and requires less pesticides than conventional cowpea. Between July 2020 and September 2021, AATF and its partners trained Extension Agents (EA) on PBR cowpea and helped to set up Demo Farms, which farmers can visit and learn from.

The training covered good agronomic practices and stewardship of PBR cowpea. A follow up survey was conducted in December 2021 with the EAs to assess the effectiveness of the training they had received, and to understand their experience sharing their learning with farmers.

Research methods

- The researchers conducted 183 (44 female and 139 male) phone interviews with the EAs who attended the training and had worked with at least one DF.
- A higher proportion of male EAs reside in the Northwestern region while most female EAs are from the Southeast region. A higher proportion of female EAs are more educated (have completed tertiary education) than their male counterparts.

Key Findings

- EAs are satisfied with the training and find it useful in their work with Demo Farmers (DFs), as indicated by a Net Promoter Score of 63 out of 100. 67% of EAs are likely to recommend PBR cowpea training to another person. Female EAs are more satisfied with the training than male EAs.
- About one-third of EAs report challenges with the training, including bad networks, inconsistent input supply, and poor timing of the training sessions.
- While nearly all EAs (99%) share what they learnt about PBR cowpea with Demo and Non-Demo Farmers, male EAs supervised more demo farms and told more farmers about PBR cowpea than female EAs.
- Some EAs face challenges convincing farmers to adopt the PBR variety: 22% of EAs reported challenges convincing male farmers to try PBR

cowpea while 16% reported challenges convincing female farmers, attributed to female farmers' hesitation to try something new, not engaging in farming and lack of awareness. Male farmers, on the other hand, may lack awareness, are skeptical about PBR, want to see demos and to receive inputs.

- Female EAs are more likely to believe that household nutrition has 'very much improved' due to PBR cowpeas, compared to male EAs.
- EAs report benefits of PBR cowpea to be high yield, early maturity, and disease resistance.

Two-thirds believe that PBR cowpea is likely to improve nutrition among farmer households and Improvements in household nutrition will be driven by PBR cowpea's nutritional content, availability, and affordability.

- 64% of the EAs believe male farmers are likely to recommend PBR cowpea to others. Reasons for recommending to others include higher crop production or yield and potential to increase income and profit.

"The training brings us an access to understand the benefits of PBR cowpea production." – Female EA, 48

"I considered it a privilege to be part of this new agricultural innovation and I made sure that the knowledge gained is shared amongst the farmers. The PBR cowpea has wonderful features like early maturity, is very economical in terms of the number of insecticides you apply, and it is very resistant to pests." – Male EA, 45.

Conclusions and recommendations

To improve the effectiveness of the PBR cowpeas training, EAs suggest training more farmers and providing more seeds to encourage trial of the variety as well as to increase its consumption.

Recommendations:

- Focus training on a wider group of stakeholders (e.g., farmers) so that the value proposition of PBR cowpea, including its nutritional benefits, can be reinforced among farmer households.
- Extend parts of the training given to EAs to farmers directly and provide more inputs (seeds) to increase the number of farmers trying PBR cowpea.
- Schedule training for farmers at appropriate times, and address challenges related to connectivity and training materials. Conduct training in a local language, with more practical training (demos and field days),
- Include farmers in training and provide more inputs (like seeds) to increase the chances of farmers trying PBR cowpea.
- Provision of demo plots and seeds to farmers could increase the production and consumption PBR cowpea. Demonstrate to farmers methods of cooking cowpea and whether there are by-products from it.