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Understanding Gender Dimension in the Uptake of Improved Groundnut Varieties: Evidence from Northern Nigeria

Kalat Patience Duniya[1], Atia A. Apusigah[2], Hamza Adam[3], Benjamin Ahmed[4]

[1] *Institute for Agricultural Research, Ahmadu Bello University, Department of Agricultural Economics and Rural Sociology, Nigeria*
[2] *University for Development Studies, Faculty of Education,*
[3] *University of Reading, School of Agriculture, Policy and Development, United Kingdom*
[4] *Institute for Agricultural Research, Ahmadu Bello University, Agricultural Economics and Rural Sociology, Nigeria*

Abstract

Increasing legume productivity for maximum food security has been the focus of Tropical Legumes project: an international initiative partnering other research institutes, through the development and dissemination of improved cultivars. Being gender inclusive is one of the key ingredients for designing effective policies so as to enhance productivity. By employing a mixed method to a sample survey of 1480 groundnut farming households and 30 focus group discussions, we examined gender differences in adoption rates of improved groundnut seed varieties using the average treatment effect (ATE) framework to address the problem of non-exposure bias. We further applied gender-disaggregated regressions and the Harvard analytical framework to explain the driving and inhibiting factors of farmers' uptake of the improved varieties. Findings revealed that 81 % of females and 78 % of males were exposed to the improved seed varieties. Potential adoption rates were found to be 70 % and 53 % for female and male farmers respectively; while actual adoption rates were 61 % and 46 % for female and male farmers respectively. Factors influencing adoption were found to differ by gender in some cases. Farmers' age, marital status, extension services and variety attributes were found to significantly influence adoption decisions female farmers; while formal education, farming experience, extension visits and participation in farm demonstration significantly influenced male farmers' adoption decision. Area planted and access to credit influenced the adoption decisions of both male and female farmers. It was further revealed that cultural discrimination against female appears to be an inhibitor, because females under males' household headship were not able to participate effectively in extension activities. Though the males were the main decision-makers, females were useful in providing information related to groundnut production. It is thus clear that groundnut productivity can be boosted with increase in females; participation in extension activities and farm work. More efforts to rectifying female bias in extension services along with improving access to credit could contribute to higher adoption rates for increased productivity.

Keywords: Adoption rate, exposure, gender, groundnuts, Nigeria

Contact Address: Kalat Patience Duniya, Institute for Agricultural Research, Ahmadu Bello University, Department of Agricultural Economics and Rural Sociology, Graceland, Zaria, Nigeria, e-mail: kalatduniya@yahoo.com