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# Gender Specific Perceptions and Adoption of the Climate-Smart Push-Pull Technology in Eastern Africa

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**Abstract**

Performance of agricultural sector in Africa is rated below average with the staple cereal crops being the most affected by both biotic and abiotic factors. The African witch weed, *Striga*, stemborers, poor soil fertility and climate change are among the main factors attributed to poor productivity. This is also in part attributed to inability of women to access to productive resources, yet they represent a crucial resource in agriculture and the rural economy through their roles as farmers and entrepreneurs. International Centre of Insect Physiology and Ecology (icipe) developed and adapted the push-pull technology (www.push-pull.net) for integrated management of cereal stemborers, *Striga* weed and improved soil fertility with the ultimate aim of increased food security among the smallholder farmers in Africa. This study evaluated perception and extent of adoption while dis-aggregating data by gender. Data analysis combined descriptive statistic and tobit model. The findings show significant gender variations in farmers' perception on farming constraints and on beneficial technology attributes. More women rated low cereal yields (98.2 %), poor soil fertility (96.3 %) and limited land (26.3 %) as major constraints compared to men; and also more women highly rated the beneficial attributes of the technology; e.g. 97.3 % of the women vs 94.6 % of men cited increased cereal production; 97.2 % women vs 92.4 % of men cited decline in *Striga* weed; 95.9 % of women vs 90 % of men cited an increase in soil fertility; 94.1 % of women vs 91.3 % of men cited an increase in fodder production and 82.3 % of women vs 66.5 % of men cited an increase in cereal and fodder production even with drought. Male farmers allocated larger portions of their land to the technology compared to the female farmers (Coefficient = 0.0947) and also expanded the technology more (37.3 % males had expanded vs 33.5 % of female farmers; and 99.6 % of males were willing to continue using vs 98.6 % of females).The results further show that a positive relationship between land size and adoption extent (Coefficient = 0.0146). Future trainings programmes, technology development and dissemination strategies and policy options should take into account gender and cultural considerations in order to reduce vulnerability.

**Keywords:** Gender, perception, push-pull, soil fertility, stemborers, *Striga*

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