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Effect of Farm Attachment Program in Enhancing Technology Adoption among Small-Scale Farmers in Kenya

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Abstract

Considering the limited availability of cultivatable land and increasing population, agriculture has continued to play an overriding and strategic role in sustainable development poverty reduction, employment creation and enhanced food security in developing countries. However, agricultural productivity in the SSA has continued to decline lagging behind that of other regions in the developed countries. Therefore, increasing agricultural productivity in Kenya has become an urgent necessity. In an attempt to increase agricultural productivity, training and research institutions have designed and generated knowledge and technologies. However, the knowledge and innovations generated by these institutions have hardly reached the end users. In response, Egerton University in collaboration with other stakeholders established Farm Attachment Program (FAP) in 2014 to innovatively engage small-scale farmers through students on internship. The University attaches third year degree and second year diploma students on farms for a period of three months in several cohorts annually. However, since the inception of the program, its effectiveness to small-scale farmers has not been evaluated. It is on the foregoing that this study aimed at filling these knowledge gap.

Primary Data was collected in Nakuru and Baringo Counties, Kenya among the farmers engaged in the program. A Tobit model was employed to empirically establish the effectiveness of the program and determine the factors influencing technology adoption among small-scale farmers.

The effectiveness of the program was measured using an adoption index, a ratio of technologies adopted against technologies proposed. The results revealed that the intensity of adoption was positively influenced by years of schooling, farming experience, security of tenure, land size, credit access, training, student responsiveness and the number of times a farmer had hosted students on attachment while age had a negative influence.

FAP has the potential of increasing agricultural productivity and therefore, alleviating poverty through enhanced technology adoption among small-scale farmers. Therefore, policies for strengthening access to finance and product market and acquisition of title deeds should be put in place to motivate farmers to undertake long-term investments by solving their liquidity constraints to enable them to incorporate the practices introduced by the program

Keywords: Agricultural productivity, effectiveness, farm attachment program, technology adoption, Tobit regression

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