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Evaluating the Impact of Group Based Training Approaches on Crop Yield, Household Income and Adoption of Pest Management Practices among Smallholder Horticulture Farmers in Kenya

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Abstract

The recent group-based training approaches such as Farmer Field School (FFS) and Common Interest Group (CIG) have been promoted in Kenya to accelerate dissemination of new technologies among farmers through various learning and communication networks. Group based extension approaches expected to have a significant and positive impact on horticultural yield, income and adoption of pest management practices. The objective of this paper was to evaluate the impact of FFS and CIG participation on horticulture yield, income and adoption of pest management practices among smallholder horticulture farmers in Kenya. A random sample of 495 farmers who had been either a member of FFS, CIG or who operate individually responded to a structured questionnaire. Information collected included farmers characteristics, farmers' membership in other groups and status of their training in reference to agriculture. Descriptive statistics method was used to analyse the status of agricultural training and Propensity score matching method was used to get the average treatment effect on the treated. Results show that FFS and CIG participation had no significant impact on yield and income of horticulture farmers. However, significant impact was observed among farmers who participate in either FFS or CIG, particularly in the area of adoption of pest management practices. The study recommends that the training methodology of the FFS and CIG approach to be reviewed in order to see the underlying problem that impede the impact of FFS and CIG programme on yield and income of smallholder horticulture farmers. Further, farmers should be encouraged to gain confidence in order to try out new technologies such as IPM. The study also suggests, the relevant bodies to come up with price differentiation among the two different horticultural products that are grown using IPM and conventional method. Because, horticultural crops that are grown using IPM method are not identified in the marketplace. Furthermore, farmers who use IPM methodology should be encouraged to market their horticultural produce as IPM Grown. In addition, there is also a need to create awareness among consumers on the danger of pesticides related health problems due to consuming products that are not grown using the IPM method.

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