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Improving Agricultural Extension to Promote Nutrition-sensitive Innovation: Insights from a Randomised Experiment in Kenya

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Abstract

There is widespread consensus that the small farm sector is a key entry point for improving nutrition in sub-Saharan Africa. Smallholder farmers are not only producing most of the food in Africa, they are also the group that is most affected by food insecurity and undernutrition. Smallholder agriculture needs to be made more nutrition-sensitive, which requires innovation in various dimensions, including better technology, enhanced production patterns, improved agricultural training, and better market access. As is well known, nutrition improvements also require greater awareness and knowledge about healthy foods and dietary practices. What is less understood is how to successfully induce nutrition-sensitive innovation and related behavioural change among smallholder farm households. We analyse the role of agricultural extension services in this connection.

We hypothesise that improved agricultural extension can play an important role for better nutrition. In addition to providing agricultural training, extension officers could provide relevant nutrition education to foster awareness and promote the adoption of technologies and practices that can help to improve dietary quality and micronutrient intake. Such a combination of agricultural and nutrition training has never been tested rigorously. In addition, extension officers could also facilitate market linkages. We evaluate the effectiveness of improved agricultural extension services through a randomised controlled trial (RCT) with farm households in Western Kenya. The RCT was carried out and completed in 2016. Different experimental treatments were designed where agricultural training as a stand-alone approach is compared with alternative approaches that also include nutrition training and market linkage elements.

Data from the baseline (late 2015) and follow-up survey (late 2016) are used to statistically evaluate impacts of the different extension approaches on the adoption of particular technologies (e.g., biofortified beans, improved chicken), household dietary practices, and other relevant variables. Results suggest that the combination of agricultural training with nutrition training is particularly promising. The findings can help to improve the design and effectiveness of extension approaches towards more nutrition-sensitive smallholder systems.

Keywords: Extension effectiveness, Kenya, smallholders