

REVITALIZING AGRICULTURAL EXTENSION SERVICES IN DEVELOPING COUNTRIES: LESSONS FROM OFF-SEASON VEGETABLE PRODUCTION IN RURAL NEPAL

Murari Suvedi, Raju Ghimire and Michael Kaplowitz

Department of Community Sustainability
Michigan State University
Natural Resources, East Lansing, MI 48824, USA
Corresponding author: suvedi@anr.msu.edu

(Received: November 25, 2016; Accepted: January 20, 2017)

ABSTRACT

Technological advances in agriculture potentially can improve the productivity and income of farmers. However, it is unclear how rural and smallholder farmers can best learn about, adopt, and benefit from technological advances. Extension services with multiple linkages to organizations and farmers have been identified as a positive factor in successful adoption of new technologies. Participatory action research was undertaken in Kaski district of Nepal focused on introducing new (for the local context) technologies for off-season vegetable. The project sought to demonstrate best practices in agricultural extension and showcase a demand-driven, participatory, and pluralistic model of agricultural extension. It was hypothesized that doing so would enhance the productivity, income, and food security of participating rural households. Two household surveys were conducted -- a baseline survey in 2013 (before the project) and endline survey in 2015 (after the project) -- to collect data and study the impact of the intervention, if any, on household wellbeing. The results show the participatory approaches used to be associated with enhanced productivity, income, and food security for participant households. The results show that the area under off-season vegetable production, marketed vegetable volume, and income increased significantly. It appears that vegetable production and income tripled while the area of land dedicated to off-season vegetable production doubled at the end of the project. The types of crops grown by participant households also significantly increased over the project period. Furthermore, participant farmers were found to organize into groups for knowledge sharing, adopting new technology, and increasing household income. The results suggest that phase-wise learning and scaling up approach used in the off-season vegetable production can be replicated to disseminate new technologies in other contexts to strengthen extension service delivery.

Key words: Participatory action research, plastic tunnels/houses, pluralistic extension services

INTRODUCTION

Technological advances in agriculture seem to offer an opportunity to rural farmers to increase production and improve their livelihood sustainably. Adopting such technologies have contributed greatly toward the financial success of farmers through the efficient use of resources and scaling up the production at lower per unit cost. However, a majority of farmers in developing countries have not been able to adopt newly developed technologies because of their limited resources (cash, labor, time) and limited access to relevant information regarding the technology (Ghimire and Huang, 2015). Further, resource-poor farmers are often reluctant to invest in any untried technology because of their risk aversion behavior. In order to adequately address this issue, a good extension