

The Effectiveness of Farmer Field School Approach for Dissemination of Technologies to Seed Potato Farmers in Badulla District

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Although farmers in Badulla district can gain higher income by cultivating potato compared to other crops they have to face more challenges as the potato requires intensive and costly inputs for its cultivation in comparison with other field crops. Thus, the main objective of this study is to investigate the effectiveness of the Farmer Field School (FFS) Approach as an agricultural innovation and dissemination platform for improving farmers' knowledge and adoption of appropriate cultural practices and thereby improving land productivity and profitability of the seed potato cultivation. The stratified purposive sampling technique was performed to select 40 seed potato farmers who participated for the FFS program (considered as FFS group) conducted in four AI ranges (Perahettiya, Halpe, Etampitiya, and Mirahawatta) in Badulla district and another 40 farmers who were not attended for the same program [considered as NFFS Group]) and living in same locations. A cross-sectional field survey administering pretested structured questionnaire and focus group discussions were undertaken to collect primary data on socio-economic status, knowledge, adoption level, yield and cost of production, and farmers' attitude towards the FFS approach. A scoring system and 5 point Likert scales were developed to measure the above criteria and index. Descriptive analysis, hypothesis testing, and Ordered Logistic Regression model were applied to measure variables and explain the relationship among the tested parameters using SPSS statistical package. The result show that there was a significant difference between FFS and NFFS seed potato growers on knowledge ($t = 11.64, p < 0.000$) and adoption of agricultural practices ($t = 7.94, p < 0.000$), productivity of land ($t = 4.039, p < 0.00$), and cost of production ($t = -5.729, p < 0.000$), and these findings reveal that FFS group are far advanced in reference parameters compared with NFFS group. Findings of the Ordered Logistic Regression model reveal that the model as a whole is fitted significantly ($P < 0.05$). R square of the model expresses that 26.75% proportion of the variance in adoption level significantly improved the recommended cultural practices as explained by seven independent variables (education, experience, and indexes of social participation, group dynamic, satisfaction, and sustainability). The findings of this study proved that FFS approach is as an agricultural innovation and dissemination platform for improving farmers' knowledge and changing their attitude on adoption of appropriate cultivation practices, and thereby improving land productivity and profitability, and living standard of self-seed potato farmers in Badulla district.

Keywords: Badulla District; Effectiveness; Farmer Field School; Seed potato