HILL FARMING TECHNOLOGY IN BANGLADESH: PRODUCTIVITY RISK AND IMPACT ON INCOME OF THE FARMERS

Major Professor: Dr. S. M. Fakhrul Islam

Name of the author: Md. Nur Alam

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Abstract

This study was undertaken to show the impact on risk and income of the farmers under the hill farming technology. The study revealed that the highest proportion farmers were in the age group of 16-45 for both Jhum and MSFO farmers. About 52 and 55% of the total Jhum and MSFO family members are male and 48% and 45% are female respectively. The average size of a family was about 5 persons constituting 3 males and 2 females for both Jhum and MSFO farmers. A majority of the Jhum (63%) and MSFO (48%) fanners were illiterate. The dependency ratios were 0.96 and 0.82 for Jhum and MSFO respectively. The main occupation of the Jhum farmers was agricultural labour but agriculture was the main occupation of most MSFO farmers. Maximum cultivable area under Jhum farmers were hilly land. MSFO farmers cultivated crops on plain land higher than that of Jhum farmers. It was observed that the Jhum farmers lived in the remote areas and didn't care about modern technology. They cultivated different types of crops in the same field. They did not use high quality seed and not aware of using fertilizers and pesticides. The Cobb-Doughlus production model was also used on the basis of the best fit and significant effects of explanatory variables like seed cost, stacking cost, urea and labour cost on Jhum farming. Estimated values of the relevant coefficient revealed that among the included variables, seed cost, labour cost and staking cost were found to be significant. The co-efficient of elasticity's obtained from the model in jhum farming production had not the expected signs for all the variable inputs. All of the individual elasticities of production were less than one case. Constant returns to scale (RTS) occurs when a proportional increase in all inputs results in the same proportional increase in output. The Cobb-Doughlus production function in the case of MSFO farming shows that some of the co-efficient did not have the expected sign. The co-efficients of seed cost, fertilizer cost and labour cost were found to be significant. The co-efficient of elasticity's obtained from the model in MSFO farming production also had not the expected signs for all the variable inputs. All of the individual elasticities of production were less than one case. Constant returns to scale (RTS) occurs when a proportional increase in all inputs results in the same proportional increase in output. After participation in the project the sources of drinking water has been few developed and the proportion of medical treatment has been improved. After participation in the project

farmers try to do various special recreational day such like Independence day, Victory day and other special day. The hill area is so much dark and the electricity was not so available .For these reason their social security livelihood has not been fully changed. After the awareness of the project they try to collect their food from various sources like NGO and leader etc. which improved their food security a little bit. After participation in the project the proportion of natural calamity has been some reduced. After creating the hill tracts porishod the hill farmers get various help from them. After participation in the project the proportion of perception of send their children to school have been improved. In many areas few school have been established and many mass media have been advertised. For these they were so much encouraged about the literacy and wish to go school.