

# COST-BENEFIT OF SOIL CONSERVATION TECHNOLOGY FOR HILL FARMING IN KHAGRACHARI DISTRICT OF BANGLADESH

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## ABSTRACT

The study revealed that particularly keeping Multi Strata Fruit Orchard (MSFO) project in view of the family size of Jhum and MSFO farmers were 5.10 and 4.72 persons respectively. More than half of the respondents were under the age group of 31-45 years. The overall literacy status of MSFO farmers was higher than that of Jhum farmers. A higher percentage of Jhum (63%) and MSFO (47%) farmers were reported to be illiterate. Most of the Jhum farmers (65%) were dependent on wage earnings, whereas MSFO farmers were mostly (84%) depended on agriculture for maintaining their family. Both type of farmers owned equal farm size of 3.628 hectare. The Jhum farmers in the study area used local variety of seed and incurred the highest cost for labour followed by seed. The average cost of Jhum cultivation was estimated at Tk. 33382 per ha. On an average, a Jhum farmer got per ha Tk. 109315 as net return. The average undiscounted Benefit Cost Ratio (BCR) was 3.27. On the other hand, Bangladesh Agricultural Research Institute (BAR1) provided all kinds of supports (cash and kind) to the farmers for setting MSFO on hills. The average cost of setting MSFO was Tk. 103775 for the first year. The cost of labour was the major cost incurred for MSFO followed by seed. The Cost Benefit Analysis revealed that the MSFO technology was highly profitable as its Net Present Worth (NPW), BCR and Internal Rate of Return (IRR) were very high. The discounted NPW, BCR and IRR of MSFO technology were Tk. 10627525; 20.55 and 135% respectively. Hill farmers were found in grow crops under Jhum system knowing all negative impacts of this system. About 90% of the Jhum farmers were fully well the affirmative in adopting soil conservation technology if they were provided full financial assistance from government. On the other hand, most MSFO farmers adopted soil conservation technology for getting more financial benefit and to benefit the children in future. They opined to expand this technology to new areas if they got further financial assistance from government. They also encountered various problems during adopting and maintaining MSFO. The problems were die of fruit saplings by unknown diseases; lacking of irrigation facilities; lacking of cash money for intercultural operations; insect-pest infestation; and lacking of spray machine.