

Determinant Factor of Farm Household Fruit Tree Planting: The Case of Habru Woreda, North Wollo

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Abstract : The cultivation of fruit tree in degraded areas has two-fold importance. Firstly, it improves food availability and income, and secondly, it promotes the conservation of soil and water improving, in turn, the productivity of the land. The main objectives of this study are to identify the determinant of farmer's fruit trees plantation decision and to major fruit production challenges and opportunities of the study area. The analysis was made using primary data collected from 60 sample household selected randomly from the study area in 2016. The primary data was supplemented by data collected from a key informant. In addition to the descriptive statistics and statistical tests (Chi-square test and t-test), a logit model was employed to identify the determinant of fruit tree plantation decision. Drought, pest incidence, land degradation, lack of input, lack of capital and irrigation schemes maintenance, lack of misuse of irrigation water and limited agricultural personnel are the major production constraints identified. The opportunities that need to further exploited are better access to irrigation, main road access, endowment of preferred guava variety, experience of farmers, and proximity of the study area to research center. The result of logit model shows that from different factors hypothesized to determine fruit tree plantation decision, age of the household head accesses to market and perception of farmers about fruits' disease and pest resistance are found to be significant. The result has revealed important implications for the promotion of fruit production for both land degradation control and rehabilitation and increasing the livelihood of farming households.

Keywords : degradation, fruit, irrigation, pest

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