

Estimating the Economic Value of Forest, Banana Plantations and Beans Cultivation in Southern Rwanda

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Abstract

People need to learn the difference between prices and values of forest plantation and cropping systems. The present study was conducted in Southern Province, Huye district in 2013, and estimated the economic values of forest plantation, banana plantation and bean cropping. Elaborated questionnaire was used where the targeted respondents were farmers, whom were interviewed to value farming activities from the beginning to the harvest and marketing. To evaluate the cost benefits of forest plantation, three cooperatives were interviewed which invest in forest plantation.

The results indicated that forest and banana plantations are more beneficial than bean cropping. The net benefits for a period of 10 years were 22 million Rwf for forest plantation, 19.7 million for banana plantation and a loss of 471,800 Rwf for bean cropping. In addition to net benefits of forest plantation, non-marketed ecological functions of forest ecosystems have to be considered, such as climate regulation and carbon sequestration, soil stabilization and erosion control, recreation and tourism, biological diversity conservation, and watershed services. From these economic benefits and ecological functions played by forest ecosystems, we encourage afforestation activities because they are highly profitable.

Keywords: *Forest, Harvest, Cost, benefit, Ecosystem, Agriculture.*