

An assessment of the contribution of an analog forest as a sustainable land use ecosystem for the development of rural green economy in Sri Lanka

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Abstract

The main reason for the forest fragmentation in most natural ecosystems in the wet zone of Sri Lanka is a result of large scale clearing of natural forests for human settlements as well as in the form of tea, rubber and cinnamon plantations. In addition, illegal logging and over-exploitation of natural resources have posed massive threats to both nature and the humans including the loss of biodiversity, soil erosion, landslides, flash floods, land degradation and increasing poverty. This paper discusses about the potential to develop the rural green economy as a result of consolidating these agricultural lands into analog forests as a sustainable land use practice in a participatory approach model. Bangamukanda Estate (BKE), a manmade analog forest in Galle District was selected for this assessment. Participatory rural appraisal methods were used to obtain information on resource utilization by the local community in nearby Bangamukanda and Liyanagamakanda villages. The past records obtained by the long term ongoing analog forestry establishment programme were also used for analysis the livelihood changes of the people in those villages due to the positive impacts of this analog forest ecosystem. Various interventions had been made in the view of addressing the issues such as encouraging local farmers to change into sustainable community based cultivation of timber, fruits, spices and medicinal plants, paying them for the environmental services they render and enhancing their income through green employment. Crop diversification helped to stabilize the economy of the local farmers and minimize the current environmental impact that resulted from mono-crop cultivation. The introduction of new sustainable agricultural activities, such as bee keeping and planting fruits resulted in the production of value added farm products and organic fruits to be sold in the market. Through environmental based tourism activities such as providing accommodation, eco guidance, food and fruit for tourists, assisting environmental research activities, the stakeholders are earning a better income which trends to the development of the green economy of the country.

Key words: Bangamukanda, analog forest, crop diversification, sustainable land use, rural green economy, green employment