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COMPARISON OF ACACIA AND EUCALYPTUS AGROFORESTRY SYSTEM FOR HILLS: TAMIL NADU, INDIA

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Abstract

Agroforestry provides social benefits by functioning as a protective system that ensures resource conservation, although some of these benefits are not directly measurable. Keeping in view facts this study was conducted at Research farm of Central Soil and Water Conservation Research and Training Institute, Research Centre (CSWCRTI,RC), Udhagamandalam, Nilgiris, Tamil Nadu, India for 21 years. In two experiments namely eucalyptus and acacia along with intercrops viz., grass legume mixture, scented geranium and potato, separately were

The net return was in the range of Rs. 1.95 to 3.15 lakhs per ha. from different treatments in eucalyptus based agroforestry system and it was highest in the case of potato with eucalyptus. The net returns ranged Rs. 0.51 to Rs. 0.92 lakh per ha. from different treatments with acacia based system and it was highest in the case of geranium with acacia followed by other treatments. This has indicated that eucalyptus based system was better than acacia based system. The inter cropping of potato, geranium, grass & legume mixture are economically viable options as per their ranking based on BCR, NPW and IRR economic criteria. Hence, study suggests that potato (first year only) and geranium in eucalyptus and acacia based agro forestry systems have performed better as compared to pure eucalyptus in the Nilgiris condition. Further, the livestock being a livelihood support enterprise in the hilly areas, grass & legume as an inter crop can be considered as another option to meet the demand of fodder for some years under agroforestry systems. However, both the system were found to be feasible option from the production as well as natural resources conservation point of view.

Key Words: Agroforestry system, cost benefit analysis, eucalyptus, acacia, Nilgiris, intercrops

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