



RESEARCH ARTICLE

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Economic evaluation of multi purpose tree species in degraded lands of Karnataka

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ABSTRACT : A field experiment was conducted to know the economically viable trees on degraded lands at MARS, UAS, Dharwad under rainfed conditions. Nine trees viz., *Eucalyptus tereticornis*, *Tectona grandis*, *Dalbergia sissoo*, *Anogeissus latifolia*, *Albizia lebbek*, *Grevillea robusta*, *Hardwickia binnata*, *Acacia nilitica* and *Azadirachta indica* were planted at 2 x 2m with three replications in Randomized Block Design. Among the tree species, total biomass was higher in *Albizia lebbek* followed by *Eucalyptus tereticornis* and *Grevillea robusta*. Soil physical properties like bulk density significantly decreased in *Dalbergia sissoo*, *Anogeissus latifolia*, *Albizia lebbek* and *Hardwickia binnata*. Trees have reduced pH of soil compared to open conditions. The available nitrogen, phosphorus and potassium were higher in soil grown with tree canopy of *Albizia lebbek*, *Hardwickia binnata* and *Tectona grandis*, respectively. The gross return, B : C ratio and IRR were higher in *Tectona grandis* (Rs. 31,647/ha/yr, 4.71 and 22 %, respectively) followed by *Eucalyptus tereticornis* (Rs. 22,547/ha/yr, 3.52 and 21 %, respectively) as compared to other tree species.

KEY WORDS : Degraded lands, Economical, Viability, Biomass, Soil physical properties

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