Economic Analysis of Different silvicultural practices in Casuarina Species

Baranidharan. K, M.Vijayabhama, K.K.Suresh and P.Durairasu
Forest College and Research Institute
Mettupalayam 641 301, Tamil Nadu, India
**Email : krisbarani@gmail.com*

Abstract

The potential of multipurpose tree species in enhancing the diversity, sustainability and productivity of marginal ecosystem has received increased attention in recent years. besides, this choice of alternative tree species to meet raw material requirement of industries is the need of hour. Casuarina has been the farmer's favorite as they fit well in agrarian ecosystem. Short gestation period, periodic returns in the form of pruned branches right from year two, ability to improve the soil fertility and ready marketability are the major attractions for this species. in addition cultivation has been steadily increased in private lands due its multiple vitalities such as fuel wood, making scaffolds, rafts for barricades & sheds, pulp wood etc. the of the wood is high and even the (4127 cal), cones are used for firing clay wares in kilns. Realizing the multiple uses, farmersperfect to plant Casuarina in their fields. The Casuarina cultivation is being encouraged by the Tamil Nadu Forest Department through schemes like Tree Cultivation in Private Lands and Emergency Tsunami Reconstruction Project, and wood purchased from the farmers by paper making industries in Tamil Nadu like TNPL and Seshasayee paper mills. To elucidate the economic potential of Casuarina cultivation a field experiment was conducted with Casuarina species *namely , C. equisetifolia* Forst. & Forst. *and C. junghuhniana* Miq from seed and clonal sources raised under five nutrient levels with a common irrigation schedule. Two weedings and one pruning were given up to 18 Months after planting (MAP). The study was taken up at Agricultural Research Station, Bhavanisagar during 2010-2012. The economic analysis of the experiment on Casuarina species with different spacing, planting materials and different nutrient levels, revealed that wider spacing 1.5 m x1.5 m with seed as the planting source in *C.equisetifolia* with 25 % more fertilizer applications over the soil test recommendation value recorded the highest BCR value of 2. 50 and 2.01 at 15 per cent and 30 per cent respectively and the IRR was 50.32.