

Demand and Supply Status of Casuarina Seed in Peninsular India

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Abstract

Casuarina cultivation has increased significantly with the implementation of programs like Trees Outside Forests (TOF) and Tree Cultivation in Private Lands (TCPL) by the State Forest Departments and attractive prices offered for its wood. *Casuarina equisetifolia* and *Casuarina junghuhniana* are the main species planted in India, generally the former along the coasts and the latter in inland areas. Since Seed is the cost-effective and the most efficient mode for casuarina propagation, the demand for quality seed from authentic source has increased tremendously. casuarina orchards have been established by organizations like Institute of Forest Genetics and Tree Breeding (IFGTB), State Forest Departments and Paper industries for quality seed production. In recent years, the concept of community seed orchards is gaining popularity. About 200 million plants are planted annually under various programs for greening and livelihood support, of which clones contribute less than 5% offering scope for deploying new clones of casuarina. With the launch of Green India Mission (GIM), the demand for quality planting stock is to further increase and particularly short rotation trees will play a significant role in greening and livelihood support. In Tamil Nadu State nearly 20 million tree seedlings of various species are planted annually under the Tamil Nadu Biodiversity and Greening Project (TBGP). It is estimated that 20 to 30% of the planting stock numbering to 6 million plants are fast growing, short rotation and nitrogen fixing Casuarinas. An additional 3 million casuarina trees are distributed to farmers by private nurseries and paper industries. To produce the total annual demand of 9 to 10 million casuarina seedlings, about 100 kg of seeds is required and it can be met from 10 to 15 ha of seed orchards. The demand for seed will be higher for larger States like Andhra Pradesh and significant quantity is also needed for States like Orissa, Gujarat and Maharashtra. IFGTB has been supplying 28 to 30 kg of casuarina seeds from well-managed seed orchards annually on cost-recovery basis. In order to meet the rest of the seed demand, there is scope for certified decentralized orchards in Peninsular India. Use of genetically improved seed sources will increase returns from casuarina cultivation meeting the multiple objectives of livelihood support, raw material supply to the wood-based industries and expanding green cover.