## Improving Casuarina productivity and wood Quality: Perspectives of the Paper Industry - International Paper APPM Limited

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## **Abstract**

With 8% annual growth in consumption amid almost no fresh capacity additions, the country's supply deficit in paper is likely to widen in the coming years. It has been estimated that of the € 5385 million (Rs. 35,000 crore) Indian Paper Industry's annual operating capacity of 12.75 million tonnes, output in 2011-12 was 11 million tonnes against the consumption (including newsprint) of 11.23 million tonnes, a deficit of 0.23 million tonnes. The deficit would widen to 1.25 million tonnes in 2013-14 and around 2 million tonnes by 2015-16. Simultaneously, the population explosion (1028 million in 2001 – 1201.2 million in 2011 census) and, the gradually shrinking land use pattern(s) due to urbanization and industrialization are emphatically posing a great pressure over the Paper Industries to opt for an enhanced productivity based Farm Forestry (FF) programs for their respective mills. The State of Andhra Pradesh with a total geographical area of 27.507 million Ha, possesses 22.58% of Forest area with a potential to practice Farm Forestry at about 37.51% of its land mass under the varied categories of land use pattern. As a matter of fact at (IPAPPML) has continually since 1989 has significantly contributed in development of the FF with the pulpwood species like Casuarina in particular besides, Leucaena and Eucalyptus in general. With an advent of time it has opted for a value based tree crop productivity enhancement FF programs both in its Seedling cum Clonal development program(s) by laying an emphasizing over - managing the quality seed material through development of its own Seed Orchard and Or otherwise; Managing the best possible Clonal Multiplication Areas; Developing appropriate package 'n' practices for mass propagation of the plant propagules; initiating R&D over minimizing the Tree Crop's initial gestation period; lowering down the cost of Clonal production; popularizing an appropriate Crop spacing concept by initiating the R&D - FF Plantations in conjunction with the local farmers; Induction of a Rapid Tree Improvement program;

Introduction of high yielding cum lower gestation period alternate pulpwood tree species etc. The intervention of the IPAPPM's FF program has resulted in an enhanced bioproductivity of Casuarina from 50MT Ha<sup>-1</sup> to 80 MT Ha<sup>-1</sup> at four years rotation. While doing so since, over the last two decades the IPAPPML has benefitted 50,000 Farmers covering an area of 1,88,000 Ha ghenerating 93.83 million mandays. This paper discusses IPAPPML's Farm Forestry program in detail.