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Role of Indigenous Tree Species in Natural Resource Management

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Abstract—A forest is a complex ecosystem which is predominantly composed of trees, shrubs and is usually a closed canopy. Forests are storehouses of a large variety of life forms such as plants, mammals, birds, insects and reptiles etc. Also the forests have abundant microorganisms and fungi, which do the important work of decomposing dead organic matter thereby enriching the soil. Traditionally, the Indian society depended on a large number of plant species for its subsistence and sustenance needs. However, with the advent of so-called "Scientific Forestry", the emphasis shifted mainly on a few timber species, which were essentially required by the British government for its industrial development. As all the management plans focused on a few commercially important species like Teak, Poplar, Shisham, Eucalyptus and Sal, coupled with increasing biotic interference, over-exploitation and consequent forest degradation, other important species gradually became less. Besides, there are a large number of native species, which have traditionally been used for food and nutritional supplements and are consumed at local levels only. Species like Aegle marmelos, Artocarpushetero phyllus, Artocarpus lakoocha, Averrhoa carambola, Carissa carandus, Cordia dichotoma, Eugenia jambos, Ficus spp., Grewiasub inaequalis, Manilkara hexandra, Moringa olifera, Morus indica, Pithecello biumdulce, Schleichera oleosa, Spondias mangifera, Syzizium cumini, Tamarindus indica, Ziziphus mauritiana etc. are gradually disappearing from the forests although they have a good potential for commercial exploitation. These species are rarely planted in afforestation and agroforestry programmes, as a result of which these are disappearing from the natural habitat. Many of these species are widely used in Ayurvedic preparations. These species are very valuable to the local communities for meeting their day-to-day requirements for food, fodder, fuel, medicines, tans, dyes etc., and can provide cash returns to the villagers.

Keywords: Ecosystem, socio-cultural, commercial exploitation, agro biodiversity.

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