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**POPULAR ARTICLE**

**Agroforestry in India**

**R. Malothu**

**Department of Seed Science and Technology (SRTC), PJTSAU, Rajendranagr, Hyderabad-500030 Telangana, India**

**Corresponding authors email: rameshmalothu1@gmail.com**

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India's agroforestry scenario shows significant untapped potential, with current coverage around 28 million hectares (about 8-9% of land), far below the high-potential area (around 75.6 million hectares) and global averages, despite traditional practices and the 2014 National Agroforestry Policy aiming to boost it. While it's a vital source for timber and improves soil/microclimate, complex regulations on timber transport and felling, lack of quality seedlings, and policy gaps hinder its growth, leading to timber imports, though adoption is increasing.

**Key Aspects of India's agroforestry:**

**Traditional Roots:** Agroforestry is deeply embedded in India's history, practiced by indigenous communities.

**Policy framework:** The 2014 National Agroforestry Policy (NAP) provides a framework to integrate trees with farming for productivity, profitability, and sustainability.

**Current coverage:** Estimates vary, but around 28 million hectares (8-9% of total land area) are under agroforestry, with potential exceeding this significantly.

**Economic Importance:** Produces over 90% of India's timber, yet India remains a net timber importer due to policy issues.

**Benefits:** Enhances soil fertility, conserves soil, improves nutrient cycling, creates better microclimates, and offers multiple outputs.

**Challenges Hindering Growth:**

**Complex regulations:** Cumbersome rules for cutting and transporting farm-grown timber (felling/transit permits) across states.

**Policy gaps:** Lack of uniform policies and implementation issues.

**Market issues:** Import policies and sawmill bans have discouraged farmers.

**Quality Planting Material:** Limited availability of quality seedlings (only about 10% of supplied seedlings are quality material).

**Current trends and potential:**

**Slow but steady growth:** Adoption is increasing, especially after the 2014 policy, with initiatives promoting it on farmlands and wastelands.

**High untapped potential:** Millions of hectares are highly suitable for agroforestry, offering massive scope for carbon sequestration and livelihood improvement, notes CEEW and Vajiram and Ravi.

**Research & Development:** ICAR institutions like CAFRI (Central Agroforestry Research Institute) work on technologies and farmer training.

**Agroforestry plants and their attributes**

<b>Plant Name</b>	<b>Primary Use(s)</b>	<b>Key Agroforestry Attributes</b>	<b>Agroforestry System Role</b>
<b>Neem</b> ( <i>Azadirachta indica</i> )	Timber, medicinal products	Pest control properties, drought tolerant, deep roots, light demander	Windbreaks, boundary planting
<b>Moringa</b> ( <i>Moringa oleifera</i> )	Edible leaves/pods, oil	Fast-growing, high nutritional value (Vitamin A), drought-resistant, deep roots	Alley cropping, homegardens
<b>Gliricidia</b> ( <i>Gliricidia sepium</i> )	Fodder, green manure	Nitrogen-fixing legume, excellent "support species," easily pruned	Alley cropping, silvopasture
<b>Teak</b> ( <i>Tectona grandis</i> )	High-value timber	Strong light demander, well-drained soil requirement, long-term investment	Agrisilviculture (block planting)
<b>Poplar</b> ( <i>Populus</i> spp.)	Commercial timber	Fast-growing, compatible with inter-cultivation of agricultural crops	Alley cropping (block planting)
<b>Mango</b> ( <i>Mangifera indica</i> )	Fruit	Provides food and income, shade for understory crops	Agri-horticulture, homegardens
<b>Bamboo</b>	Construction material, fiber	Extremely fast-growing, excellent soil erosion control, high carbon sequestration	Riparian buffers, boundary planting
<b>Coffee</b> ( <i>Coffea arabica</i> )	Cash crop (beans)	Shade-tolerant crop component that thrives under tree canopy	Forest farming, agri-horticulture