



NATIVE TREE SPECIES IN PHILIPPINE TREE-BASED LANDSCAPES: A REVIEW OF MANAGEMENT, RESTORATION, AND CONSERVATION PERSPECTIVES

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ABSTRACT – Native tree species play a vital role in biodiversity conservation, ecological restoration, and sustainable landscape management in the Philippines. However, information on their utilization, management, and ecological contributions remains fragmented across different disciplines and management contexts. This review synthesizes existing literature on native tree species in Philippine tree-based landscapes using a narrative review approach. The reviewed studies were organized into five thematic areas: (1) agroforestry and forestry systems, (2) reforestation, restoration, and rainforestation systems, (3) species selection, propagation, and plantation management, (4) ecological functions and ecosystem services, and (5) socioeconomic, governance, and indigenous knowledge dimensions. Findings indicate that native tree species contribute significantly to biodiversity conservation, ecological restoration, carbon storage and sequestration, watershed protection, and livelihood enhancement. Native-tree-based systems support ecological succession, forest recovery, and the conservation of native, endemic, and threatened species. Restoration approaches such as Rainforestation demonstrate considerable potential for accelerating ecosystem rehabilitation and strengthening community participation. Nevertheless, challenges persist, including limited planting materials, inconsistent nursery standards, governance constraints, market limitations, and the continued dominance of exotic species in large-scale restoration programs. Overall, native tree species represent an important resource for achieving sustainable landscape management and biodiversity conservation in the Philippines. Strengthening restoration planning, nursery systems, research initiatives, and community-based approaches will further enhance their contribution to ecological resilience and sustainable rural development.

Keywords: agroforestry, biodiversity conservation, ecosystem services, forest restoration, native tree species, sustainable landscape management



JOURNAL OF NATURE STUDIES
(formerly Nature's Bulletin)
Online ISSN: 2244-5226

To cite this paper: Vermudo, V. & Vermudo, E.K.V. 2026. Native Tree Species in Philippine Tree-Based Landscapes: A Review of Management, Restoration, and Conservation Perspectives. *Journal of Nature Studies* 25(1), 18-37.