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Sustainability of Industrial Forest Plantations and Indigenous Land Rights in the Philippines

A thesis presented in partial fulfillment
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ABSTRACT

In the Philippines, forest management two decades ago was mainly aimed at addressing the need for economic growth. There was low priority accorded to the long-term sustainability and inherent environmental functions of the country's forests as well as social equity issues over the use of these resources. Sustainable development and the management of forest resources during that time was nothing more than just a concept used by academicians, ecologists, and forestry professionals. Forest management also ignored the concerns and interests of the forest dwellers particularly the indigenous people. It was not until the late 70s and early 80s when the effects of deforestation and rapid depletion of forest resources impacted on the country's economic, social, and environmental wellbeing, did the country realise the need to sustainably manage these resources. The need to consider the economic and social wellbeing of the forest dwellers particularly the indigenous people, also started to be recognised.

The growing consciousness on the need to balance development with environmental protection, and the inherent need to sustain the flow of benefits from the country's forest resources, has become the main rationale in developing sustainable forest management policies. The primary vision was to adopt forest management policies that can help ensure that various benefits that can be derived from the forests would cater to the needs of the greatest number of Filipinos in the longest period of time without compromising the environment. The development of industrial forest plantations has been one of the major forest management strategies designed in support of such vision in the management of the country's forest resources.

This study was undertaken to provide an understanding of industrial forest plantations as a forest management strategy in the Philippines and how it impacts on indigenous people and local communities. Using a qualitative research approach, case studies of three industrial forest plantations were analysed to investigate the impact of industrial forest plantations on indigenous

people and local communities. The case studies were also used to examine the degree to which industrial forest plantations have been achieving economic, social, and environmental objectives by identifying and examining the factors that may enhance or hamper its sustainability as a forest development strategy.

This study concluded that there is a growing role for industrial forest plantations in the sustainable management of forest resources in the Philippines. This role derives from the need to develop alternative sources of timber to the rapidly depleting sources from the natural forests, bringing socio-economic development in the upland areas in the country, and promoting environmental rehabilitation. As a forest management strategy, industrial forest plantations can promote social equity by recognising the rights of indigenous people over their land and the use of resources therein and by encouraging local community participation in the development process, which in a way helps strengthen local institutions. It was shown in this study that the integration and definition of property rights of indigenous people in any upland development programme is a critical factor that seriously affects the success and sustainability of any forest management strategy. The success of any forestry programme can only be achieved if supported by effective institutional and policy framework.

Finally, it was concluded that industrial forest plantations could only be sustainable if as a policy strategy, it has been designed to consider the "bottom up" perspective where local needs, community values, and indigenous rights are consistent with the overall national goals of sustainable development.

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GLOSSARY

- 1) **Agroforestry** - a sustainable management for land, which increases overall production, combines agricultural crops, tree crops, and forests plants, and animals or livestock simultaneously or sequentially with the cultural patterns or the local population.
- 2) **Alienable and Disposable land (A & D)** - those lands of the public domain which have been classified and declared as not needed for forest purposes.
- 3) **Barangay** - The smallest local government unit consisting of several villages or communities
- 4) **Biodiversity** - the diversity of life forms, either flora or fauna, at all biological levels.
- 5) **Brushland** - land which is predominantly covered with shrub growth or short, stunted trees or shrubs.
- 6) **Distress Syndrome** - refers to the irreversible process of biotic systems breakdown, such as forest systems, leading to termination of the system even before its life span is attained.
- 7) **IFMA** - a contractual agreement entered into by the DENR and a qualified applicant that devolves to the applicant the responsibility for the following:
 - Invest in, manage and protect a defined area of land under the DENR jurisdiction;
 - Establish, manage, and utilise industrial forest plantations in specified locations within the area primarily to supply the raw material requirements of forest-based processing and energy related industries; and
 - Improve, manage, and protect residual forests in the area and to utilise on a sustainable basis timber and non-timber forest products from the residual forests.
- 8) **IFMA Area** - a defined area of land under the jurisdiction of the DENR covered by an IFMA.
- 9) **Industrial Forest Plantation** - any tract of land predominantly planted to timber producing species including rubber and/or non-timber species such as rattan and bamboo.
- 10) **Kaingin** - a portion of the forest land which is subjected to shifting cultivation or permanent slash and burn cultivation having little or no regard to prevent soil erosion.

- 11) **Lease Agreement** - a privilege granted by the State to a person or a company to utilise and manage forest resources within any forest land with the right of occupation and possession over the same, to the exclusion of others, except the government, but with the corresponding obligation to develop, protect, and rehabilitate the same in accordance with the terms and conditions set forth in the agreement.
- 12) **Logged-over areas** - land areas in indigenous forests, which have been previously subjected to logging activities.
- 13) **Multiple-Use Forest Management** - the development, protection, and harmonious utilisation of the various beneficial uses of the forest.
- 14) **Open and Denuded land** - land that has been depleted of its natural forest cover and is predominantly covered with grasses, herbaceous species or bare soil.
- 15) **Pruning** - removing branches including live branches flush with the stem to promote the growth of knot free timber.
- 16) **Pulong-pulong** - A local term used in ALSONS, which refers to a small group community discussion.
- 17) **Regalian Doctrine** - a doctrine of medieval origin which, recognises that all lands and natural resources in the public domain belong to the state.
- 18) **Residual Natural Forest** - a contiguous area of ten hectares or more of undisturbed dipterocarp/natural forest which has an average basal area of at least five square meters per hectare.
- 19) **Rotation period** - the period to grow trees from planting to a harvestable stage to clearfelling.
- 20) **Sawlog** - a log suitable in size and quality for the manufacture of sawn timber.
- 21) **Selective Logging System** - the systematic removal of mature, over-mature, and defective trees in such manner as to leave an adequate number and volume of healthy residual trees of the desired species necessary to assure a future crop of timber, and forest cover for the protection and conservation of soil and water.
- 22) **Stumpage** - a pricing system whereby the price point is the standing tree. Also, the value of standing timber when all harvesting costs have been paid.

- 23) **Sustained Yield** - the continuous or periodic production of forest products with intervention when necessary to achieve at the earliest practicable time an approximate balance between growth and harvest.
- 24) **Thinning** - the process of culling out some trees in a stand usually those of inferior quality, before maturity or clearfelling to improve the quality in terms of growth and form of potential crop trees.

ABBREVIATIONS

1. **ADB** - Asian Development Bank
2. **AFF** - Agroforestry Tree Farm Lease
3. **ALSONS** - Alcantara and Sons Incorporated
4. **ANR** - Assisted Natural Regeneration
5. **AOP** - Annual Operations Plan
6. **BFD** - Bureau of Forest Development
7. **BFI** - Bukidnon Forests Incorporated
8. **CADC** - Certificate of Ancestral Domain Claim
9. **CADT** - Certificate of Ancestral Domain Title
10. **CALC** - Certificate of Ancestral Land Claim
11. **CALT** - Certificate of Ancestral Land Title
12. **CBFM** - Community-Based Forest Management
13. **CENRO** - Community Environment and Natural Resources Office
14. **CFMA** - Community Forest Management Agreement
15. **CSC** - Certificate of Stewardship Contract
16. **CTF** - Communal Tree Farm
17. **DAF** - Department of Agriculture and Food
18. **DAR** - Department of Agrarian Reform
19. **DAO** - DENR Administrative Order
20. **DECS** - Department of Education Culture and Sports
21. **DENR** - Department of Environment and Natural Resources
22. **DILG** - Department of Interior and Local Government
23. **DOH** - Department of Health
24. **DOJ** - Department of Justice
25. **DPWH** - Department of Public works and Highways
26. **DSWD** - Department of Social Welfare and Development
27. **EIA** - Environmental Impact Assessment
28. **EIS** - Environmental Impact Statement
29. **EO** - Executive Order
30. **FAR** - Family Approach to Reforestation
31. **FAO** - Food and Agriculture Organization of the United Nations
32. **FMB** - Forest Management Bureau
33. **FOM** - Forest Occupancy Management
34. **GDP** - Gross Domestic Product
35. **ICC** - Indigenous Cultural Communities
36. **IEC** - Information, Education, and Communication Campaign
37. **IEMSD** - Integrated Environmental Management for Sustainable Development
38. **IFMA** - Integrated Forest Management Agreement
39. **IFP** - Industrial Forest Plantation
40. **IP** - Indigenous People
41. **IPRA** - Indigenous People's Rights Act
42. **ISFP** - Integrated Social Forestry Programme
43. **ITTO** - International Tropical Timber Organization
44. **ITP** - Industrial Tree Plantation
45. **ITP** - Industrial Tree Plantation

- 46. **IUCN** - International Union for the Conservation of Nature and Natural Resources
- 47. **KCDFI** - Kapalong Cultural Development Foundation
- 48. **MAI** - Mean Annual Increment
- 49. **NALCO** - Nasipit Lumber company
- 50. **NEDA** - National Economic and Development Authority
- 51. **NGO** - Non-Government Organization
- 52. **NZODA** - New Zealand Official Development Assistance
- 53. **PENRO** - Provincial Environment and Natural Resources Office
- 54. **PCSD** - Philippine Council for Sustainable Development
- 55. **PD** - Presidential Decree
- 56. **PHP** - Philippine Pesos (currency in the Philippines)
- 57. **PICOP** - Pulp and Paper Industries Corporation of the Philippines
- 58. **PLA** - Pasture Lease Agreement
- 59. **PMPFD** - Philippine Master Plan for Forestry Development
- 60. **PO** - People's Organization
- 61. **PROMANBATA** - Provident, Manobo, Banua-on, Talaandig, Foundation
- 62. **PSSD** - Philippine Strategy for Sustainable Development
- 63. **PTFI** - Provident Tree Farms Incorporated
- 64. **RA** - Republic Act
- 65. **SIFMA** - Socialized Integrated Forest Management Agreement
- 66. **TLA** - Timber License Agreement
- 67. **UNCED** - United Nations Conference for Environment and Development
- 68. **WB** - World Bank
- 69. **WCED** - World Commission for Environment and Development

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