



MAY 26 2005

DENR MEMORANDUM CIRCULAR
2005 - 005

SUBJECT : Adopting Forestry Definitions Concerning Forest Cover/Land Use

In view of the recent developments in forestry and consistent with internationally accepted definitions of forestry terminologies, the following forestry definitions concerning forest cover/land use are hereby adopted for common understanding among forestry and other stakeholders.

- A. Forest** - land with an area of more than 0.5 hectare and tree crown (or equivalent stocking level) of more than 10 percent. The trees should be able to reach a minimum height of 5 meters at maturity in situ. It consists either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest formations with a continuous vegetation cover in which tree crown cover exceeds 10 percent. Young natural stands and all plantations established for forestry purposes, which have yet to reach a crown density of more than 10 percent or tree height of 5 meters are included under forest.

These are normally forming part of the forest area which are temporarily unstocked as a result of human intervention or natural causes but which are expected to revert to forest. It includes forest nurseries and seed orchards that constitute an integral part of the forest; forest roads, cleared tracts, firebreaks and other small open areas; forest within protected areas; windbreaks and shelter belts of trees with an area of more than 0.5 hectare and width of more than 20 meters; plantation primarily used for forestry purposes, including rubber wood plantations. It also includes bamboo, palm and fern formations (except coconut and oil palm).

Reference: Food and Agriculture Organization, 2000.

1. **Natural forest** - forest composed of indigenous trees, not planted by man.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 1.1 **Broadleaved forest** - forest with a predominance (more than 75 percent of tree crown cover) of trees of broad-leaved species.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.



1.1.1 Closed forest - formations where trees in the various storeys and the undergrowth cover a high proportion (>40 percent) of the ground and do not have a continuous dense grass layer. They are either managed or unmanaged forests, in advanced state of succession and may have been logged –over one or more times, having kept their characteristics of forest stands, possibly with modified structure and composition.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

1.1.2 Open forest - formations with discontinuous tree layer with a coverage of at least 10 percent and less than 40 percent. They are either managed or unmanaged forests, in initial state of succession.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

1.2 Coniferous forest - forest with predominance (more than 75 percent of tree crown cover) of trees of coniferous species.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

1.3 Mixed forest - forest in which none of the species groups such as conifer, broadleaved, bamboo and palm accounts for more than 75 percent of the tree crown cover.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

1.4 Bamboo/palm formation - forest in which more than 75 percent of crown cover consists of bamboo/palm species.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

1.5 Mangrove forest - forested wetland growing along tidal mudflats and along shallow water coastal areas extending inland along rivers, streams and their tributaries where the water is generally brackish and composed mainly of *Rhizophora*, *Bruguiera*, *Ceriops*, *Avicenia*, *Aegiceras*, and *Nipa* species.

Reference: Center for International Forestry Research and Section 3 of Presidential Decree No. 705, 1975.

1.6 Mossy forest - forest stand found principally on high elevations and very rough mountainous regions characterized by steep ridges. The trees are mostly dwarfed with stems and branches usually covered by epiphytes and dominated by *Podocarpaceae*, *Myrtaceae*, and *Fagaceae*.

Reference: Natural Forest Resources of the Philippines, Philippine-German Forest Resources Inventory Project Report, 1988.

1.7 Beach forest - a narrow strip of wooded land along the sandy and gravelly beaches of the seacoast dominated by *Terminalia catappa*, *Casuarina equisetifolia*, *Barringtonia*



asiatica, Sonneratia caseolaris, Acacia farnesiana and Erythrina orientalis.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

2. Plantation forest - forest stands established by planting or/and seeding in the process of afforestation or reforestation. It may be composed of broadleaved, coniferous, and/or mixed forests.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 2.1 Young plantation forest - forest plantation where trees have not yet reached a height of five (5) meters.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 2.2 Open broad-leaved plantation forest - forest plantation where the crown is between 10 to 40 percent of the area.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 2.3 Medium closed broad-leaved plantation forest - forest plantation where the crown cover is at least 40 percent of the area and less than 70 percent.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 2.4 Closed broad-leaved plantation forest - forest plantation where the crown cover is above or 70 percent of the area.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- B. Other Wooded Land** - lands either with a crown cover (or equivalent stocking level) of 5-10 percent of trees able to reach a height of 5 meters at maturity; or a crown cover (or equivalent stocking level) of more than 10 percent not able to reach a height of 5 meters at maturity (e.g. dwarfed or stunted trees); or with shrubs or bush cover of more than 10 percent.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

1. Shrubland - where the dominant woody vegetation are shrubs, generally of more than 0.5 meter and less than 5 meters in height in maturity and without a definite crown. The growth habit can be erect, spreading or prostrate. The height limits for trees and shrubs should be interpreted with flexibility, particularly the minimum tree and maximum shrub height, which may vary between 5 and 7 meters approximately.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

2. Wooded grassland - areas predominantly vegetated with grasses, such as *Imperata, Themeda, Saccharum* and where the trees cover is between 5 to 10% of area and their height may reach 5 meters at maturity.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

3. Fallow - refers to woody vegetation resulting from the clearing of natural forest for shifting agriculture. It is an intermediate class between forest and non-forest land uses. Part of the area,



which is not under cultivation, may have the appearance of a forest.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- C. **Other Land with Tree Cover** - the land primarily not under forest having more than 0.5 hectare with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity. It includes urban parks and gardens.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- D. **Other Land** - Land with tree cover less than 5%. It includes agricultural land, pastures, built-up areas, bare areas, grassland, etc.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

1. **Natural** - land not classified as forest or other wooded land undisturbed by man.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 1.1 **Bare areas** - land not covered by (semi-) natural or artificial cover. These include, among others, sand dunes, riverwash, lahar laden areas and rocky or stony areas.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 1.2 **Grassland** - areas predominantly vegetated with grasses such as *Imperata*, *Themeda*, *Saccharum spp.*, among others.

Reference: Inter-Agency Task Force on Geographic Information Resolution No. 1, Series of 1995.

2. **Cultivated** - land not classified as forest or other wooded land used by man for agriculture or pastures.

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

- 2.1 **Annual cropland** - land cultivated with crops with a growing cycle under one year, which must be newly sown or planted for further production after harvesting.

Reference: Food and Agriculture Organization, 2000.

- 2.2 **Perennial cropland** - land cultivated with long term crops that do not have to be replanted for several years after each harvest; harvested components are not timber but fruits, latex and other products that do not significantly harm the growth of the planted trees or shrubs; orchards, vineyards and palm plantations, coffee, tea, sisal, banana, abaca, etc.

Reference: Food and Agriculture Organization, 2000.

- 2.3 **Pastureland** - land managed for raising livestock.

Reference: Food and Agriculture Organization, 2000.

3. **Built up area** - composed of areas of intensive use with much of the land covered by structures. It includes cities, towns, villages, strip developments along highways, transportation, power, and communication facilities, and areas occupied by malls, shopping centers, industrial and commercial complexes,



and institutions that may, in some instances, be isolated from urban areas.

Reference: Food and Agriculture Organization, 2000.

E. **Wetlands** - areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static, flowing, fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed six meters.

Reference: Ramsar Convention on Wetlands, Article 1.1 as amended in 1982 and 1987, Ramsar, Iran, 1971.

1. Marshland - natural area usually dominated by grass-like plants such as cat tails and sedges which are rooted in bottom sediments but emerge above the surface of the water. It contains emergence vegetation and usually develop in zones progressing from terrestrial habitat to open water.

Reference: Convention on Biological Diversity, Rio de Janeiro, June 2, 1992.

3. Inland waters - bodies of water surrounded by land (e.g. rivers, lakes, streams, mudflats, ponds/fishponds, dams and reservoirs).

Reference: Forest Resource Assessment, Food and Agriculture Organization, 2000.

Henceforth, all DENR personnel shall use consistently, and that no other forest-related terminology be used for the categories herein stated and share it with all forestry stakeholders within their jurisdiction for common usage and understanding.

For your guidance.



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Secretary