



Republic of the Philippines

Department of Environment and Natural Resources

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DENR MEMORANDUM CIRCULAR

No. 2004- 06

SUBJECT: GUIDELINES IN THE INTEGRATION OF RAINFORESTATION FARMING STRATEGY IN THE DEVELOPMENT OF OPEN AND DENUDED AREAS WITHIN PROTECTED AREAS AND OTHER APPROPRIATE FOREST LANDS.

Pursuant to the provisions of Executive Order No. 192 and in line with our commitment to the UN Convention on Biological Diversity, the UN Framework Convention on Climate Change, the UN Convention to Combat Desertification and the United Nations Forum on Forests, and to the principle of Sustainable Forest Management, the following guidelines for the integration of rainforestation farming strategy in the development of open areas and denuded forests to promote biodiversity conservation and sustainable development in protected areas and other appropriate forest lands are hereby promulgated:

Section 1. Basic Policy

It is the policy of the State that the management and rehabilitation of protected areas and other forest lands shall be undertaken primarily to restore forests to approximate their original structure and functions, and conserve the biological diversity therein.

Section 2. Rationale

There has been some degree of success in the restoration of these areas by assisting the natural process of ecological succession. Ecological succession is a progressive change in species composition and forest structure caused by natural processes over time¹. It can be described in terms of plant community changes, referred to as plant succession. An area where the tropical rainforest vegetation has been removed will have their natural tendency to revert back to forest cover. In general, depending on the level of degradation, this process will involve the replacement of annuals, which have a relatively short life cycle by perennials and pioneer or gap species, which have longer life cycle; finally these are replaced by climax-based tree species².

The Rainforestation farming strategy shall be employed as an approach in restoring the original vegetation stand and at the same time promoting

¹ International Tropical Timber Organization, 2002. Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forests – ITTO, Yokohama, Japan

² Sajise, Percy. Working with Nature: Technical and Social Dimensions of Assisted Natural Regeneration. RAP Publication 2003/19. Advancing Assisted Natural Regeneration (ANR) in Asia and the Pacific. FAO-UN. Regional Office for Asia and the Pacific. Bangkok, 2003.

and conserving the biological diversity in the area by facilitating the natural process of succession.

Section 3. Objectives

The principal objective of rainforestation farming strategy is to restore, manage and rehabilitate degraded and secondary forest in protected areas and other appropriate forest lands.

Specifically, this Strategy aims to:

- 1) To restore the original vegetation stand and the corresponding ecosystem functions of degraded forests;
- 2) To promote and conserve biological diversity in the area;
- 3) To form a buffer-zone around primary forest;
- 4) To promote hydrologic integrity and biotic functions; and
- 5) To improve incomes and well-being of upland farmers.

Section 4. Definition of Terms

4.1 Rainforestation farming – is a concept in forest restoration, wherein only indigenous and endemic tree species are used as planting materials which include but not limited to dipterocarp species, premium tree species, etc. It is a kind of reforestation whose aim is to preserve biodiversity and expand Philippine forests and simultaneously sustain human food production.

4.2 Endemic species – refer to plants with distribution restricted only in the Philippines.

4.3 Pioneer species – refers to species to planted prior to the introduction of the indigenous tree species consistent with process involved in the ecological succession.

4.4 Indigenous forest tree species – refer to all forest tree species native to a particular area or region.

4.5 Premium tree species – tree species, the wood of which has special characteristics, such as strength, durability, beauty, scarcity and rarity or is used for special purpose (see list of species in DAO 78, Series of 1987).

- 1) Dipterocarps – refer to all species belonging to family Dipterocarpaceae.

4.6 Agroforestry crops – refer to all agricultural crops (cash crops, annual crops, semi-perennial crops) inter-planted with forestry species.

Section 5 Scope and Coverage

The areas which could be covered under this circular are as follows:

- 5.1 Open, denuded, inadequately wooded or degraded portions of protected areas, critical habitats of wild flora and fauna, proclaimed watersheds and other appropriate forest lands;
- 5.2 Areas under DENR-DILG-LGU partnerships, such as communal forest, community watersheds, municipal and barangay tree parks; and
- 5.3 Other identified protection forests/zones.

Section 6. Species to be planted

- 6.1 Local species or pioneer species, for which information on these species can be obtained from key members of the local community.
- 6.2 Natural forest tree species, eg. dipterocarp and premium trees, indigenous to the site and/or pioneer tree species, which are adaptable and can survive local environmental conditions, as planting materials;
- 6.3 Where appropriate and possible, agroforestry crops may be intercropped in between the indigenous species as an additional source of livelihood for the community.

Examples of forest tree species to be used is attached as Annex "A".

Section 7. Planting Scheme

- 7.1 In critical or steep areas, vegetative as well as structural measures shall be integrated for better soil protection and stability;
- 7.2 Mixed planting of indigenous tree species shall be encouraged to promote biological diversity particularly in degraded areas. Prior to the planting of climax species, e.g. dipterocarps and premium species, indigenous pioneer tree species shall be planted first to simulate natural regeneration of the area. Assisted natural regeneration shall be adopted in areas where the vegetation and micro-climate allows introduction of other endemic tree species.

Section 8. Sources of Planting Materials

Planting materials of indigenous tree species may be sourced from existing clonal nurseries, gene banks and/or natural stands where wildlings are observed to be abundant.

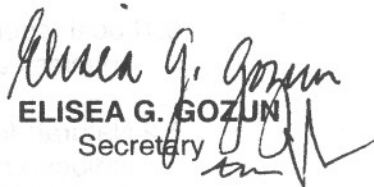
Section 9. Implementation Plans

The DENR shall ensure the incorporation of this strategy in the reforestation and restoration plans prepared by DENR offices.

For protected areas, rainforestation farming shall be incorporated in the protected area management plan to be prepared by the PASu and reviewed by the PAMB.

The rainforestation strategy shall also be encouraged to be included, where appropriate and applicable, in the Forest Land Use Plans of Local Government Units.

This Circular takes effect immediately and supercedes all other instructions issued inconsistent herewith.


ELISEA G. GOZUM
Secretary

Examples of species to be used in the Rainforestation Farming Strategy

Agathis spp.
Anthocephalus spp.
Calamus spp.
Dipterocarpus spp.
Dryobalanops spp.
Durio spp.
Diera spp.
Eugeissona spp.
Gonystylus spp.
Instia spp.
Parashorea spp.
Sindora spp.
Shorea spp.
Tectona spp.
Araucaria spp.
Achras spp.
Calophyllum spp.
Campnosperma spp.
Cratoxylon spp.
Durian
Nephelium spp.
Octomeles spp.
Paraserianthes spp.
Pithecellobium spp.

Samanea
Toona spp.
Calicarpa spp.
Acacia spp.
Albizia spp.
Azadiracta spp.
Balakata spp.
Calicophyllum spp.
Caliandra SPP.
Cassia spp.
Cinnamomum spp.
Derris spp.
Erythrina spp.
Ficus spp.
Fragrea spp.
Heynea spp.
Hopea spp.
Leucaena spp.
Macaranga spp.
Melia spp.
Palaquium spp.
Phoebe spp.
Schima spp.
Syzygium spp.