



DEPARTMENT OF
ENVIRONMENT AND
NATURAL RESOURCES

SEP 10 1990

DENR MEMORANDUM CIRCULAR)
NO. 30)
Series of 1990)

SUBJECT : Guidelines on the restoration of open and denuded areas within National Parks and other Protected Areas for the enhancement of biological diversity.

Pursuant to the provisions of Section 5, Executive Order No. 192 and in order to hasten the restoration of open, denuded, degraded and disturbed natural habitats within the national parks and other protected areas thereby protecting the integrity and restoring as close as possible, the original condition for purposes of conserving the biological diversity of such areas, the following guidelines are hereby promulgated for the guidance of all concerned:

Section 1. Areas to be restored:

- 1.1 Areas subject of restoration shall include open, denuded, inadequately wooded and/or degraded portions of national parks and other protected areas, such as game refuge and bird sanctuaries, and wilderness areas.
- 1.2 River banks, lakeshores, seashores, gulleys, road right-of-ways, easements, deltas, swamps, dry riverbeds, beaches and roadsides within national parks and other protected areas shall also be subject to restoration measures.

Section 2. Species to be planted:

- 2.1 Emphasis shall be directed towards the use of indigenous trees to the site and/or pioneer forest tree species which are adaptable and can survive environmental conditions, as planting materials.
- 2.2 Planting endemic tree species which bear flowers and fruits that form part of the natural food of wildlife shall be undertaken.

- 2.3 Endemic ornamental plants and trees may also be introduced to improve or beautify the landscape surrounding buildings, structures and other facilities within national parks and other protected areas.

Section 3. Planting Scheme:

- 3.1 Restoration of open areas along roadsides and road right-of-ways shall follow the form of landscape architecture. Planting shall cover a total distance of 100 meters from the roadside with a spacing of 2 meters by 2 meters or more depending on the size of planting materials when fully grown to stimulate a natural forest feature. The first 25% of the area nearest the road shall be planted with small-sized trees (species reaching 20 cms. at diameter breast height with height up to 5 m.); the next 25% of the areas shall be planted with medium-sized trees (diameter at breast height ranging from thirty to forty cms. with height of five to fifteen m.); and the last 50 m from the roadside or 50% of the area shall be planted with large-sized trees (diameter at breast height over forty cms. with a height over fifteen m.).
- 3.2 In very critical or steep areas, vegetative as well as structural measures shall be integrated to provide better soil protection and stability.
- 3.3 In areas other than road right-of-ways, mixed planting shall be encouraged to promote biological diversity particularly in degraded sites. Endemic fast growing species may be introduced to immediately restore the vegetative cover of the area.

Assisted natural regeneration shall be accepted in areas where the vegetation and micro-climate allows introduction of endemic premium species.

2

3.4 In areas where the grasslands form special foraging sites for browsers, cluster planting of mixed species covering an area of not less than 200 sq. m. per cluster shall be undertaken.

Section 4. Restoration Plan:

A restoration plan of which the outline is provided in the attached Annex 4 shall be prepared to cover a site whose area shall not be more than twenty (20) hectares.

Restoration plans shall be prepared by the Community Environment and Natural Resources Office (CENRO), reviewed by the Provincial Environment and Natural Resources Office (PENRO), and approved by the Regional Executive Director. Whenever a plan is found, a new site should be identified to enable the CENRO to prepare and maintain at least three (3) plans at a time.

Section 5. Implementation of approved plans and periodic submission of progress or accomplishment reports:

The Community Environment and Natural Resources Office (CENRO) shall implement the approved plans. All progress reports shall be submitted to the Office of the Secretary through the Office of the Undersecretaries for Environment and Research and the Field Operations for evaluation and validation.

Section 6. Coordination:

Restoration measures shall be tied up with the conservation and protection activities of the Environmental Management and Protective Areas Service of Regional Offices. As such and whenever possible, active participation of non-government organizations and concerned citizens of local communities where the national parks and other protected areas are located, shall be encouraged.

an

Section 7. ~~E~~^xcluded Reservations:

These guidelines shall exclude those areas covered by industrial tree plantations and other similar projects within the Province of Palawan except small islands declared as National Reserves under Proclamation No. 219 as amended, St. Paul Subterranean River National Park, Tubbataha Reef National Marine Park, El Nido Marine Sanctuary, Palawan Flora and Fauna and Watershed Reserve, and Calauit Game Preserve and Wildlife Sanctuary.

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



FULGENCIO S. FACTORAN, JR.
Secretary

ANNEX A. OUTLINE: RESTORATION PLAN FOR DEGRADED NATURAL
HABITAT OF NATIONAL PARKS AND OTHER PROTECTED
AREAS

1. INTRODUCTION

Provide general description of the area including the rationale for the establishment of such project in a specific area.

2. SITE DESCRIPTION

2.1 Location and Area

Indicate specific location which shall include the name of barangay, municipality and province, the approximate extent in hectares, the geographical coordinates (longitude and latitude), and accessibility of the area.

Extent of site of each plan for restoration activities shall be done by small watershed units with an area of preferably not more than twenty (20) hectares.

2.2 Climate

State climatic type and the average annual rainfall (mm/year) and distribution.

2.3 Topography and Drainage

Describe topography i.e., whether rolling, moderately sloping, steep, etc.. Indicate range of elevation. Describe creeks and rivers draining the area.

2.4 Soils

Indicate specific soil type and its properties.

2.5 Vegetative Cover and Land Use

Describe the existing vegetative cover in the area and the present land use status (hectares of forested/deruded, etc.). As much as possible, document history of vegetation within and in the immediate vicinities of the project area.

3. OBJECTIVES OF THE PROJECT

3.1 General Objectives

State general objectives of the project.

3.2 Specific Objectives

Define objectives of the project. These should be in consonance with the general objective(s).

4. RESTORATION SCHEME

4.1 Choice of Species

Enumerate specific species that will be planted in the area taking note of the provisions of DENR Memorandum Circular No. _____, Series of 1990.

4.2 Nursery Establishment and Development

Indicate general description of the nursery, its size and relative location with respect to the project area. Describe also seedling propagation techniques and indicate schedule of activities.

4.3 Planting Scheme

Indicate plan of activities for specific site development. Spacing of trees and mode of planting should be in accordance of the guidelines per above-mentioned Memorandum Circular.

4.4 Maintenance and Protection

Describe maintenance techniques and activities which shall include brushing, weeding, cultivation, fertilizer application, replanting, etc.. Include also sustained protection measures from injurious agencies like forest fires, pests and diseases, etc.

4.5 Facilities

Indicate types of infrastructure facilities that will be established in support to the project. Include access trails, project headquarters, fires look-out stations, water system and other similar facilities.

5. ADMINISTRATION/SUPERVISION

5.1 Organizational Structure

Describe the specific implementing organizational structure of the project and their corresponding functional chart.

5.2 Manpower

Indicate manpower requirement of the project.

6. ANNEXES

6.1 Maps

6.1.1 Vegetative Cover

6.1.2 Drainage Pattern Map

6.1.3 Project Map indicating the planting scheme by species and other development on the site.

6.2 Work Schedule

Present schedule of activities using Gantt chart and/or PERT-CPM.

6.3 Table showing detailed activities, targets and unit cost by activity, total cost and cost per hectare.

NOTE: If the rehabilitation/restoration project will be administered by contracts include the following:

6.4 Proposed schedule of payment

6.5 Articles of Incorporation duly registered with the Securities and Exchange Commission (SEC).

6.6 Latest Financial Statement/Capitalization

6.7 List and Bio-data of technical personnel

6.8 List of reforestation equipment/tools.