DENR ADMINISTRATIVE ORDER	
NO. 13	
Series of 1992	,

SUBJECT: <u>REGULATIONS GOVERNING THE ESTABLISHMENT OF BUFFER</u>
ZONES WITHIN FOREST LANDS

Pursuant to PD 705, as amended, Executive Order No. 192 dated June 10, 1987, and in line with the policy of the Government to sustainably manage and provide equitable access to the country's natural resources, the following regulations on buffer zones? are hereby promulgated:

- Section 1. Policy, it shall be the policy of the Government to ensure the sustainability of the remaining forest resources through the establishment of buffer zones between the boundary of production forests and areas used for agricultural and other purposes, and provision of livelihood opportunities to forest occupants.
- Section 2. **Objectives.** The buffer zones to be established under this Order shall have the following objectives:
 - 2.1 To serve as a protective belt on the exposed natural forest, both virgin and residual or second growth, from encroachment and destruction;
 - 2.2 To provide areas for livelihood opportunities to rural communities; and
 - 2.3 To establish natural landmarks within forest lands.
- Section 3. **Definition of Buffer Zones.** As used in this Order, buffer zones refer to a strip of land with natural or established vegetation which provide an added layer of protection to the forests where restricted use is allowed for local production of various benefits to rural communities.
- Section 4. Areas identified as Buffer Zones, in the establishment of buffer zones, priority shall be given to forest lands and critical mangrove areas located along the boundaries of population centers or densely populated communities and in forest lands made accessible by the presence of legitimate TLA holders or permittees.

More specifically, buffer zones shall be established in:

- 4.1 Twenty-meter strips of land along the edge of normal high waterline rivers and streams with channels of at least five meters (5 m) wide;
- 4.2 Where applicable, buffer zones shall likewise be established in the following areas:
 - 4.2.1 Strips of land at least fifty meters (50 m) in width fronting the sea, ocean or other bodies of water and twenty meters (20 m) on both sides

 of river channels/banks maintained and developed to enhance the protective capability of mangrove against strong currents, winds and high waves;

- 4.2.2 In storm-prone areas, mangrove forest strips one hundred meters (100m) wide inward along shoreline fronting seas, oceans and water bodies and fifty meters (50 m) strip river bank protection; and
- 4.2.3 Twenty-meter (20 m) strips of land outside the boundaries and immediately adjacent to designated protected areas.

Section 5. Identification, Delineation and Establishment of Buffer Zones. The DENR through the PENRO and CENRO shall immediately identify, with the aid of the latest Forest Resources Condition Maps (FRCM), aerial photographs and/or other technical references, potential areas as buffer zones. Areas identified shall be validated and demarcated on the ground and thereafter indicated on a map with a scale of 1:20,000.

Following the procedures prescribed in Annex A hereof, the CENRO concerned shall issue administrative order declaring a specific area as buffer zone/s and shall be submitted to the Secretary through proper channels, together with the map and development plan of the area, for approval.

Section 6. **Development and Maintenance of Buffer Zones.** To ensure the proper development and maintenance of the established buffer zones, the following shall be observed at all times:

- 6.1 Established buffer zones shall not be subject of applications for lease or permit:
- 6.2 Buffer zones established for the protection of river banks and mangroves, gathering of forest products shall be strictly regulated and tree planting shall be encouraged;
- 6.3 in residual forests and protected areas buffer zones, utilization of forest products maybe allowed, PROVIDED, that the purpose for which the buffer zone was established, shall not be defeated;
 - Planting of forest tree species including firewood species and fruit trees, shall be encouraged in these areas adopting the appropriate spacing. However, in cases where portions of open areas need to be established to provide accessibility, as in the case of foot trails, pathways or similar structures, occupancy shall be prohibited; and
- 6.4 The buffer zones shall be jointly managed and protected by the DENR and the concerned local government units and the communities themselves. The products derived therefrom shall accrue to the communities; and

- 6.5 Areas identified as mangrove buffer zones, which have already been converted into fishponds through approved Fishpond Lease Agreements (FLAs) are not covered by this Order: Provided that, the lessee/s shall reforest, whenever practicable, the tidal flats fronting their respective areas to at least 50 meters strip.
- Section 7. **Penal Provision.** Violations of any of the provisions of this Order shall be penalized in accordance with applicable laws, rules and regulations.

Section 8. Effectivity. This Order shall take effect immediately.

(SGD.) RICARDO M. UMALI OIC, Secretary

MANUAL OF PROCEDURES IN THE ESTABLISHMENT AND MANAGEMENT OF BUFFER ZONE WITHIN FOREST LANDS

A. For Social Forestry Projects

Locate the boundary of the entire Social Forestry Project

Locate the boundaries of the entire Social Forestry Project by putting signs/ markers along the boundary of the area. Determine the boundaries adjacent to forest lands as well as those bordering alienable and disposable lands.

Delineate the boundary of the buffer zone

From the identified boundaries, a width of twenty (20) meters (moving outside the area) is measured forming a belt-like structure along the boundaries of the project. Existing trees found within the buffer zone are marked by painting a red band (6 inches) about two meters above the ground.

Preparation of a development plan

A development plan for the buffer zone should be prepared by the community to be assisted by the social forester/community organizer designated in the area. The prepared development plan should be submitted to the CENRO concerned for approval.

The plan should include the desired tree species to be planted, the method to be use in the establishment and combination of crops desired.

B. For Reforestation Projects

1. Locate the boundaries of the entire reforestation project

Locate the boundaries of the entire reforestation project by placing signs, poster or any mark for easy identification.

Identify the buffer zones to be established

The buffer should be established along boundaries of the reforestation project. From the boundaries, a width of 20 meters (moving inside the area) should be measured forming a belt-like structure along the boundaries of the project. The identified strip should be marked with stakes/poles as guide for future activities.

Preparation of the development plan.

The Reforestation Project manager shall prepare the development plan of the identified buffer zones which shall be submitted to the CENRO concerned for approval. Communities within the vicinities of the reforestation project should be involved in the planning process.

C. For Mangrove Forests

Identification of the Puffer Zone

Buffer zones for mangrove forest include strips of lands along seashores, oceans and other bodies of water having at least 50 meters in width and 20 meters for both sides of river channels/banks. Boundaries of these areas should be marked properly for easy reference.

For storm surge and typhoon-prone areas, the buffer zone will be 100 meters inward along shoreline fronting seas, oceans and water bodies and 50 meters strip for river bank protection.

2. Preparation of development plan for the identified buffer zone.

A development plan should be prepared by the CENRO concerned and participated by the communities adjacent to the identified buffer zone.

The following are some of the species recommended for planting inside buffer zones:

FOR MANGROVE SWAMPS:

- a. Bakauan (Rhizophora sp.)
- b. Api-api
- c. Bungalon
- d. Pagatpat
- e. Tangal
- Nipa palm (Nipa fruticans)

FOR AREAS ALONG RIVERS/STREAMS

a. Akle		k. Narra
b. Anchoan		I. Teak
c. Bamboo		m. Tibig
d. Bangkal		n. Tindalo
e. Gmelina		o. Batino
f. Ipil-ipil	4	p. Dita
g Kalumpang		q. Ilang-ilang
h. Lanete		r. Dao

- i. Mahogany
- j. Supa

- s. Malunggai
- t. Coconut

FOR LOWLANDS - 1200 M. above sea level -

- a. Acacia
- b. Akleng parang
- c. ALibangbang
- d. Binayoyo
- e. Datiles
- f. Earpod
- g. Gmelina
- h. Ipil-ipil
- i. Kakawate
- j. Kalumpang
- k. Molave
- l. Teak

- m. Narra
- n. Fire tree
- o. Arangile
- p. Agoho
- g. Golden shower
- r. Kalantas
- s. Bagras
- Dapdap
 Banaba
- v. Bamboo
- w. Mahogany

(Fruit Trees)

- a. Achuele
- b. Anonas
- c. Antipolo
- d. Atis
- e. Avocado
- f. Caimito
- g. Chico
- h. Duhat
- i. Guava
- j. Guyabano

- k. Kalamansi
- I. Kasoy
- m. Mabolo
- n. Makopa
- o. Mango
- p. Nangka
- q. Rimas
- r. Sampalocs. Santol
- t. Siniquelas

FOR AREA - 1200- 2000 M, above sea level

- a. Alnus
- b. Pine
- c. Sangtib
- d. Eucalyptus
- e. Paper mulberry
- e. rapa masan
- f. Bat-kuking
- g. Molave
- h. Narra

- i Kapok
- j. Kamachile k. Almaciga

FOR AREA -2000 & Above sea level

- a. Oak
- b. Pine
- Dacrydium
- d. Podocarpus
- e. Mt. Agoho