[DENR ADMINISTRATIVE ORDER NO. 2010-11, May 05, 2010]

REVISED REGULATIONS GOVERNING FOREST TREE SEED AND SEEDLING PRODUCTION, COLLECTION AND DISPOSITION

Pursuant to Presidential Decree No. 705, otherwise known as the Revised Forestry Code of the Philippines as amended, Executive Order No. 192, reorganizing the Department of Environment and Natural Resources (DENR), Executive Order No. 318 promoting sustainable forest management, and Master Plan for Forestry Development, the revised regulation on forest tree seed, seedling production, collection and disposition is hereby issued for the guidance of all concerned.

SECTION 1. Basic Policy. It is the policy of the state to ensure the sustainable use, development, management, and conservation of the country's forest resources not only for the present but also for the future generation. The government through the DENR shall promote the use of high quality planting materials in the establishment of tree plantations, tree farms, agroforestry and other forestation activities to promote biodiversity conservation, and to ensure sustainable production and supply of wood and other forest products in the country.

SEC. 2. Objectives. This Order envisions to attain the following:

2.1 Ensure the continuous production of adequate supply of phenotypically and genetically-improved planting materials to meet the requirements for high quality seeds and seedlings by the government and private sectors in the establishment and development of tree plantations, tree farms, forest gardens, forestation, agroforestation projects, and rehabilitation of watersheds and coastal areas;

2.2 Develop a forest tree seed and seedling documentation and registry system for effective forest tree seed collection, handling and disposition; and sustainable seedling production;

2.3 Develop an accreditation system for government, Local Government Units (LGUs), and private seed production areas for the operation of a forest nursery;

2.4 Provide strategies and guidelines for the establishment, maintenance and protection of existing and potential Seed Production Areas (SPAs), Seedling Seed Orchards (SSOs), Seedling Clonal Orchards (SCOs) and Seed Sources (SS); and in the determination of quality planting materials; and

2.5 Update the seed calendar for each forest tree species to serve as a guide for appropriate seed collection period.

SEC. 3. Definition of Terms. The following terms shall be understood and interpreted as follows for the purpose of this order:

3.1 Clonal Seed Orchard (CSO) – seed orchard originated from cloned planting materials.

3.2 Forest Garden – a plantation mix of forest trees, fruit trees, industrial crops, rubber trees, palms, rattan and other economically perennial plants.

3.3 Forest Tree Breeding – the application of knowledge of genetics to develop improved trees. The activities are geared to solve some specific problems or to produce a specially desired product, an example of such direct breeding is the development of pest-resistant trees or breeding trees that possess specially desired wood.

3.4 Forest Tree Improvement development of the genetic make-up of the tree through selection and breeding in combination with cultural practices.

3.5 Forestation – establishment of vegetative cover through the process of reforestation and afforestation.

3.6 Genotype – the genetic constitution of an individual plant/tree.

3.7 Germplasm – the collective hereditary materials that are the physical basis for inheritance.

3.8 Lesser-known Species/Lesser-used Species – timber which are less known or less accepted by end-users especially in commerce and/or trade both locally and internationally, because they are characterized by incompleteness of information as to species identification, available volume and end-use properties.

3.9. Phenotype – the visible characteristics of a plant/tree, the product of the interaction of the plant genes with the environment.

3.10 Plus tree – a tree possessing better or superior phenotypic characteristics compared with other trees of the same species grown under the same environment.

3.11 Progeny test (trial) – evaluation of parent plant by comparing the performance of their offspring.

3.12 Propagule – a plant part such as bud, shoot, tuber, root, or spore used to propagate an individual vegetatively.

3.13 Provenance – the original native source of a population or source of seed, pollen or propagules.

3.14 Pruning – removal of undesirable branches.

3.15 Roguing – systematic removal of trees with undesirable traits or phenotype from a seed orchard or SPAs.

3.16 Seedling – includes all planting materials coming from seeds, wildlings, cuttings and other sources.

3.17 Seed Bank – a facility for multiplication, collection, distribution (sale) and promotion of the use of genetically improved seeds and propagules. It includes seed processing unit, seed storage chambers, seed testing laboratory and an office.

3.18 Seed Orchard – an area where superior phenotypes or genotypes are established and managed intensively and entirely for seed production.

3.19 Seed Production Area (SPA) – A plantation with known origin or stand of a natural forest with superior phenotypic characters selected on the basis of its maturity and capacity to produce abundant seeds, majority of the trees are healthy, tall, big in diameter, straight bole, balance crown and proportional branch size.

3.20 Seed Source (SS) – the locality where a seed/seedlot was collected.

3.21 Seed Stand – a group of trees that has been identified or set aside specifically as a seed source. It has been upgraded and opened by removal of undesirable trees and then cultivated for early seed production.

3.22 Seedling Seed Orchard (SSO) – seed Orchard raised from seedlings produced from selected parents through natural or controlled pollinations.

SEC. 4. Identification, Establishment, Maintenance and Protection of Seed Production Areas (SPAs), Seedling Seed Orchards (SSOs), Seedling Clonal Orchards (SCOs) and Seed Sources (SS). Natural stands, existing forest plantations, private forest and tree plantations which are potential sources of seeds and planting materials of various forest tree species shall be identified, surveyed, delineated, assessed and evaluated using the procedures/processes as mentioned in ***Annexes A to B****

Documentation of identified, established, maintained SPAs, SSOs, SCOs and SS shall be undertaken by the Regional Forest Tree Seed Committees. All information shall be reported and forwarded to NTWG following the format attached in ***Annex C****.

Tree cutting within identified and proclaimed areas inside public forest is strictly prohibited except those which form part of the silvicultural treatment such as thinning and rouging operations.

Protection and maintenance of SPAs, SSOs, SCOs and SS shall be the responsibility of the RED/PENRO/CENRO, in coordination with LGUs, academic institutions and other partner organizations. Appropriate signage's and markings shall be installed on the designated areas. For private SPAs, SSOs, SCOs and SS, owners shall be responsible for the protection and maintenance of their respective areas in coordination with DENR at Regional, PENRO and CENRO levels.

SEC. 5. Silvicultural Treatments for Established SPAs, SSOs, SCOs and SS.

The following silvicultural treatments shall be conducted:

5.1 Seed Production Areas

5.1.1 Stand Improvement. – Stand improvement, such as thinning, roguing and pruning shall be done in accordance with the Stand Improvement Plan approved by the Regional Executive Director upon the recommendation of the RFTSC taking into account the following technical considerations:

a. Thinning shall be undertaken based on established timber stand improvement techniques. All trees that do not meet minimum specifications shall be removed. All under storey vegetation that interfere with seed collection and maintenance of the area shall likewise be removed.

b. The first thinning shall be conducted until at least two years after canopy closure in order to ensure complete suppression of weed growth before opening up the stand. An initial thinning of at least 50% of fully stocked stands is recommended. A final stocking of at least 80-100 seed trees per hectare is recommended.

c. Thinned out trees and/or pruned branches shall be disposed in accordance with existing rules and regulations.

d. All diseased trees and those with undesirable forms shall be removed from the stand. Trees of below-average vigor (based on the dominant and co-dominant trees in the original stand) shall likewise be removed based on "plus" tree selection criteria under ***Annex D****.

e. Pruning shall be done to improve undesirable branches of selected "plus" trees.

5.2 Seedling Seed Orchards/Seedling Clonal Orchards

Silvicultural management of Seed Orchard. Special care should be given to the plants during the first year of establishment during which they are specially vulnerable.

5.2.1 Weeding – the plants should be kept from weed competition during establishment. Complete weeding should be done at least around each plant. Weeds between the plants maybe cut or completely removed. If chemical weeding is applied, care should be taken in terms of time, weather condition, and doses of application.

5.2.2 Roguing – once the result of the progeny test is available, the undesired families or ramets are cut and