



APR 07 2009

**DENR MEMORANDUM CIRCULAR**

No. 2009-07

**SUBJECT: Guidelines and Procedures on the Role of the Research Sector  
in the Implementation of the Upland Development Program**

In order to define and give direction on the role of the Research Sector in the Implementation of the Upland Development Program (UDP), as provided for in DENR Memorandum Circular No. 2008-04 and DENR Memorandum No. 2009-03, this memorandum circular is hereby promulgated.

*A. Research Sector's Roles*

There shall be three (3) major roles that the Sector will perform: (1) provision of technical assistance in the production of quality planting materials; (2) conduct of extension and technology transfer activities; and (3) introduction of charcoal briquetting technology as additional source of livelihood for selected UDP farmer-beneficiaries.

**1. Technical Assistance in the Production of Quality Planting Materials**

As a key element in the successful implementation of UDP, production of quality planting materials shall be ensured. The following procedures shall be observed:

**a. assessment and verification of quality seeds**

All forest tree seeds available in the CBFM Areas, Seed Production Areas and other seed sources that can be utilized in the production of quality planting materials for the UDP shall be collected.

The criteria in Annex A shall be used in assessing and verifying the source and quality of the seeds that will be collected and later raised in nurseries.

As a general rule, the seeds must have a known source and provenance. The method used in collection, time of collection, processing, storage system, and packaging must be considered. Similarly, seed counts per kilogram, color (to determine seed maturity), size, percent purity, and germination capacity must likewise be accounted.

These criteria shall be observed using the checklist provided (Annex B) for easy application by the *Bantay Gubat* and later verification by authorized DENR/LGU personnel who shall be trained by ERDS for the purpose.

b. assessment and verification of quality planting materials

In assessing and verifying the quality of planting materials that will be produced for UDP, the criteria enumerated in Annex C shall be followed. In general, assessment and verification shall be based on the nursery operation, how the seedlings are raised, the morphological characteristics and cultural practices applied, and percent of acceptability. These criteria are translated into checklist for easy application (Annex D).

Based on these criteria, the authorized DENR/LGU staff, who shall be trained by ERDS, shall verify the quality of planting materials produced in nurseries.

c. establishment of demonstration areas for training and planting materials production purposes

ERDS is also hereby tasked to establish demonstration areas in each region that will serve as show window and training ground for appropriate nursery operation, production of quality planting materials through seeds and asexual methods of propagation, establishment of hedge garden, and others.

2. Extension and Technology Transfer

To effectively facilitate technology and information awareness and skills enhancement and development for the stakeholders of UDP, an Extension and Technology Transfer component of the Program shall be instituted, which will be handled by the Sector in close coordination with the Human Resources Development Service.

a. Responsible Office

The Ecosystem Research and Development Bureau (ERDB) shall be responsible in providing the overall direction and guidance in terms of training and IEC material needs, while the Ecosystems Research and Development Sector (ERDS) shall provide the inputs to the development and preparation of training modules, training materials and IEC materials that are applicable to regional needs.

b. Target Recipients

The target recipients of the training and IEC materials are the following:

- b.1. Extension agents – who will provide technical assistance to farmers and CBFM families on the importance of environmental protection, particularly on production of quality planting materials, plantation establishment, and other livelihood opportunities.
- b.2. *Bantay Gubat* – tasked to help increase adherence of people to natural resources laws and regulations and as agents of information dissemination.
- b.3. PENRO and CENRO staff – as in charge of actual implementation of UDP, they should have a complete appreciation and internalization of the program.

c. Training Preparation

- c.1. Training Modules and Materials. Training modules and training materials on collection of quality seeds, production of quality planting materials, and general aspects of environmental protection shall be produced.

Training programs shall be based on the felt needs of the target recipients and the skills required in the implementation of the program.

- c.2. Training Design and Materials. Existing training modules, design and materials on the topics listed in Annex E shall be assessed by the sector to produce the training modules and materials that would best provide information and skills needed by the target recipients.

d. Conduct of Training

The conduct of training programs shall be managed jointly by the Sector and HRDS and the Sector shall provide resource persons and technical assistance as defined in the training modules.

e. Inventory and production of IEC materials

The Sector shall inventory the IEC materials available at the regions and match these with the preferred list of information needs of the extension agents and *Bantay Gubat*.

There shall be two types of IEC materials to be produced, namely:

- Technical handouts for extension agents and *Bantay Gubat*
- Popularized reading materials for farmers

All IEC materials for dissemination and use of both the Extension Agents/*Bantay Gubat* and farmers shall be provided before the actual field assignments and implementation.

### 3. Charcoal Briquetting

#### a. Area coverage

The project shall be implemented in CBFM-UDP sites nationwide. In the selection of priority areas, the following criteria shall apply:

- Traditional charcoal making is rampant;
- Availability of abundant abandoned waste as raw materials;
- Limited livelihood options;
- Socio-political acceptability;
- With committed and organized People's Organizations, Non-Government Organizations and/or Cooperatives/Associations; and
- With existing and potential market.

#### b. Choice of Materials

Raw materials available in the community such as cogon, coco wastes, twigs, leaves, and other cellulosic waste materials will be used.

#### c. Charcoal Briquetting Implementation Activities

After the identification of the sites, equipment shall be provided and training on the charcoal briquette production shall be conducted by the Sector.

To ensure marketability and overall viability of the project, sample briquettes will be sent to the laboratory for analysis, prior to commercialization.

#### d. Other by-products

Aside from charcoal briquettes, the project shall endeavor to produce other by-products such as liquid smoke (insect repellent, fungicide, etc.) and organic fertilizer.

*B. Representation to the UDP Task Forces*

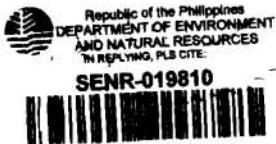
To ensure that these roles are carried out and integrated in the overall implementation of the Program, the ERDB and the ERDS shall be represented in the National and Regional UDP Task Forces, respectively.

They shall submit monthly reports to the National and Regional Offices concerned on the performance of their specific roles vis-à-vis the progress of the Program implementation.

They shall periodically evaluate their plans and programs in carrying out their roles in the Program.

This Memorandum Circular shall take effect immediately.

  
JOSE L. ATIENZA, JR.  
Secretary



**Assessment and Verification of Quality  
Planting Materials**

**Seeds**

Species: \_\_\_\_\_

Criteria:

**A. Collection**

- Provenance
- Source
- Method of collection
- Time
- Processing

**B. Storage**

- Sorting
- Treatment
- Packaging
- Place/Method of Storage

**C. Germination Capacity**

- % germination

Checklist of Quality Planting Stock

SEEDS

1. Source

- SPA       Natural Stand       Artificial Stand

Seed Status

- Newly collected      Date of Collection: \_\_\_\_\_  
 Old Seed      Age (no. of months in storage): \_\_\_\_

2. Time of Collection

- End of fruiting season  
 Others, please specify: \_\_\_\_\_

3. Method of Collection

- Picked from standing trees  
 Collected from the ground

4. Processing

- With processing  
     Air-dried  
     Removal of pericarp

- Without processing

5. Seed count per kilogram: \_\_\_\_\_

6. Color: \_\_\_\_\_

7. Size: \_\_\_\_\_

8. Storage

Refrigerated

Normal room temperature

9. \_\_\_\_\_ % Purity          \_\_\_\_\_ % germination

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Remark:

Quality of Seed Accepted

Quality of Seed Rejected

Verified by:

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Printed Name & Signature



**Assessment and Verification of Quality  
Planting Materials**

**Planting Stock**

Species: \_\_\_\_\_

Criteria:

- A. Source (SPA or Natural Stand)
- B. Type
  - Seedlings (from seeds)
  - Wildlings
  - Asexually propagated
- C. Quality Control
  - Free from pest and disease
  - Color (nutrient deficiency determination)
  - Size (height and diameter)
  - Age of seedling
  - Hardened

### Checklist of Quality Planting Materials

Species: \_\_\_\_\_

1. Type:  Seedling  
 Wildling  
 Asexually Propagated

2. Morphological Characteristics

a. Form

Straight

b. Leaves

Green

c. Health Status

Absence of Pest and Diseases

No abnormalities

d. Size:

Height (cm): \_\_\_\_\_

- Fast-growing species : 30 cm and above

- Slow-growing species: 50 cm and above

Diameter (cm): \_\_\_\_\_ (0.5 cm and above)

3. Applied Cultural Practices

Hardened

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Remark:

Quality of Planting Stock Accepted

Quality of Planting Stock Rejected

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Verified by:

\_\_\_\_\_  
Printed Name & Signature

**Topics for Training Modules**

**Bantay Gubat**

Assessment of quality planting materials  
Agroforestry  
Policies and regulations  
Plantation development  
Species matching  
Basic Knowledge on ENR  
Quality planting stock production  
Charcoal briquetting  
Bamboo production  
Composting  
Forest Protection  
Assisted Natural Regeneration (ANR)  
Seed collection and handling

**Extension Agents**

Quality planting stock production  
Basic Knowledge on ENR  
Bio-fertilizer  
Composting  
Enrichment Planting  
Mangrove rehabilitation and management  
Bamboo, rattan, anahaw and  
other NTFPs production  
Forest Protection  
Assisted Natural Regeneration (ANR)