

**MEMORANDUM CIRCULAR**  
**No. 21**

**TO :** ALL REGIONAL EXECUTIVE DIRECTORS, PENRO  
CENROs

**SUBJECT :** Establishment of 10-Hectare Management Block  
Unit Pursuant to DENR Monitoring and  
Evaluation System in All Areas Under Contract  
Reforestation.

**SECTION 1. BASIC POLICY.** Consistent with the implementation of Contract Reforestation nationwide, it is the policy of the DENR to implement a Monitoring and Evaluation System (MES) for effective management and closer supervision of all types of contracts funded by the Administration, ADB and OECF. As a policy of establishing adequate ground control and systematic management of all areas under contract reforestation, the DENR initiates a control technique by block management system (BMS) or the area grid control which may lead to the full computerization of all relevant data pertaining to the execution of contract terms and conditions based on living tree concept; and consequently utilizing remote sensing technique in later years for the inventory of the established plantations.

**SECTION 2. DEFINITION OF TERMS.** Cognizant of the developed DENR MES, the following words as used in this Circular are hereby defined:

1. **Block** – a management unit established with an area of 10 hectares.
2. **Blocking** – is the process necessary to establish specific unit area for monitoring purposes where in this Circular, the area of which is 10 hectares.
3. **Block Management System (BMS)** – it is a control technique for an area under contract reforestation. This means sub-dividing the area awarded into 10-hectare block with a uniform dimension of 200 meters by 500 meters. Each block for computerization purposes is assigned with a unique identification number to establish its identity.
4. **DENR Monitoring and Evaluation System (MES)** – a system modified and subsequently adopted by DENR for use by the National Forestation Program in all areas under contract reforestation. The system was first developed and applied by the Paper

Industries Corporation of the Philippines (PICOP) in its industrial plantation areas. The ADB consultant group recommended the adoption of the system as modified.

5. UTM or Universal Transverse Mercator – a worldwide mapping system that reduces the distortions in square maps caused by the round features of the earth. The earth's surface is divided into several hundreds of zones. Each zone has a principal baseline and a principal meridian. The zones used in the Philippines are numbered 50 and 51. The area covered is from longitude 117 degrees to longitude 126 degrees and from latitude 4 degrees to latitude 20 degrees.
  - as applied to Monitoring and Evaluation of contract reforestation, UTM means a worldwide mapping system from which the baselines for the blocking of the area will be based.
6. Living Tree Concept – that of ensuring high survival of plantations by monitoring stocking density in between phases against the standard of not less than 80%.

### SECTION 3. ORGANIZATION AND WORK PROCEDURE.

a) Effective immediately, all DENR offices involved in the planning and implementation of contract reforestation are hereby instructed to implement the blocking of areas under contract for the years 1988 and 1989 following the procedure and specifications called for by the DENR MES and utilizing the UTM technique in establishing grids therein.

b) To effectively implement the blocking of the contracted areas, you are hereby directed to utilize the services of the DENR personnel who were trained in the DENR MES. In doing so, there shall be teams to be created in each region (refer to Tables I and II for the number of teams for each region) headed by a MES trained personnel. Each team shall consist of six (6) members under the overall supervision of the aforesaid MES trained personnel, who thereafter systematically be fielded to carry out the task hereunder:

1. Establishment of a reliable reference tie point preferably at the center of the project area to be blocked using UTM as general reference.
2. Establishment of two baselines from the reference point following the cardinal directions. It will be done using a compass by running the line from the center to a due north/south and due east/west directions.

3. While running the baselines, the 10-hectare block subdivision shall be established simultaneously by planting corner posts on designated block boundaries. For the east-west direction, every 200 meters shall be marked while for the north-south direction, marking shall be done for every 500 meters, repeating the same procedure until the whole area is covered.
4. Planted corner posts should be in square form and at least 5 feet in height. The post should be erected in such a way that the four sides should face different blocks. The corner of the post should coincide with dividing lines of the blocks.
5. Block number on the corner post should be indicated for easy identification of the block following the MES block numbering system.
6. In case a block boundary crosses the road, guide post should be planted on the side of the road, the distance of which should be indicated on the guide post and the direction specified by an arrow.
7. For partial block (less than 10 hectares as in the case of block at the edge of the perimeter boundary of the project) dimensions should be measured and gross area computed.
8. Staking of the seedlings planted and also in spots with no surviving ones based on spacing used.

Whenever possible enlist the assistance of NAMRIA and Land Evaluation Parties attached with the Office of your respective ASECs for field operations.

**SECTION 4. AREAS FOR BLOCKING AND PERIOD OF COMPLETION.** The total area by region and period of completion of the blocking activity is hereunder indicated in Appendix A for your reference and strict compliance.

**SECTION 5. PREPARATION AND SUBMISSION OF MAPS OF BLOCKED AREAS.** Upon completion of the task under Section 4 of this Circular, each region should have prepared a map with a scale of 1:10,000 detailing the identification of each block established in accordance with the DENR MES coding designed and using UTM as reference in grid establishment.

The resulting map should be known as a Blocking Management System Map or BMS Map, a copy of which will be furnished Office of the Assistant Director, Special Concerns Office (SCO), DENR, fifteen (15) days after the completion date as herein indicated in Section 4 of this Circular.

**SECTION 6. FUNDING SOURCES.** In carrying out the blocking works, funds allocated under the National Forestation Program (NFP) shall be utilized herein.

**SECTION 7. FUTURE TARGETS OF BMS.** For areas under contract reforestation from 1990 onward, the same procedure shall apply. Henceforth, blocking of areas under contract reforestation shall become an integral part of the planning process, which a contractor himself may undertake at a cost, if such contractor possesses the technical capability to pursue the same.

**SECTION 8. REPEALING CLAUSE.** Any provision of Department Administrative Orders, Memorandum Circulars or other DENR issuances inconsistent with this Circular are hereby amended or repealed accordingly.

**SECTION 9. EFFECTIVITY**

This Circular takes effect immediately.

**VICTOR O. RAMOS**  
Undersecretary for Field Operations

Signed on November 10, 1989

\* (Appendices A, B and C Omitted)