



DEPARTMENT OF  
ENVIRONMENT AND  
NATURAL RESOURCES

DENR SPECIAL ORDER  
NO. 763  
SERIES OF 1993

JUN 18 1993

SUBJECT: Authorizing DENR Personnel to attend training on Hand-Made Paper for Community-Based Management of Logged-over Areas in the Philippines.

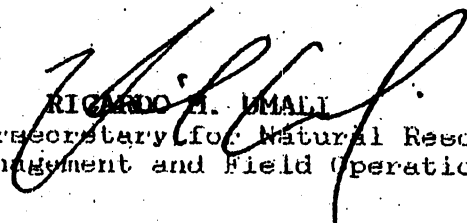
In the interest of the service and to provide a venue for the improvement of knowledge and skills on Hand-Made Paper Making, the following personnel are hereby authorized to participate in the scheduled training, sponsored by the Pilot Project on Community-Based Management of Logged-over Areas in the Philippines on June 16-18, 1993 at Presentacion, Camarines Sur :

1. CFP Regional Coordinator
2. Project Management Officer for the Pilot Project
3. BREDCI Members
4. CM-LOA Project Staff
5. CFP Secretariat Staff

All participants required to attend all the sessions and practicum of said training. The participants are expected to implement the learnings in the project.

Travelling expenses shall be shouldered by the Community-Based Management of Logged-over Areas in the Philippines Fund, subject to the existing accounting and auditing procedures.

This Order takes effect immediately.

  
RICARDO H. UMALI  
Undersecretary for Natural Resources  
Management and Field Operation

## TRAINING COST ESTIMATE

### Trainers :

Leader : P 200/hr. x 8 hrs./day x 5 days	P 8,000
Asistant : P 150/hr. x 40 hrs.	6,000
Board and lodging : 2 persons x 5 days x 150/day	1,500
Transportation cost of trainers, 2 x P500	1,000
Sub-total	P 16,000

### Materials :

Plastic pails, 25 l cap, 4 pcs., P90/pc	360
Mold and deckle, bamboo materilas, 2 pcs. P350/pc.	700
Sodium hydroxide (NaOH), 2 kg, P90/kg	540
Calcium hypochlorite, 2 kg, P280/kg	560
Sumfactant 2 kg. P280/kg	560
Potassium hydroxide 4 kg. P90/kg.	360
Alum, 1 kg. P100/kg	100
Rosin 1 kg. P100/kg	100
Dyes, assorted colors 5 packs P100/pck	500
Plastic sheet, 0.1mm thick polyester 20 meters, P50/m	1,000
Sub-total	P4,780

### Meals and snacks of participants:

15 participants x 3 days x P100/day	P4,500
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GRAND TOTAL	P25,280
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**TRAINING DESIGN FOR HANDMADE PAPERMAKING AT  
PRESENTACION, CAMARINES SUR**

Trainors : Two (2)  
Duration of Training : Three (3) days  
Expected Number of Participants : 15

Objectives :

- \* To improve knowledge and skills on how to prepare pulps for handmade papermaking (HMP);
- \* To improve the techniques on how to produce good quality and decorative paper; and
- \* To know how to safely handle wastewater during HMP

Expected Outputs:

At the end of the training the participants will have:

- \* known the properties required for a suitable raw material for paper and how to prepare such material prior to pulping;
- \* known the different pulping processes and the steps involved in each type of pulping methods;
- \* learned the techniques involved in stock preparation and in the use of papermaking additives;
- \* have made pieces of export-quality, decorative paper for varied purposes; and
- \* known how to treat, reuse and dispose off wastewater.

Activities

Day

- 1 Collection and preliminary treatment of raw materials  
Pulp preparation- cooking, washing, pounding, beating and screening
- 2 Bleaching, dyeing, preparation of paper additives  
Stock preparation, paper making
- 3 Continuation of papermaking activities; evaluation of the products

Mechanics:

The participants will be divided into three groups. Each group will have hands-on experience in each of the stages of handmade papermaking.