

# NADEP COMPOSTING

NADEP composting is a natural process by which biomass wastes, soil wastes and animal wastes are biologically degraded and decomposed into an organic - compost

## 1. Materials Required

- (1) Construction of a 6 ft x 3ft x 4ft aerated tank made of locally available materials like splitted bamboo or bamboo post or wooden post or plank
- (2) About 1500 Kg of agricultural wastes/ dried plant residues
- (3) About 100 Kg cowdung or slurry until harvesting
- (4) About 1700 Kg fine dry soil mass
- (5) About 1500 litres of water till harvesting

## 2. Process

- (1) Collection of locally available materials for construction of aerated tank
- (2) Collection of biomass like cowdung, cowdung slurry, soil mass
- (3) Dry the plant residues, soil-mass
- (4) The 1st layer of 15 cms thickness is to be filled with biomass wastes and filled with cowdung slurry and followed with dried soil-mass. This sequence of layering is to be repeated till the tank is more than full
- (5) One sequence of three layers must be completed in one go
- (6) Repeat (4) above till the tank is more than full on
- (7) The top layer is to be plastered with cowdung

## 3. After Care

- (1) Water should be regularly sprinkled (depending upon the season)

## 4. Precautions

- (1) The area in which the tank is constructed should be compact



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- (2) The ground of the tank is to be plastered with mud and dung to prevent leaching
- (3) As soon as cracks develop, filled up with dung slurry.
- (4) After completion of a sequence of 3 layers @ 15 cm per layer, the filling of the last sequence of remaining layers should be done after observation of the settlement of the 3 earlier layers
- (5) Make a roofing structure with locally available materials to protect from rain and direct sunlight

## 5. Harvesting

- (1) Harvesting will be done after decomposition which may take 100 to 200 days without organic solution to hasten the decomposition
- (2) The compost is then ran through a sieve and store in a cool place in gunny bag or locally available material so as to prevent loss of moisture, etc
- (3) A tank size of (6 x 3 x 4) ft with a capacity of 1500 Kg agricultural wastes, 100 Kg cowdung, 1700 Kg fine dry soil-mass and 1500 litres water may yield 700 Kg NADEP compost in about 100 – 200 days



Mixing of cowdung slurry



Chopping of dry biomass



Construction of aerated tank



1st Layer: Fill with 6" of biomass



2nd Layer: Pour with cowdung slurry



3rd Layer: Stacking with top soil



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