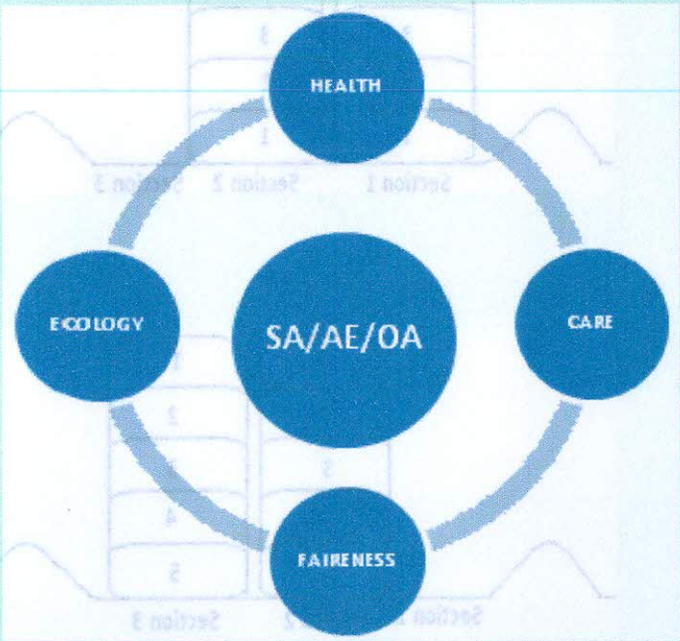
IFOAM ORGANICS INTERNATIONAL | CULTIVATING CHANGE.

inter cooperation
Natural Resource Management
Rural Economy
Local Governance and Civil Society

ORGANIC AGRICULTURE
Supported by
IFOAM - ORGANICS INTERNATIONAL
Implemented by
MOUNTAIN AGRO-ECOSYSTEM ACTION NETWORK

Facilitates in Rich Nutrients Crops To Overcome Malnutrition and Nutrient Deficiencies
IN
BEER UNION COUNCIL
DISTRICT HARIPUR
COMPOST MAKING



[Mahmood Elahi RSP]

Composting:

Definition: "Composting is the process by which organic waste material is converted to humus."
Humus provides the soil with more nutrients which are essential for high crop yields and good crop quality. Compost can reduce the farmers need to spend money on buying expensive chemical fertilizers.
Compost Making Process: The following is the simple description of **composting;**
Compost Pit: is the place where the organic waste material is collected and humus is made. The pit should be located near to:
-a water source,
-the organic material source, and
-the crop land where the compost will be added.
The compost pit is dug to a depth of 1-2 feet and the excavated material placed around the sides to form a bund. The size of the pit will depend on the amount of material available for composting.
Organic material: the material used in the composting process must be organic.

Organic Farming-Nutrition Sensitive Agriculture

Organic materials includes:
vegetation such as crops residue, plants, weeds, stalk of maize and pulses, tree leaves, branches,
Shouts & shrubs, vegetable waste such as rice bran, and cereal straw; woody materials such as sugar cane trash, tree bark and saw dust.
The best particle size for organic material in composting is about 2 inches. If the material is bigger than this, then it needs to be broken down. This can be achieved by either chopping the material, soaking it or by laying on a road and allowing traffic to break it up.
The main category of organic material is animal waste; can be liquid in the form of urine, or solid in the form of manure. Urine is a good source of potassium which is essential for good crop growth.
Building the heap: when enough material is available for composting, building of the heaps can begin. The heap will be built in the compost pit constructed for this purpose. At the bottom of the pit place a layer of branches or brushwood. This will help in aeration and prevent water logging of the lower layers. The pit should be divided into a number of sections in which each heap will be built.

Organic Farming-Nutrition Sensitive Agriculture

This division is required for later, when turning of the heap will be necessary. On the branch layer place the organic material. The heap should be built up in layers of 10 inches up to a maximum of 6 layers or 5 feet in height. The layers should be alternate between vegetable waste and then animal waste if it has not been mixed and prepared beforehand. As each layer is added it should be lightly watered so that it becomes damp but not saturated.

In the middle of each heap a ventilation pole should be inserted. This will help in the aeration of the pit which is necessary for the composting process. The pole should be moved around from side to side in a circular motion as the heap is being constructed. The ventilation pole should be less than 4 feet apart and when the heap is completed it should be left in place.

Turning of the heap: In order to get optimum results from composting, it is necessary to turn the heap on regular bases. The first turn is usually carried out after 2 weeks. If you have two compost heaps then you will need three sections in order to turn the heaps.

Layer. This layer is watered lightly and the next 10 inches layer of heap 2 is placed on top of this. Again the layer is lightly watered.

The top layer (10 inches) of heap 2, is turned onto the floor of section 3 in a

This process continues until all of heap 2 is in section 3.

Following the same procedure, the heap in section 1 is turned layer by layer into section 2.

The second turn should be carried out after a further 3 weeks, during week 5 after heap construction. After nine weeks a third turn is made. The final compost product should be mature about 12 weeks after starting. Mature compost has a friable texture, an earthy smell and is dark brown in colour.

Use of Compost: After the compost is ready it should be used at once. Any delay may result in a reduction of the nutrient content due to rain and sunlight. The best time to apply compost is just before ploughing. Compost should be ploughed in to a depth of 4 inches where it will readily available to developing crop root system. The compost will breakdown slowly releasing the major plant nutrients, nitrogen (N), phosphorus (P) and potassium (K) and also the minor and trace elements.