

- \* Untreated wood products i.e. sawdust.
- \* Calcium chloride, bentonite, chalk, gypsum, phosphate chalk, epsom salt i.e magnesium sulphate.
- \* Rock phosphate, lime

### SCOPE OF ORGANIC FARMING IN NE REGION :

1. The use of inorganic fertilizers and chemicals is meagre/scanty and the farmers of this region in general having apathy towards the use of agrochemical.
2. The fruits of green regulations could not benefit the farmers of these region as the system of production remained low input-low risk-low yield technology and the average yield of most of the crop remained far behind the national average productivity. It is assumed that the difference in production gap due to change from conventional to organic farming would be negligible, rather there is scope for enhancing productivity with good organic management and the premium price for organic produce would boost earning of the farmer.
3. The native organic carbon content of the soil in the NE region is very high (1.5-4%)

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# ORGANIC FARMING AND ITS SCOPE IN NE REGION



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Organic farming is the production system which avoids or largely excludes the use of synthetic inputs such as fertilizers, pesticides, growth regulators and live stock feed additives. This system relies on legumes, green manures, crop rotations, crop residues, animal manures, biofertilizers, biopesticides, bioherbicides etc. It is a holistic management of agriculture system which aims at cultivation of the land in such a ways that soil is kept healthy and dynamic with biochemical and soil microbial activities related to bio diversity. Organic farming is a farmer's movement. It works along the principles found in nature.

#### **NEED OF ORGANIC FARMING:**

1. To produce nutritionally high quality food (no chemical residues).
2. To keep our environment healthy.
3. To allowed beneficial organism like honey bee and earth worm to live.
4. To maintain long term fertility of the soil.
5. To make farming less dependable on external inputs.
6. To recycle agricultural products/by product within the farm unit.
7. To reduce the problem of water logging, salinity and acidity i.e. deterioration of soil quality with existing practices
8. To maintain the genetic diversity of the plants and animals.
9. To increase the farm income.
10. To reduce the harmful effect of agricultural chemicals on the soil micro flora and fauna
11. To maintain the healthy and sustainable production system.

#### **COMPONENTS OF ORGANIC FARMING :**

Basically Organic farming components can be grouped into the following categories :

- (A) Crop residues
- (B) Green Manures
- (C) Crop rotation/ intercropping/ sequential cropping
- (D) Organic manures FYM
- (E) Weed Biomass
- (F) Compost/Vermicompost
- (G) Biofertilizers/Azolla/Rhizobium etc
- (H) Oil cakes/wood ash/fish meal/blood meal.
- (I) Mulching/Cover crops
- (J) Liquid manures/vermi wash
- (K) Botanicals
- (L) Legumes in cropping system
- (M) Bio-gas slurry

- (N) Biopesticides/botanicals/biological control of insect pests and diseases.
- (O) Weed control

#### **BENEFITS OF ORGANIC FARMING :**

- \* It helps in maintaining environment health by reducing the level of pollution.
- \* It reduces human and animal health hazards by reducing the level of toxic residue in the product.
- \* It helps in keeping agricultural production at a higher level and makes it sustainable.
- \* It reduces the cost of agricultural production and also improves the soil health.
- \* It ensures optimum utilization of natural resources for short- term benefit and helps in conserving them for future generation.
- \* It not only saves energy for both animal and machine, but also reduces risk of crop failure.
- \* It improves the soil physical properties such as granulation and good tilth giving good aeration, easy root penetration and improves water holding capacity of soil.
- \* It improves the soil's chemical properties such as supply and retention of soil nutrients and promotes favourable chemical reactions.

Besides these, it has been demonstrated extensively that plant products from organic farming are substantially better in quality like bigger in size, look, flavour and aroma and animal products to be of better quality when they are feed and fodder produced organically. The under ground water of the area where such farming system is in practice has been found to be free of toxic chemicals.

#### **What we should not do.**

- \* Don't use chemical fertilizers like urea, DAP, SSP, MOP etc.
- \* Don't use chemical insecticides like Rogor, Dimecron, Endosulphan etc.
- \* Don't use chemical herbicides like Paraquat, 2, 4-D, Pendimethalin etc.
- \* Don't use synthetic feed additive to fishes and farm animals.
- \* Don't use chemical medicines like Bavistin, furadon, Kitazin etc.
- \* Don't use synthetic growth regulators.

#### **What we should do, We can use.**

- \* FYM, compost, vermicompost, poultry manure, urine etc.
- \* Bio-fertilizers, oilcakes, green manures
- \* Crop residues (mulches) and animal westes.
- \* Crop rotations, Legumes etc.
- \* Bio-dynamic products.
- \* Plant extracts like neem, karanj for controlling insect, pest, disease, and weeds.
- \* Bio-control agents for controlling insect pest, disease, and weeds.