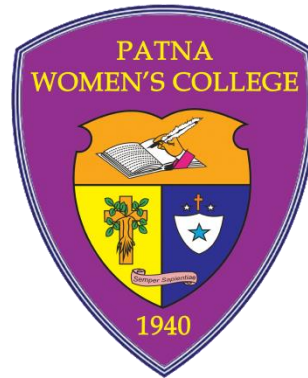


PATNA WOMEN'S COLLEGE

Patna University

‘College with Potential for Excellence’ (CPE) status accorded by UGC
3rd Cycle NAAC Accredited at ‘A’ Grade with CGPA 3.58/4



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Organic food and its farming

ORGANIC FOOD

Organic food is that which is raised, grown, processed, and stored without the use of synthetically produced chemicals or fertilizers, herbicides, insecticides, or any other pesticides and growth hormones as a plant growth regulator. By organic farming, organic food is produced.



ORGANIC FARMING

Organic farming is a form of agriculture which avoids the use of synthetic inputs (such as fertilizers, pesticides, hormones, weed additives etc). Organic farming rely upon crop rotations, crop residues, animal manures, off-farm organic waste, and mechanical cultivation to maintain soil production, to supply plant nutrients and to control weeds, insects and other pests.



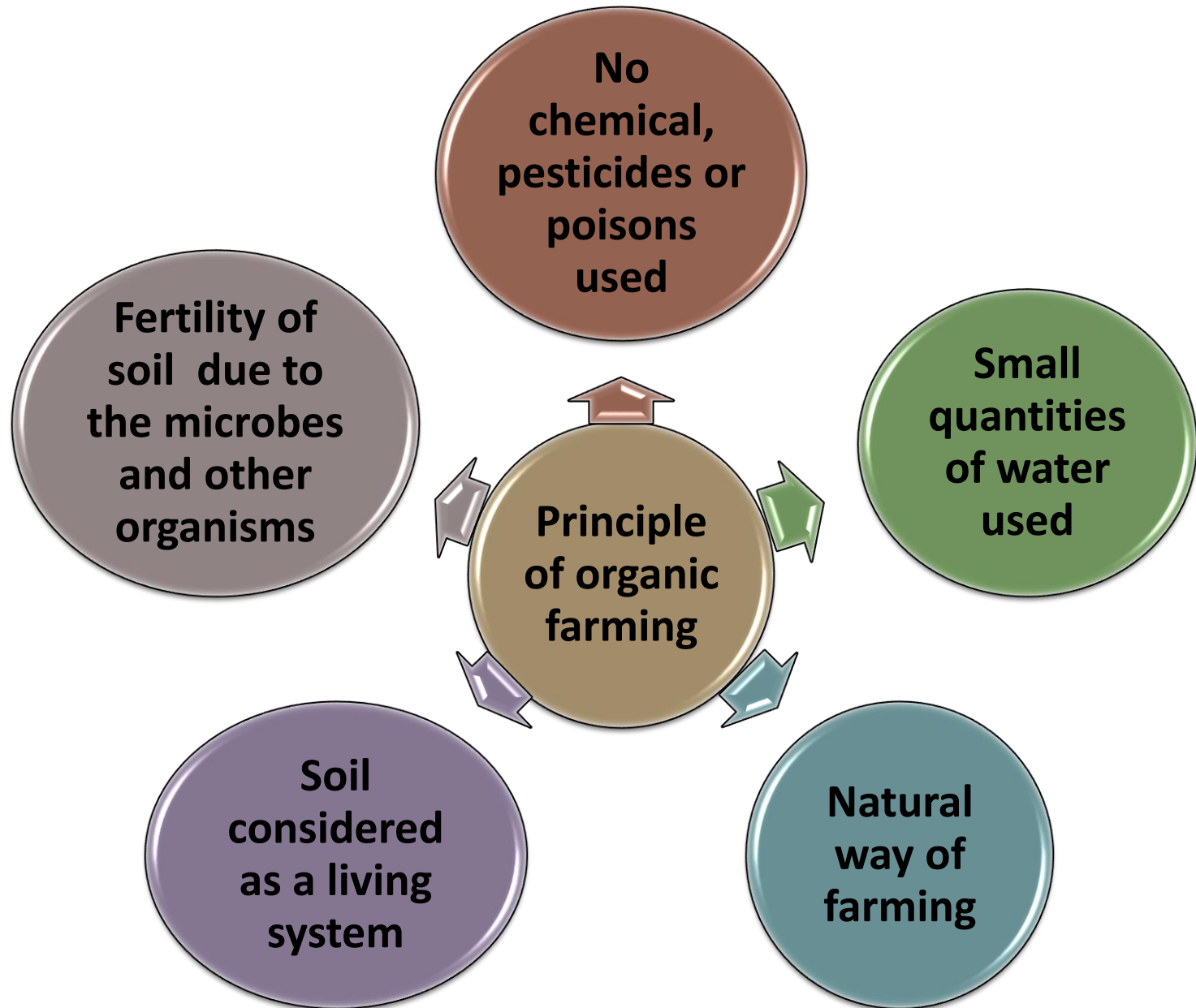
Objectives of adopting organic farming

Organic farming may be adopted to :-

- increase long-term soil fertility.
- control pests, weeds and diseases without harming the environment.
- promote more usage of natural pesticides.
- ensure that water stays clean and safe.
- produce nutritious food, feed for animals and high quality crops to sell at a good price.



Principles of organic farming



TYPES OF ORGANIC FARMING

Organic
farming

Kitchen
gardening

Alley
cropping

Bio-
intensive
agriculture



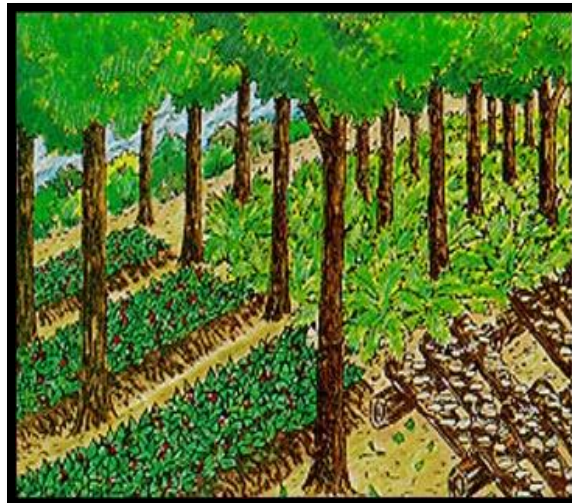
1. Kitchen gardening:-

Kitchen gardening is a type of organic farming as organic manures from kitchen waste is used. It includes use of organic manures, and bio-pesticides with complete avoidance of inorganic chemicals and pesticides.



2. Alley cropping:-

Alley Cropping is planting rows of trees at wide spacing with a companion crop grown in the alleyways between the rows. Alley cropping can diversify farm income, improve crop production and provide protection and conservation benefits to crops. Common examples of alley cropping plantings include wheat, corn, soybeans plant in between rows of black walnut trees.



3. Bio-intensive agriculture:-

Bio-intensive agriculture is an organic agricultural system that focuses on achieving maximum yields from a minimum area of land, while simultaneously increasing biodiversity and sustaining the fertility of the soil. The goal of the method is long term sustainability on a closed system basis. It is particularly effective for backyard gardeners and smallholder farmers in developing countries, and also has been used successfully on small-scale commercial farms.

Components important to the bio-intensive approach include:

- Double-dug, raised beds
- Composting
- Carbon farming.



Organic manures:-

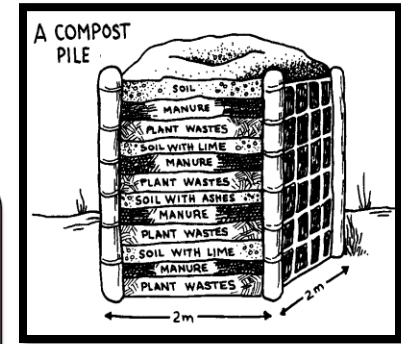
- Organic manures are natural products used by farmers to enhance sustainable crop production;
- Organic manures provides all the nutrients that are required by plants;
- It helps in maintaining carbon: nitrogen ratio in the soil and also increases the fertility & productivity of the soil;
- It improves both the structure and texture of the soil;
- It increases the organic matter (bacteria & fungal activity) in the soil. These organic matters in turn releases the plant food in available form for the use of crops.
- It increases the water holding capacity of the soil;
- It provide organic acid that help to dissolve soil nutrients and make them available for the plants.

Types of organic manures



**green
manures**

compost



**farm yard
manure**

**biological
wastes**

**Organic
manures**



Advantages of organic farming

- 1) Less damaging to the environment;
- 2) Use less energy & produces less waste;
- 3) Better than conventional farming as sustaining diverse eco-system;
- 4) Soil has higher water retention;
- 5) Protects the health of farm workers;
- 6) Organic foods are better in taste and texture.



Disadvantages of organic farming

- Less food produced approximately 1/3rd lower than conventional farming;
- Production costs are high;
- Food illness may happen more often;
- Organic food is more expensive than conventional food.



Certification of organic products

Certified organic products are those which have been produced, stored, processed, handled and marketed in accordance with precise technical specifications (standards) and certified as “organic” by a certification body. Once conformity with organic standards has been verified by a certification body, the product is afforded a label.



- PACKAGING OF ORGANIC FOOD:-

The following points needs to be considered during organic packaging:-

1. Biodegradable, recyclable, reusable systems and eco-friendly packaging materials shall be used;
2. The accredited Certification Body shall approve the packaging material for use.

CONTD.

3. Material used for packaging shall not contaminate food.
4. The packages shall be closed in such a manner that substitution of the content cannot damage of the seal.

- LABELING OF ORGANIC FOOD:-

An organic label indicates that a products has been certified against specific organic standards. The label carries the name of the certification body and the standard with which it complies. Labeling shall convey clear and accurate information on the organic status of the product.



INDIAN NATIONAL STANDARDS FOR ORGANIC PRODUCTS

In 2001, the government of India released the National Standards for Organic Products (NSOP) under the National Programme for Organic Production (NPOP). Products sold or labeled as organic, thereafter, need to be inspected & certified by a nationally certified body or agencies.

Different countries put their organic seals on the products that conform to the standards. In India, the certified organic products can be identified by a trade mark “India Organic” logo.



CONCLUSION

Organic agriculture is a holistic way of farming, which promotes production of goods of high quality, an important aim is to conservation of the natural resources, maintain long-term fertility of the soil and biodiversity. Thus organic farming works in a harmony with nature rather than against it. This involves using techniques to achieve good crop yields without harming the natural environment or the people who live & work in it.



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