



মণিপুরৰ শিক্ষা বিভাগ (অংল)

DEPARTMENT OF EDUCATION (S)
Government of Manipur

CHAPTER- 1. CROP PRODUCTION AND MANAGEMENT

NOTES:

In order to provide food for large population- regular production, proper management and distribution is necessary.

Crops

When plants of the same kind are cultivated at one place on a large scale, it is called a crop. Examples are: wheat, rice, maize, pea, etc.

Types of wheat

In India crops can be broadly classified into two types:-

- (i) Kharif crops and
- (ii) Rabi crops.

Kharif crops are grown in rainy season from June to September. Examples are: paddy, maize, soybean, etc.

Rabi crops are grown in winter season generally from October to March. Examples are: wheat, gram, pea, etc.

Agricultural practices

Several activities undertaken by farmers in growing crops are referred to as agricultural practices. These activities are as follows:

- (i) Preparation of soil
- (ii) Sowing
- (iii) Adding manure and fertilizers
- (iv) Irrigation
- (v) Protecting from weeds
- (vi) Harvesting
- (vii) Storage

Preparation of soil

- It is the process of loosening and tilling of the soil and is known as tilling or ploughing.
- It allows the root to penetrate deep inside the soil and breathe easily.
- It helps in the growth of earthworms and microorganisms present in the soil which in turn help in turn and loosen the soil and add humus to the soil.
- It brings nutrients rich soil to the top so that plants can use these nutrients.
- It is done by using tools like plough, hoe and cultivator.

Sowing

- It is the process of placing seed in the soil to germinate and grow into plant.
- Sowing of seeds at appropriate depths and distance gives good yield.
- Good variety of seeds is sown after selection of healthy seeds.
- Sowing is done by using traditional tool and seed drill.

Adding manure and fertilisers

The substances which are added to the soil in the form of nutrients to replenish the soil with nutrients for healthy growth of plants are called manure and fertilisers.

Differences between Fertiliser and Manure:

Sl. No.	Fertilisers	Manure
1.	A fertiliser is an inorganic salt.	Manure is a natural substance obtained by the decomposition of cattle dung, human waste and plant residue.
2.	A fertiliser is prepared in factories.	Manure can be prepared in the field.
3.	A fertiliser does not provide any humus to the soil.	Manure provides a lot of humus to the soil.
4.	Fertilisers are very rich in plant nutrients like nitrogen, phosphorus and potassium.	Manure is relatively less rich in plant nutrients.

Harmful effects of excessive use of fertilisers

- Excessive use of fertilisers has made the soil less fertile.
- Fertilisers have also become a source of water pollution.

Advantages of Manure

The organic manure is considered better than fertilisers. This is because

- It enhances the water holding capacity of the soil.
- It makes the soil porous due to which exchange of gases becomes easy.
- It increases the number of friendly microbes.
- It improves the texture of the soil.
- It can be prepared in the field by the farmers.

Irrigation

It is the supply of water to crops at appropriate intervals. Some of the traditional methods of irrigation are moat (pulley-system), chain pump, *dhekli*, and *rahat* (lever system). Some of the modern methods of irrigation are **sprinkler system** and **drip system**. These modern methods of irrigation help us to use water economically.

Protection from weeds

- Undesirable plants may grow naturally with crops. These undesirable plants are called **weeds**.
- The removal of weeds is called **weeding**.
- Weeding is done during tilling of the soil, by uprooting or cutting them close to the ground using *khurpi* and using certain chemicals call **weedicides** like 2,4-D.

Harvesting

- It is cutting of crop after it is matured.
- It is done manually by sickle or by a machine called harvester.
- The process of separating the grain seeds from the chaff of the harvested crop is known as **threshing**.
- Threshing can be done with the help of a machine called “combine” which can do both harvesting and threshing.
- Small scale holdings of land can do threshing by a process called **winnowing**.

Storage

- Proper storage of crop product is necessary to protect them from pests and microbes.
- The harvested food grains are dried in the sunshine before storing in order to reduce their moisture content. This prevents the attack by insects, pests, bacteria and fungi.
- Storage of food grains can be done in jute bags or metallic bins. Large scale storage is done in silos and granaries.

Food from animal

Food is also obtained from animals for which animals are reared. When this is done on a large scale, it is called animal husbandry. It includes providing food, shelter and day to day care.



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