

Chapter 15

IMPROVEMENT IN FOOD RESOURCES

Cropping pattern:

To increase the crop yield different farmers adopt to different crop patterns, they are

Mixed cropping:

Here two or more crops seeds are combined and grown together in the same field.

Risk of total crop failure is less due to adverse climatic conditions and rainfall.

E.g., Wheat and gram, wheat and mustard, groundnut and sunflower.



Inter cropping:

1. Here two or more crops are grown together in same field but in specific pattern.
2. This pattern ensures maximum productivity of crops

3. This pattern is followed by small farmers who are completely depend upon rainfall.

E.g. **Soyabean & Maize**, finger millet & cowpea.



Crop Rotation:

1. In this method different types of crops are grown in the same land in different seasons.
2. If crop rotation is done correctly 2-3 crops can be grown in within a year.
3. In this method complete nutrients are used by different crops based on their need.



Crop protection Management:

Fields are infested by large number of weeds insects, pests and diseases if they are not controlled at Specific time it may lead to entire loss of crop.

1. Weeds:

- Unwanted Plants grown in the field.
- They take up the nutrition and reduce the growth of crop.
- Removal of weeds during early stage of crop growth is essential for food harvest.

Ex. Xanthium, Parthenium etc.

2. Pests:

Attack the plants by three ways,

- By cutting root, stem and leaf of the plant.
- By sucking call sap of Various plant parts.
- They bore into stem and fruits.

3. Diseases:

Various types of diseases are caused by bacteria, fungi and virus.

E.g., **Tobacco Mosaic Virus**, Cauliflower mosaic Virus



Control Methods:

Usage of weedicides, pesticides fungicides & Insecticides at right time can be beneficial if not done it leads to entire loss of crop.

Storage of grains:

Storage losses in agricultural produce can be very high.

Various factors responsible for the losses are,

a) Biotic factors:

Like insects, fungi, bacteria, rodents and mites

b) Abiotic factors:

Excess temperature and moisture.

Prevention and control measures:

1. Proper drying of grains in sunlight and then in shade
2. Maintaining of storage house properly.

