

**CROPPING PATTERN** : The yearly sequence and spatial arrangement of crops or of crops and fallow on a given area.

**CROPPING SYSTEM** : The cropping patterns used on a farm and their interaction with farm resources, other farm enterprises, and available technology which determine their make up.

**MULTIPLE CROPPING** : Growing two or more crops on the same field in a year.

#### **TYPES OF MULTIPLE CROPPING :**

1) **INTERCROPPING** : Growing two or more crops simultaneously on the same field in definite row pattern.

(a) **Mixed intercropping**: Growing two or more crops simultaneously with no distinct row arrangement. Also referred to as mixed cropping

(b) **Row intercropping**: Growing two or more crops simultaneously where one or more crops are planted in rows. Often simply referred to as intercropping.

(c) **Strip intercropping**: Growing two or more crops simultaneously in strips wide enough to permit independent cultivation but narrow enough for the crops to interact agronomically.

(d) **Relay intercropping**: Growing two or more crops simultaneously during the part of the life cycle of each. A second crop is planted after the first crop has reached

*its reproductive stage of growth, but, before it is ready for harvest. Often simply referred to as relay cropping.*

### ***Advantages of intercropping***

- Better use of growth resources including light, nutrients and water*
- Suppression of weeds*
- Yield stability; even if one crop fails due to unforeseen situations, another crop will yield and gives income*
- Successful intercropping gives higher equivalent yields (yield of base crop + yield of intercrop), higher cropping intensity*
- Reduced pest and disease incidences*
- one crop provide shelter and physical support to other crop.*

### ***Disadvantages of intercropping***

- Creates obstruction in the free use of machines for intercultural operations.*
- Sometimes yield decreases because of adverse competition effect.*

**2) SEQUENTIAL CROPPING :** *Growing two or more crops in sequence on the same field in a farming year. The succeeding crop is planted after the preceding crop has been harvested.*

- a) *Double, triple and quadruple cropping: Growing two, three and four crops, respectively, on the same land in a year in sequence.*
- b) *Ratoon cropping: The cultivation of crop re-growth after harvest.*

*The various terms defined above bring out essentially two underlying principles, that of growing crops simultaneously in mixture, i.e., intercropping; and of growing individual crops in sequence, i.e., sequential cropping. The cropping system for a region or farm may comprise either or both of these two principles.*