

- Intercropping of compatible plants also **encourages biodiversity** by providing a habitat for a variety of insects and soil organisms that would not be present in a single-crop environment. This in turn can help **limit outbreaks of crop pests** by increasing predator biodiversity.
- Along with **suppression of weeds** it causes **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.
- It reduces pest and disease incidences and improves soil health and agro-ecological system.
- Reducing the homogeneity of the crop increases the barriers **against biological dispersal of pest** organisms through the crop.

Mixed Cropping vs Intercropping	
Mixed Cropping	Intercropping
Aimed to minimize the risk of crop failure	Aimed to increase productivity from unit area
Seeds of different crops are mixed together before sowing	Seeds are not mixed
All the crops are sown at the same time.	Crops can be sown at the same or different time.
Crop sowing is random.	Different crops are grouped in different rows or columns.
Pest control is relatively difficult.	Pest control is relatively easier.
Equal emphasis is given to all the crops.	More emphasis is given to main crops.
Same fertilizer and pesticide is applied to all crops.	Specific fertilizer and pesticide is applied to each crops.

C. Sequence Cropping or Sequential Cropping or Crop Rotation:

- It can be defined as growing of two or more **crops in a sequence on same piece** of land in a farming year. The succeeding crop is planted after the preceding crop has been harvested.
- Crop variation is done **with respect only to time**. There is **no intercrop competition**. Its various types are:
 - **Double Cropping:** Growing two crops on the same land in a year in sequence (across time). Ex. rice → cotton
 - **Triple Cropping:** Growing three on the same land in a year in sequence. Ex. Triple cropping: rice → rice → pulses
 - **Quadruple:** Growing four crops on the same land in a year in sequence. Ex. tomato → ridge gourd → amaranthus greens → baby corn.

(NOTE: The various terms defined above bring out essentially two underlying principles 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).

D. Other Types of Multiple Cropping

Alley cropping: It is planting rows of trees at wide spacing with a companion crop grown in the alleyways between the rows.

- It diversifies the sources of farm income, improves crop production and provide protection and conservation benefits to crops.
- Common examples of alley cropping plantings include wheat, corn, soybeans or hay planted in between rows of black walnut or pecan (a type of walnut) trees.

Relay Cropping: Growing two or more crops simultaneously during the part of the life cycle of each.