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Cropping Pattern in India

Introduction- Multiplicity of cropping systems has been one of main features of Indian agriculture and it is attributed to rain fed agriculture and prevailing socio-economic situations of farming community. Cropping systems of a region are decided by and large, by a number of soils and climatic parameters which determine overall agro-ecological setting for nourishment and appropriateness of a crop or set of crops for cultivation.

Nevertheless, at farmers' level, potential productivity and monetary benefits act as guiding principles while opting for a particular crop/cropping system. These decisions with respect to choice of crops and cropping systems are further narrowed down under influence of several other forces related to infrastructure facilities, socio-economic factors and technological developments, all operating interactively at micro-level.



Cropping System in India

The Indian agriculture is decided by the soil types and climatic parameters which determine overall agro-ecological setting for nourishment and appropriateness of a crop or set of crops for cultivation.

There are three distinct crop seasons in India, namely Kharif, Rabi and Zaid.

- The Kharif season started with Southwest Monsoon under which the cultivation of tropical crops such as rice, cotton, jute, jowar, bajra and tur are cultivated.
- The Rabi season starts with the onset of winter in October-November and ends in March-April.
- Zaid is a short duration summer cropping season beginning after harvesting of Rabi crops.

There are four cropping systems in India which is discussed below:

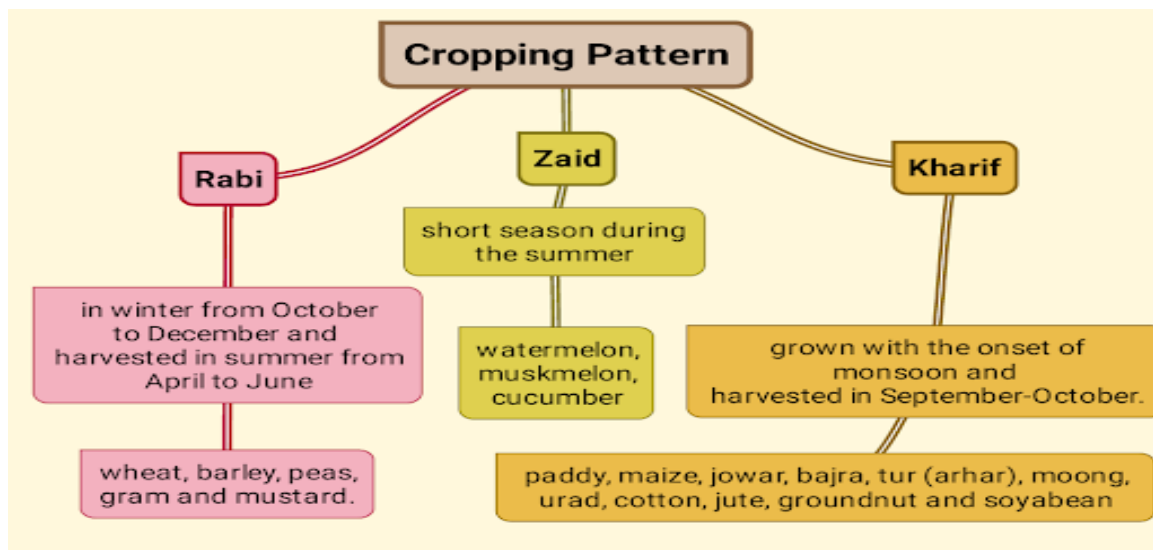
1. Rainy Season Cropping Systems: In this system of cropping, Rice, Sorghum, Pearl Millet (Bajra), Maize, Groundnut and Cotton are grown.
2. Winter Cropping Systems: In this system, wheat, barley and oats, sorghum and chickpea are grown.
3. Plantation and other commercial crops: Sugarcane, Tobacco, Potato, Jute, Tea, Coffee, Coconut, Rubber, and Spices are important crops are grown in this system.
4. Mixed Cropping: In this system, pulses and some oilseeds are grown with maize, sorghum and pearl millet.

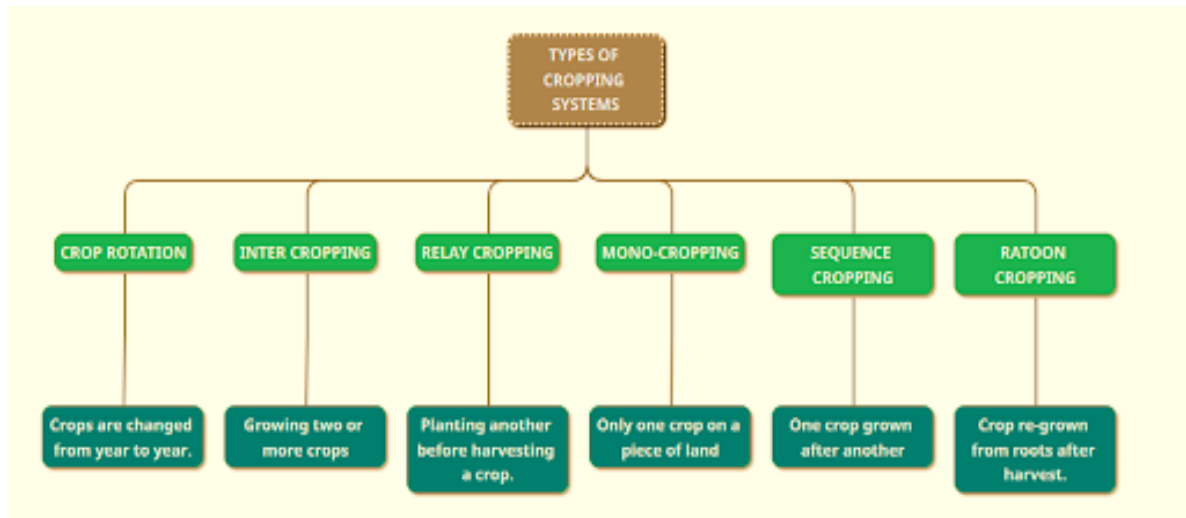
Types of Cropping System in India

There are three types of cropping system followed in India which is below:

1. Mono-Cropping or Monoculture: In this system, only one crop is grown on farm land year after year.
2. Multiple-Cropping: In this system, farmers grow two or more crops on farm land in one calendar year with intensive input management practices. It includes inter-cropping, mixed-cropping and sequence cropping.
3. Inter-cropping: In this system, farmers grow two or more crops simultaneously on the same field in one calendar year.

The Indian agricultural practices are still lacking by intensive planning because India has diversified agro-climatic zone, which is unfortunately not giving sufficient production. If our farming system relied on modern cropping pattern and cropping system, then we have a predominance of food grain crops, our farming will also inclined towards commercial crops and most importantly it will noticeable increase in the production of individual crops.





Factors determining cropping pattern in India

1. Physical Factors:

Cropping pattern of any particular region of the country is depending on its **soil content, weather, climate, rainfall etc.** As for example, in a wet area having chances of heavy rainfall and water-logging, people will like to cultivate rice whereas in a dry area, farmer can manage to cultivate coarse cereals like bajra, jowar etc.

2. Technical Factors:

- The cropping pattern also depend upon the technical factors such as **nature and capacity of irrigation facilities available in a region, availability of improved seeds, chemical fertiliser etc.** With the development of irrigation facilities, the entire method of cultivation being followed from the traditional period is bound to change.
- With this, **new and better crop rotation system** can be followed and **new and superior crops also can be grown.**
- In India, due to the **extension of irrigation facilities**, the cultivation of sugarcane, tobacco, oilseeds etc. have increased substantially.
- Moreover, with the availability of irrigation water, even **double or triple cropping** is also successfully done. Again, in the absence of irrigation facilities in some other parts of the country, the concept of “dry land farming” is also gaining its importance in recent year.

3. **Economic Factors:**

Economic factors are playing the major role in determining the cropping pattern in a country like India. The following are some of the economic factors influencing the cropping pattern of our country:

Price and income aspect:

- Movement of **price of agricultural products is having some correlation with the changes in cropping pattern**. A remunerative and steady price of a particular crop will provide a better incentive to the producer to produce that crop and un-remunerative price will induce the farmer to change the cropping pattern.
- In India, **fixed procurement price of wheat and rice** and other controls imposed by the Government induced the **farmers to shift to cash crops** like sugarcane. Again, the **un-remunerative prices of jute** prevailing in Assam and other adjoining states also led to **shift in the production of food crops**.
- Moreover, **income maximisation aspect** is also playing an important role in influencing the cropping pattern in the country. Relative profitability per acre is also having considerable influence on the cropping pattern of the country.

Farm Size:

- A good relationship also exists between farm size and cropping pattern. In a **small farm**, farmers are very much **interested to produce food grains for household consumption**. After meeting their own food requirements small farmers may go for cash crops in order to maximise their money income. On the other hand, in a **big farm farmers like to follow that cropping pattern which maximise their income**.

Tenure:

- Land tenure system prevailing in the country also influences the cropping pattern. In a system of **crop sharing, it is the landlord who finalizes the cropping pattern** guided by profit maximising principle.

Availability affirm inputs:

- Cropping pattern is also depending upon the **farm inputs available**, seeds, fertiliser, controlled and assured water supply through irrigation etc. and among these irrigation is the most important.

Government Action:

- Cropping pattern may also be influenced by government action undertaken in the form of **administrative and legislative measure**. Supply of inputs by the government, **intensive scheme** for various crops, various government campaign like grow more food or any legislative provision by the government, **transportation and marketing provision** also help to finalize the cropping pattern in the country.