

# CROPPING PATTERNS AND CROPPING SYSTEMS IN INDIA AND ITS DIFFERENCE: A REVIEW ARTICLE

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## Abstract

The present study is indicated the overview about cropping system and cropping patterns in India. Farmers made their crop selections based on physical, social, and economic considerations. On occasion, they rotate a specific crop combination over a period of time while cultivating a variety of crops on their farms. But it is noteworthy that the finest farming techniques always adhere to specific cropping patterns and cropping systems to increase productivity and preserve soil fertility.

**Keywords:** Cropping, fertilizer.

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## Introduction

### Cropping pattern in India

The concept of cropping pattern is dynamic since it shifts throughout both place and time. It can be described as the percentage of land that is currently planted with different crops. To put it another way, it is a yearly pattern and geographical configuration of sowing and fallow on a specific region. In India all problems

related to climate and technology all are affected on crops.

The primary crops can be used as the basis crop and all other potential alternative crops can be used to depict the cropping patterns in India. In order to classify crops, it is crucial to recognise them and the agro-climatic conditions they are displaying. For instance, wheat, barley, and oats are grouped together



**Fig 1. Cropping System and cropping patterns in India**

The soil types and climatic factors that control the entire agro-ecological setting for

sustenance and the suitability of a crop or group of crops for growing in India

agriculture. In India, there are three distinct agricultural seasons: Kharif, Rabi, and Zaid. The Southwest Monsoon, which is when tropical crops including rice, cotton, jute, jowar, bajra, and tur are grown, began the Kharif season. The Rabi season lasts from October through November, when winter officially begins, until March through April. After the harvest of the crops for Rabi, the short-lived summer farming season known as Zaid begins. There are four types of cropping systems which is discussed below:

### 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 in the land.

**3. Plantation and other commercial crops:** Sugarcane, Tobacco, Potato, Jute, Tea, Coffee, Coconut, Rubber, Spices crops are grown in this system.

**4. Mixed Cropping:** In this system, pulses and some others like oil seeds 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.

**2. Multiple-Cropping:** In this approach, farmers use intensive input management techniques to cultivate two or more crops on farmland in a single calendar year. Intercropping, mixed-cropping, and sequence cropping are all included.

**3. Inter-cropping:** In this system, farmers grow two or more crops at the same time on the same field in one calendar year.

Since India has a diverse agro-climatic zone, which regrettably does not produce

enough, the agricultural practises are still in need of careful planning. Our farming would lean more towards commercial crops, have a predominance of food grain crops, and most crucially, there would be a discernible rise in the production of specific crops if our farming system was based on contemporary cropping patterns and cropping systems.

Difference between cropping pattern and cropping system

Cropping pattern	Cropping system
Crop rotation practiced by a majority of farmers in a given area or locality.	Cropping pattern and its management to derive benefits from a given resource base under specific environmental conditions.
Type and management of crops in time and space.	The cropping patterns used on a farm and their interaction with farm resources, other farm enterprises and available technology which determine their make up.
Yearly sequence and spatial arrangement of crops or crops and fallow on a given area. The proportion of area under various crops at a point of time in a unit area	Pattern of crops taken up for a given piece of land, or order in which crops are cultivated on a piece of land over a fixed period, associated with soil, management practices such as tillage manuring and irrigation

### Factor affecting cropping pattern

The cropping patterns are affected by

- Agrarian policy changes, the availability of agricultural inputs, and technological advancements.
- As a result, cropping patterns help to increase the soil's fertility, which in turn boosts crop yield.
- It guarantees crop protection and fertiliser availability for succeeding crops.

### DISCUSSION

The purpose of this study was to examine how farmers choose the crops for cultivation based on physical, social, and economic variables when describing cropping patterns and cropping systems. On occasion, they rotate a specific crop combination over a period of time while cultivating a variety of crops on their farms. But it is noteworthy that the finest farming techniques always adhere to specific cropping patterns and cropping systems to increase productivity and preserve soil fertility

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