

A Review Study on Various types of Farming & Crops in India

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ABSTRACT: *Agriculture is the primary source of the bulk of the food we consume. In addition to food grains, it produces raw materials for a number of businesses. India is a major agricultural superpower. Agriculture employs two-thirds of the people of the nation. In agricultural and industrial production, India's geographical location is unique since it provides numerous beneficial conditions. Plains, fertile soil, a long growing season, and a wide range of weather conditions are all available, among other things. Cropping trends and agricultural methods in the United States include a variety of food and fiber crops, as well as vegetables, fruits, spices, and other aromatic plants. Agriculture is one of India's and the rest of the world's most important sectors. Farmers are analogous to farmers, and agriculture would be incomplete without them. A single farm or a group of farms with comparable agricultural features might be considered an agricultural system. Since the beginning of agriculture, many different types of production have been employed. The food need will be satisfied in the future by utilizing new technologies as well as diverse farming methods. The current study looks at the many types of agriculture in India. In the future, diverse farming in agriculture field will significantly increase the soil quality as well as crop quality.*

KEYWORDS: *Agriculture, Cultivation, Crops, Harvesting, Irrigation.*

1. INTRODUCTION

India is a major agriculture powerhouse. Agriculture integrates several of the people of the nation. Farming is one of the most important activities since it generates the bulk of the food we consume. In addition to food grains, it produces raw materials for a number of businesses. Agriculture is a centuries-old economic activity in our country. Due to effect on the physical environment, technological knowledge, and socio-cultural attitudes, cultivation systems have developed significantly throughout time[1]. Farming is classified as either subsistence or commercial. Some of the most significant crops cultivated in the nation include many types of food and vegetable crop, and fiber crops, fruits, spices and sauces, and so on.

Agriculture, often known as farming, may be viewed as a system. Seeds, fertilizers, machines, and labor are all significant inputs. Ploughing, planting, irrigation, weeding, and harvesting are some of the tasks involved. Crops, wool, dairy, and poultry products are among the system's outputs. Farming is done in a variety of methods all around the world. Farming may be divided into two categories based on geographical factors, demand for produce, labor, and technological level. Subsistence farming and commercial farming are the two types of farming. To fulfil the demands of an ever-increasing population, a wide range of crops are cultivated[2].

Agricultural production and management are concerned with how farmers use land, water, farm inputs, labor, and managerial skills to create agricultural crops. This crop is grown in some parts of the country during March to June. Crops cultivated during the Zaid season are grown in various regions of the nation from March through June. In India there are various types of farming which are: subsistence farming, Plantation farming, mixed farming, commercial farming, and shifting cultivation (Figure 1). Agriculture covers mostly part of the India and different region adopt different technique for farming. All the things like methods of farming and their comparison are explained in this study[3]. It is necessary to understand all the things because it helps farmer to increase the food production and their income.

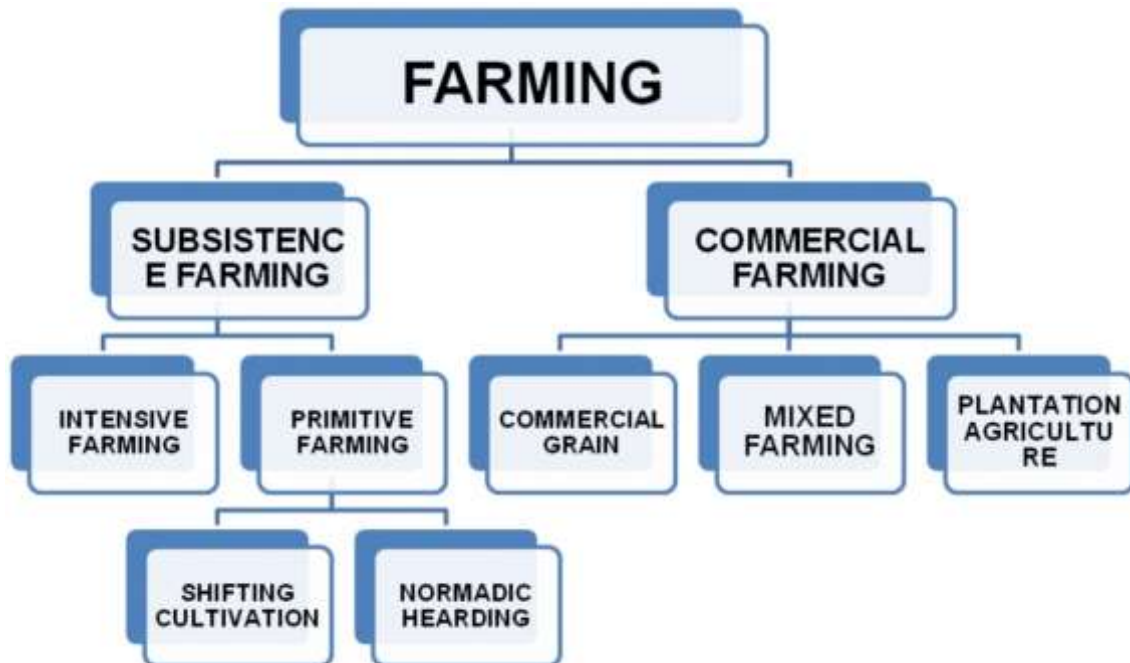


Figure 1: Illustrate the Various Types of Farming Methods Which is used in India.

1.1 Types of Farming:

1.1.1 Subsistence Farming:

In India, the vast majority of farmers use this method. Farming for a living this entails producing food for one's own consumption. Landholdings are tiny and dispersed in this form of Farming. This sort of farming is done to satisfy the requirements of the local community[4]. Family of a farmer Low degrees of technology have been the norm in the past and domestic labor are employed to manufacture on a modest scale output. There are several types of subsistence farming such as intense and basic subsistence farming (Figure 2).

Intense subsistence agriculture requires greater effort, climatic conditions with a considerable number of days, and little equipment to farm a small piece of land. A broad diversity of plants may be grown thanks to the combination of sunshine and good soils. Rice is the main component. Other oilseeds include wheat, maize, legumes, and other crops. Moving crops and nomadic husbandry are examples of primitive livelihoods.



Figure 2: The Above Figure Shows the Method of Farming i.e. Subsistence Farming.

1.1.2 Commercial Farming

Commercial agriculture is a kind of farming using huge volumes of modern inputs to produce higher yield seeds, chemicals, insecticides and pesticides. A plant is a kind of commercial farming in which one crop is planted throughout a broad area (Figure 3). Plantations use migrant labor and capital-intensive inputs to cover large expanses of land. Advertising agriculture is distinguished by the use of huge amounts of modern inputs to boost output. Commercial agriculture is mostly used to cultivate crops that are in high demand, as well as those that must also be exported or used as raw materials in industries[5]. Furthermore, the extent to which agricultural marketing is performed differs by area.



Figure 3: Illustrate the Commercial Farming Methods of Agriculture i.e. Only one Crop is Grown Across a Big Area.

1.1.3 Subsistence vs. Commercial Agriculture: Key Differences:

- Subsistence agriculture is a labor-intensive approach due to the large amount of labor required. Commercial agriculture, on the other hand, necessitates large financial investments, which is why it is a capitalistic method.
- Only a small region of the world practices subsistence agriculture. Commercial agriculture, on the other hand, needs a huge area.
- While subsistence agriculture is heavily reliant on the monsoon and primitive irrigation methods, commercial agriculture uses sophisticated irrigation techniques such as surface irrigation, drip irrigation, and watering.
- Traditional techniques of cultivation are utilized in subsistence agriculture, whereas machinery are used in commercial agriculture to cultivate the soil.
- Food grains such as wheat and rice, as well as fruits and vegetables, are cultivated in subsistence agriculture. Cash crops and grains, on the other hand, are mostly cultivated in commercial agriculture.
- Subsistence agriculture is an agricultural method in which the farmer and his family cultivate as many crops as possible to fulfil all or almost all of their requirements, with little or no excess goods to sell.

1.1.4 Plantation Farming

Plantation farming is a type of commercial agriculture in which crops are produced for profit. Because crops are cultivated for profit, huge areas of land are required to make this form of farming profitable. In tropical environments, this form of agriculture is most frequent. It takes a lot of work and money to farm (Figure 4). Some of the most popular cultivates on plants include tea, coffee, sugar cane, cassava, rubber, bananas, and cotton. In tropical locations there are the largest plantations in the world. Rubber is cultivated in Malaysia, Brazilian coffee, and Indian and Sri Lanka tea[6].



Figure 4: The Above Figure Shows the Plantation Farming in which Crops are Produced for Profit.

1.1.5 Shifting cultivation

Shifting is an agricultural practice in which a person uses a piece of land for a short while before giving up or changing its use. This procedure generally involves clearing a lot followed by several years of timber

extraction or agriculture until soil is nutrient poor (Figure 5). The property was then abandoned due to a reduction in fertilizer. Farmers then migrate to another piece of land to resume the process[7].



Figure 5: Illustrate the Method of Shifting Cultivation in which a Person Uses a Piece of Land Shortly Before Changing its Use.

1.1.6 Mixed farming

Grows and animals are known as mixed agriculture on the same site. For instance, mixed agriculture refers to maize and beans growing, while cattle and sheep flourishing. The goal is to supplement land and labor demands throughout the year by increasing income from various sources (Figure 6). This form of farming is mostly used in Odisha and Kerala in India.



Figure 6: The Above Figure Shows the Mixed Farming in which the Growing Crops and Raising Animals on the Same Land.

1.1.7 Mixed farming's characteristics:

- On the same farm, crops are cultivated and animals are raised.
- Animal grazing is reserved for a portion of the land. In the case of a farm choosing to rear its animals in specifically constructed facilities, part of a farm will be allocated for food or feed.
- Farms are of a reasonable dimension.
- Fertilizer of animal excrement is used in the soil. Farmer may receive manure, which he can use on the farm to boost soil fertility, so that farmer can increase his harvest and revenue. Animal rearing.

1.2 Types of crops

Some of the main crops cultivated in the nation are various kinds of fibre and food crops, vegetables and fruit, spices and sauces, and so on. India has the following three growing seasons (Figure 7):



Figure 7: The Above Figure Shows the Classification of Crops in India.

1.2.1 Rabi Crops

Rabi is cultivated from April to June in the winter and harvested in the summer. The most important rabi plants are wheat, barley, peas, gramme and mustard. Although farmed across India these crops are particularly crucial for wheat and other rabi crops in north and northwestern India such as Punjab, Himachal Pradesh, Haryana, Jammu & Kashmir, Uttar Pradesh, and Uttarakhand[7]. Due to western temperate cyclones, the availability of rainfall throughout the winter months helps these crops succeed. The crop is irrigated or cultivated using rainfall that has percolated into the ground. In comparison to Kharif crops, it also demands cold weather and less water[8].

1.2.2 Kharif crops

As the Monsoon season approaches, kharif plants are sown in different areas of the nation and harvested in September and October. Urad, jowar, bajra, Arhar, Paddy, moong, maize, jute, cotton, groundnut, as well as soybean are important crops cultivated during this season. Kharif crops are reliant on a big amount of rainwater as well as the timing of it[9].

1.2.3 Zaid crops

In the summer, a short interval between rabi and kharif is called as the Zaid season. Vegetables, muskmelon, Watermelon, cucumber, and fodder crops are among the crops grown during 'zaid'. It takes approximately a year for sugarcane to mature. Warm, dry weather is required during the main growing phase of Zaid crops, as well as extended day duration for blooming[10].

1.2.4 Major Crops:

In India each and all types of crops are growing which are explained in Table 1.

Table 1: The Below Table Shows the Main Crops with Their Meaning as Well as Example of Main Crops.

SL. NO.	Types of Crops	Meaning	Major Crops
1	Commercial Crops	Crops that are cultivated in raw or semi-processed form for sale	Cotton, Oilseeds, sugarcane, as well as Tobacco.
2	Food Grains	Plants cultivated on plantations on big estates.	Rice, Oil seeds, Wheat, etc.
3	Horticulture	Agriculture section in which vegetables and fruit are cultivated.	Vegetable as well as fruit.
4	Plantation Crops	Cultivated crops that are planted in huge countries.	Rubber, Coffee, Tea, etc.

DISCUSSION

Agriculture is one of the most significant fields in India and throughout the world. We can't fathom life without agriculture. It is consequently necessary to understand the significance of various forms of agriculture in India. Agriculture may be equated to farmers; farming would be incomplete without them. According to the report, Indian farmers use diverse agricultural practices depending on the type of the land, soil, and agro-climate. It is very important to adopt different types of farming methods and technology for the increasing food production, improve the quality of food as well as also increase the income of the farmer and economy of the country. And there are different forms of farming, such as subsistence farming, plantation farming, mixed farming, commercial farming, and shifting cultivation, among others. Each style of farming and crop has its own set of advantages and disadvantages. To enhance food output, food quality, and farmer revenue, it is important to understand agricultural practices and the variety of crops available.

CONCLUSION

The farming business is essential to the economy of the region. Like all other economic sectors, it undergoes a transition into a market economy with major changes in the frameworks of social, legal, structural, production and supply structures. In India there are different types of agriculture farming as well as crop season. When such regions are lost to agriculture, the capacity to grow crops that require that specific mix of variables is gone as well. Agriculture is a vital activity for any country. Crops, vegetables, fruits, and flowers are all part of the process. Agriculture is the sole source of income for any country. Farming is influenced by factors such as geography, product demand, labor, and technological advancements. Agriculture is a vital activity for any country. Crops, vegetables, fruits, upon the season, climate condition, location and many other factors. All the types of crops having advantages and also having limitation. Agriculture is the sole source of income for any country. Farming is influenced by factors such as geography, product demand, labor, and technological advancements.

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