

1. SUBSISTENCE FARMING

Majority of farmers in India practise subsistence farming. It is characterised by small and scattered landholdings and use of primitive tools, like hoe and digging sticks by family members. As the farmers are poor, they do not use fertilizers and high yielding variety of seeds in their fields. Facilities like electricity and irrigation are generally not available to them. These result in low productivity. Most of the food production is consumed by the farmers and their families. Where facilities like irrigation and electricity are available, farming has improved. Subsistence agriculture has given way to commercial agriculture in many places.

The main features of Subsistence Farming are:

- (i) Landholdings are small and scattered.
- (ii) The farmers use traditional methods of agriculture.
- (iii) It depends upon monsoon, natural fertility of the soil and environmental conditions.
- (iv) The output is not very high and it is consumed within the family.
- (v) There is a dominance of food crops and there is never surplus for the market.

2. COMMERCIAL FARMING

This system of agriculture involves cultivation of crops for sale in the market. These crops are called

cash crops. They include sugarcane, tobacco, fibre crops and oilseeds. This type of agriculture involves the use of High Yielding Variety (HYV) seeds, chemical fertilizers, insecticides and pesticides to obtain higher productivity. The degree of commercialisation of agriculture varies in different parts of the country. For example, rice is a commercial crop in Punjab and Haryana, but it is a subsistence crop in Odisha.

Commercial farming has shown good results in Punjab, Haryana, Western UP, Gujarat and Andhra Pradesh. In most other States there are small landholdings. Therefore, commercial farming cannot be popularised throughout the country. However, the Government is now trying to change the situation through consolidation of such landholdings.

It is usually practised in areas where plenty of land is available and market economy is well developed.

The main features of Commercial Farming are:

- (i) Crops are grown mainly for sale.
- (ii) Large farms are required.
- (iii) Mechanised farming is practised.
- (iv) It is prevalent in areas where farms are large and market economy is well developed.

3. SHIFTING AGRICULTURE

Shifting Agriculture, also known as '*slash and burn method*', is a primitive agricultural practice in which a patch of forest is cleared, trees are



Commercial Farming



Shifting Agriculture

felled and stumps are set on fire. The cleared patch is then cultivated for a few years until the fertility of the soil is reduced. Then the farmer moves to a fresh piece of land and the same process is repeated. This type of farming is dependent upon monsoon, natural fertility of the soil and suitability of other environmental conditions.

The main features of Shifting Agriculture are:

- (i) A patch of forest land is cleared by cutting and burning of the stumps. The ash is spread on the field as manure.
- (ii) After the land is cleared of trees, seeds are sown in the ground. Neither ploughing of the soil nor any other agricultural practices are followed in this type of cultivation.
- (iii) After 2-3 years, when soil fertility is lost, the fields are abandoned.
- (iv) Again another patch of land is cleared and the same process is repeated.
- (v) Shifting cultivation is a great menace to environment. It accelerates soil erosion and causes floods and silting in the lower reaches of the riverine flood plains.

Dry paddy, buckwheat, maize, millets and vegetables are the crops commonly grown in this type of farming. The yield per hectare is low as the farmers do not use fertilizers. Yams and tapioca are also cultivated.

This type of cultivation is known by different names in different regions of India like *Jhum* in Assam, *Ponam* in Kerala, *Podu* in Andhra Pradesh, *Koman* or *Bringg* in Odisha, *Khil* in the Himalayan region, *Kuruwa* in Jharkhand and *Bewar*, *Masha*, *Penda* and *Hera* in various parts of Madhya Pradesh. As far as possible

government has tried to discourage this type of cultivation due to its wasteful nature and adverse effects on the environment.

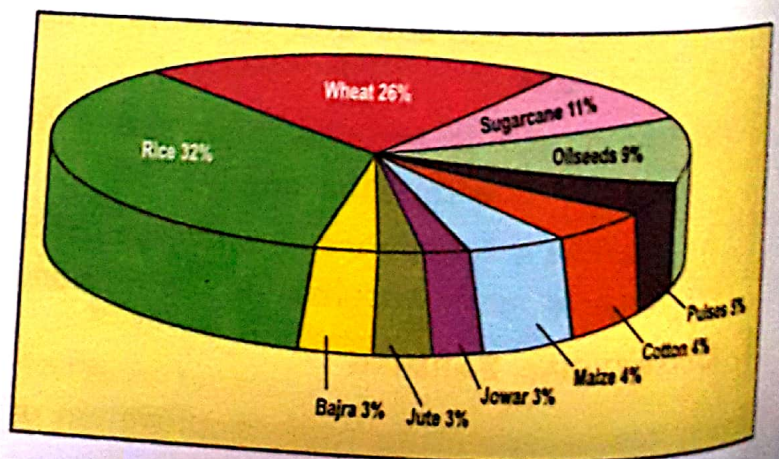
Intercropping is used in many areas as an alternative to shifting cultivation. Intercropping refers to the practice of growing two or more crops next to each other at the same time in a way that they do not compete with each other for space, nutrients, water and sunlight. For example, intercropping involves planting one crop with deep roots along with another having shallow roots.

4. INTENSIVE FARMING

This is the system of farming under which small farms are cultivated intensively using large inputs of manual labour, manures and fertilizers. Since it is a labour intensive system, it is practised in those areas where the density of population is high. Emphasis is laid on increasing the per hectare yield by using good quality seeds, rich manure and fertilizers and water supply through irrigation. Usually more than one crop is cultivated on the same field and the land is under one crop or the other throughout the year. This type of agriculture is practised in the irrigated areas of the plains of northern India and the coastal areas of South India. The main crops grown are rice and wheat.

The main features of Intensive Farming are:

- (i) Small farms are intensively cultivated.
- (ii) More than one crop is cultivated on the same field.
- (iii) To increase the output, rich manure and fertilizers, good quality seeds and irrigation facilities are used.
- (iv) It is a labour intensive system.



Crops Grown in India

5. EXTENSIVE FARMING

This type of farming is practised on farms of large size with the help of machines and the input of labour per unit area is low. Crop specialisation is one of the major characteristics of this type of farming, i.e., the farmer specialises in a couple of major commercial crops. The emphasis is laid on increased production. Since the productivity is based on natural fertility of soil, climate and terrain of the area, it is practised on large farms to achieve higher yields. The total crop production is high due to large land holding but low in terms of per unit production.

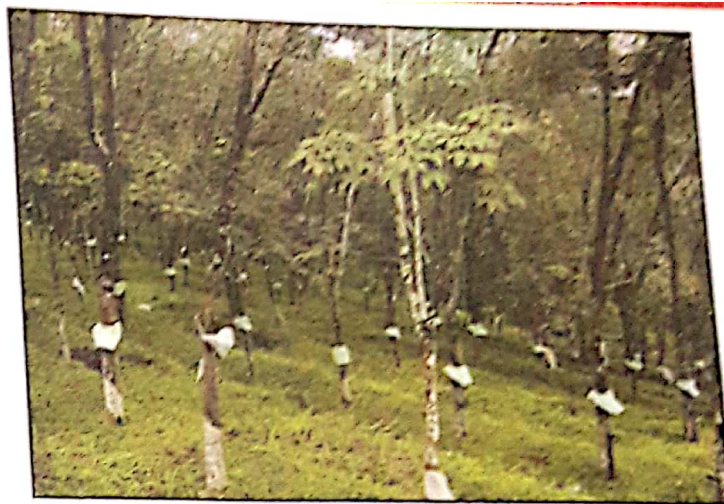
The main crops grown are rice, wheat, sugarcane, etc. This type of farming is almost absent in India except some rich farmers of Punjab, Haryana and Uttar Pradesh.

The main features of Extensive Farming are:

- (i) Farms are huge in size.
- (ii) Machines are used.
- (iii) Farmer specialises in the production of one or two major commercial crops.
- (iv) It is highly capital intensive.
- (v) Crop yield is high, with large surplus for sale.
- (vi) Due to less use of chemical fertilizers and pesticides, it is an environment friendly method.

6. PLANTATION FARMING

Plantations are large tracts of land or estates used for cultivation of a single agricultural crop like tea, coffee, rubber or spices. A plantation is usually a monoculture over a large area and does not include naturally occurring plants. Such type of farming is labour intensive with huge capital investment, involving modern and scientific techniques. Plantations were introduced in India by the Europeans. Many planters in India still lack technical knowledge, managerial ability, quality control and even transport facilities. The plantation crops usually cater to the export market and earn foreign exchange. Plantation farming is carried on in some parts of India, like the hills of South India and North-East India where tea, coffee and rubber are cultivated in states of Kerala, Karnataka, parts of North Bengal and Assam lowlands.



Plantation Farming

The main features of Plantation Farming are:

- (i) One crop is cultivated using modern scientific methods.
- (ii) Chemical fertilizers, herbicides, and insecticides are used extensively.
- (iii) It is undertaken on a large tract of land, using modern machinery.
- (iv) Commercial crops are grown for sale.
- (v) In order to meet the expenses, capital investment is made.
- (vi) Latest technology and modern methods of agriculture are used.

7. MIXED FARMING

Cultivation of crops and raising of animals simultaneously is called *mixed farming*. Subsidiary occupations like fruit and vegetable gardening or poultry-farming may also be practised. Two or more crops are grown together. In such cases, a number of crops, with varying maturing periods, are sown at the same time. The crop maturing early is generally harvested before the growth of the long maturing crop. Mixed farming ensures a steady income for the farmers because if the agriculture fails due to adverse climate or any other reason, they can look back to the other means like cattle raising for income.

The main features of Mixed Farming are:

- (i) Crops and animals are raised simultaneously.
- (ii) Two or more crops are grown together.
- (iii) Rotation of crops is practised.
- (iv) It ensures steady income to the farmers.