

## CHAPTER 3 PRIMARY ACTIVITIES

### INTRODUCTION

Economic activities, which generate income, are categorized into Primary, Secondary, Tertiary, and Quaternary activities. Primary activities directly utilize natural resources and include hunting, gathering, pastoralism, fishing, forestry, agriculture, and mining. For example, coastal and plain region inhabitants often engage in fishing and agriculture due to their accessibility. People engaged in primary activities are called *red-collar* workers due to the outdoor nature of their work. These activities are essential for human survival and development, with traditional practices like subsistence agriculture evolving into modern, mechanized methods. This chapter explores the concept of primary activities, their historical transformation, and their evolving role across different regions.

#### PRIMARY ACTIVITIES

- Hunting
- Gathering
- Pastoralism
- Agriculture
- Mining

### TOPICS COVERED

1. Primary activities - concept,
2. Changing trends; gathering, pastoral, mining, subsistence agriculture, modern agriculture;
3. People engaged in agriculture and allied activities - some examples from selected countries.

#### Agriculture

- Subsistence Agriculture
- Primitive Subsistence Agriculture
- Intensive Subsistence Agriculture
- Plantation Agriculture
- Extensive Commercial Grain Cultivation
- Mixed Farming
- Dairy Farming
- Mediterranean Agriculture
- Viticulture
- Market Gardening and Horticulture
- Collective Farming
- Cooperative Farming

#### Mining

- Factors
- Underground or Shaft Mining Method
- Opencast Mining Method

#### Pastoralism

- Nomadic Herding
- Commercial Livestock Rearing

### HUNTING AND GATHERING

The earliest human beings depended on their immediate environment for their sustenance. They subsisted on: Animals hunting, Edible items, Fishing and Forestry. The earliest human beings depended on their immediate environment for their sustenance.

1. Animals which they hunted
2. The edible plants which they gathered from forests in the vicinity.



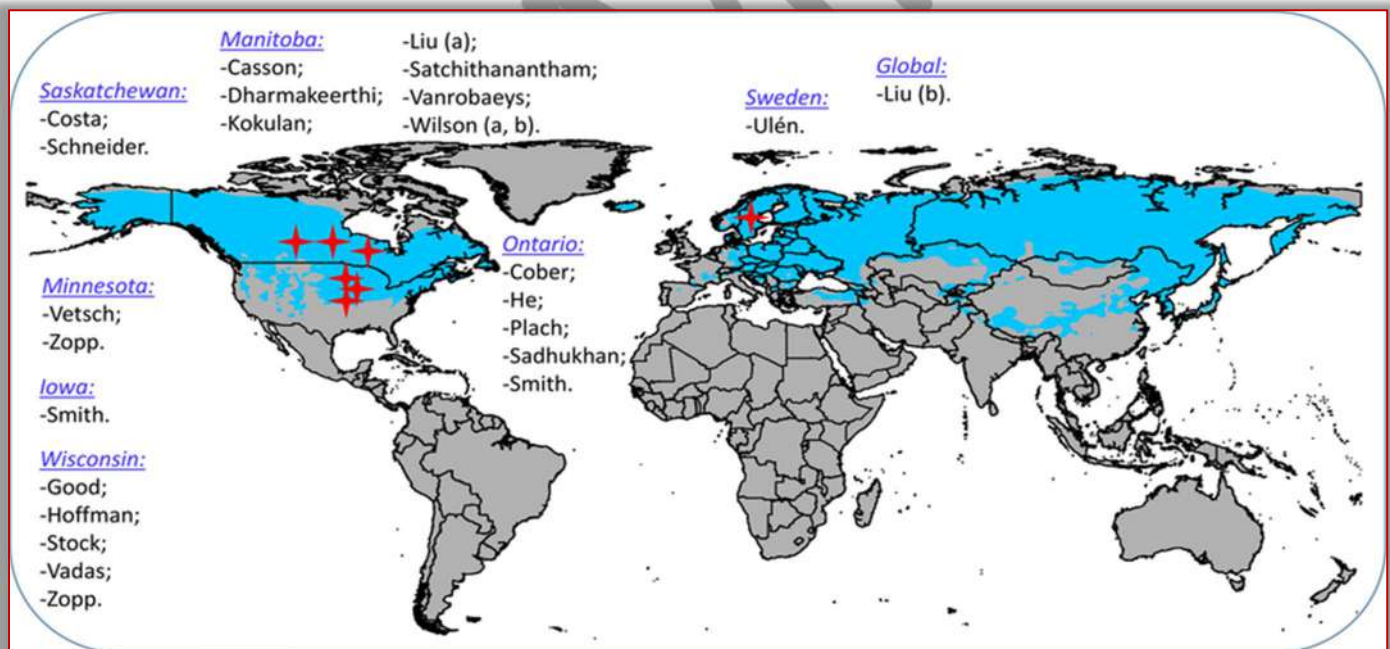
Primitive societies depended on wild animals. People located in adverse areas or geographically challenged spaces like very cold spaces extremely hot climates survived on hunting and then food gathering. Early tools made of stones, twigs or arrows so the number of animals killed was limited. Gathering and hunting are the oldest economic activity known. These are carried out at different levels with different orientations.

## GEOGRAPHICAL LOCATIONS FOR GATHERING PRACTICES

1. High latitude zones which include northern Canada, northern Eurasia and southern Chile.
2. Low latitude zones such as the Amazon Basin, Tropical Africa, Northern fringe of Australia and the interior parts of Southeast Asia.

## PASTORALISM: NOMADIC HERDING OR PASTORAL NOMADISM

Hunting, being unsustainable in the long term, likely led humans to consider animal domestication. However, keeping animals without adequate resources seemed burdensome. Over time, pastoralism emerged, providing a steady supply of resources and adding significant value to human civilization by fostering stability and growth. **Nomadic herding, or pastoral nomadism, is a traditional/primitive subsistence activity where herders rely on their livestock/animals for food, clothing, shelter, tools, and transport.** Nomadic herders move with their livestock, seeking quality pastures and water, and often follow traditional routes within specific territories. In earlier times, this lifestyle was a predominant activity, along with shifting agriculture, forming a vital part of subsistence practices.



## REGIONS INCLUDING THE PASTORAL ACTIVITY

1. The Atlantic shores of North Africa.
2. The Arabian Peninsula.
3. Mongolia and Central China.
4. Eurasia.
5. Southern hemisphere in South-west Africa and on the island of Madagascar.

**SEGMENTS OF PASTORAL NOMADISM:** Pastoral nomadism is associated with three main segments:

1. **Nomadic Herding** - Nomadic herding or pastoral nomadism is a primitive subsistence activity, in which the herders rely on animals for food, clothing, shelter, tools and transport. The core region extends from the Atlantic shores of North Africa to Arabian Peninsula into Mongolia and Central China.
2. **Commercial Livestock Rearing** - Commercial Livestock Rearing is more organised and capital intensive. Commercial livestock ranching is essentially associated with western cultures and is practised on permanent ranches. **New Zealand, Australia, Argentina, Uruguay and United States of America are important countries where commercial livestock rearing is practised.**
3. **Ranching of Animal** - Rearing of animals in ranching is organised on a scientific basis. The main emphasis is on breeding genetic improvement, disease control and health care of the animals.



## AGRICULTURE



**Agriculture is the practice of cultivating soil, growing crops, and raising livestock for human use and consumption.** It encompasses a range of activities, including planting, harvesting, animal husbandry, and the production of food, fibre, and other resources essential to human society. Agriculture has been

fundamental to the development of civilizations, providing sustenance, economic stability, and the foundation for trade and industry. Agriculture is practised under multiple combinations of physical and socio-economic conditions, which gives rise to different types of agricultural systems.

**SUBSISTENCE AGRICULTURE:** Subsistence agriculture is one in which the farming areas consume all, or nearly so, of the products locally grown. It can be grouped in two categories -

1. Primitive Subsistence Agriculture
2. Intensive Subsistence Agriculture

**PRIMITIVE SUBSISTENCE AGRICULTURE:** Primitive subsistence agriculture is a traditional farming practice in which small-scale farmers produce crops primarily for their own consumption, using

simple tools and techniques. It relies heavily on natural resources, such as rainfall and local soil fertility, and often involves shifting cultivation or slash-and-burn methods. This type of agriculture is labour-intensive, has low yields, and is typically practiced in remote or forested areas where farmers move to new plots after depleting soil nutrients. It is widely practised by many tribes in the tropics, especially in Africa, south and central America and south east Asia.



**INTENSIVE SUBSISTENCE AGRICULTURE** Intensive subsistence agriculture is a type of farming where small plots of land are cultivated with high levels of manual labour and inputs to produce maximum yields. Farmers rely on this method to meet the food needs of their families, with little surplus for sale. It is characterized by the use of simple tools, irrigation, and sometimes fertilizers to boost productivity. It is common in densely populated regions, monsoon Asia, and often focuses on staple crops like rice, wheat, or maize, and makes the most efficient use of limited land resources.

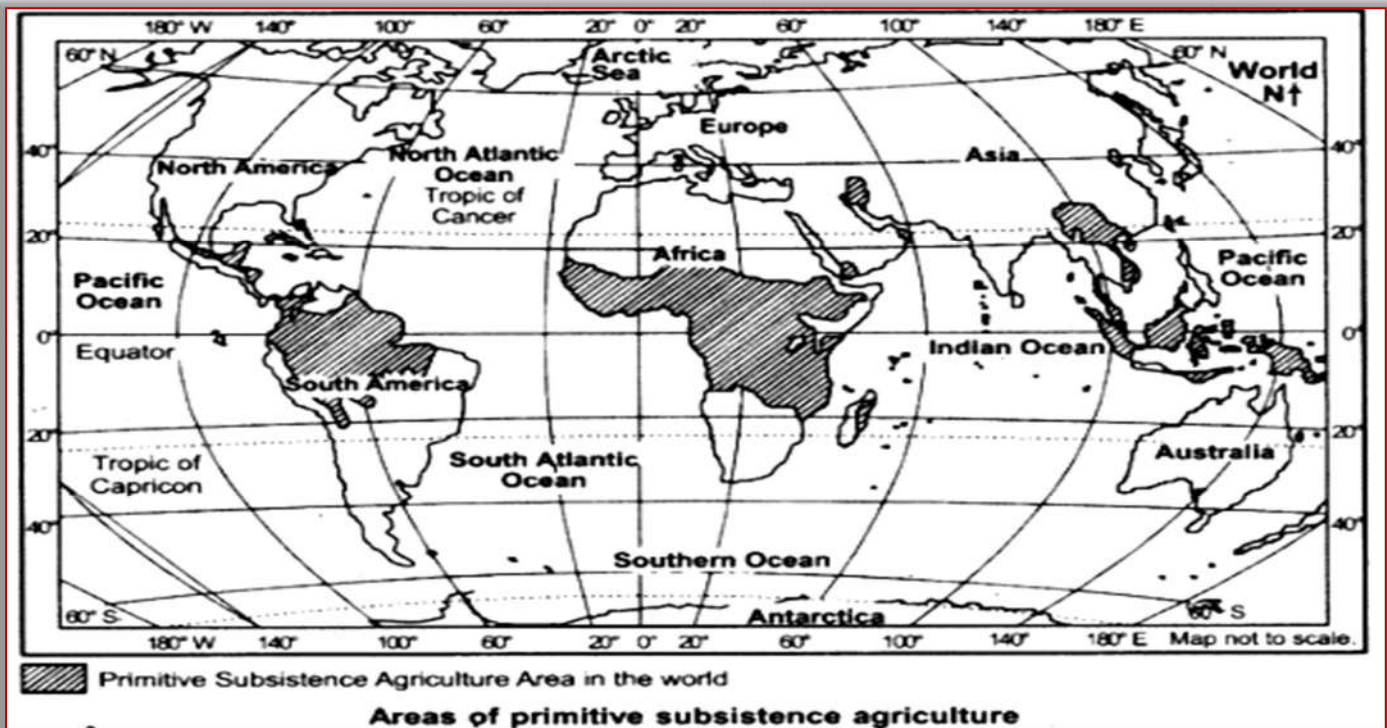
Feature	Wet Paddy Dominated Agriculture	Non-Paddy Dominated Agriculture
Main Crops	Rice	Wheat, soybeans, barley, sorghum, millets
Land Holdings	Very small due to high population density	Small to moderate, varies by region
Labour	Family labour-intensive	Family labour, with some regional variations
Use of Machinery	Minimal, mostly manual labour	Limited, but slightly more use of irrigation and manual labour
Soil Fertility Maintenance	Farmyard manure	Farmyard manure, supplemented with irrigation
Geographical Suitability	Suitable in low-lying areas with abundant rainfall	Adapted to areas with varied relief, climate, and soil conditions
Yield per Unit Area	High	High, but dependent on irrigation
Per Labor Productivity	Low	Low to moderate

Fundamentally, there are two types of intensive subsistence agriculture:

1. **Intensive Subsistence Agriculture Dominated by Wet Paddy Cultivation:** This form of agriculture is marked by the predominance of rice cultivation. Due to the high population density, land holdings are typically very small. Farmers rely heavily on family labour, resulting in intensive land use. The use of machinery is minimal, with most farming tasks performed manually. To maintain soil fertility, farmyard manure is commonly applied. While the yield per unit of land is high, the productivity per worker tends to be low.
2. **Intensive Subsistence Agriculture Dominated by The Crops Other Than Paddy.** Due to variations in relief, climate, soil, and other geographical factors, growing paddy is not feasible in many



areas of monsoon Asia. In regions like northern China, Manchuria, North Korea, and northern Japan, crops such as wheat, soybeans, barley, and sorghum are cultivated. In India, wheat is grown in the western Indo-Gangetic plains, while millets are cultivated in the dry regions of western and southern India. This type of agriculture shares many characteristics with wet paddy farming, but irrigation is more commonly used.



## PLANTATION AGRICULTURE

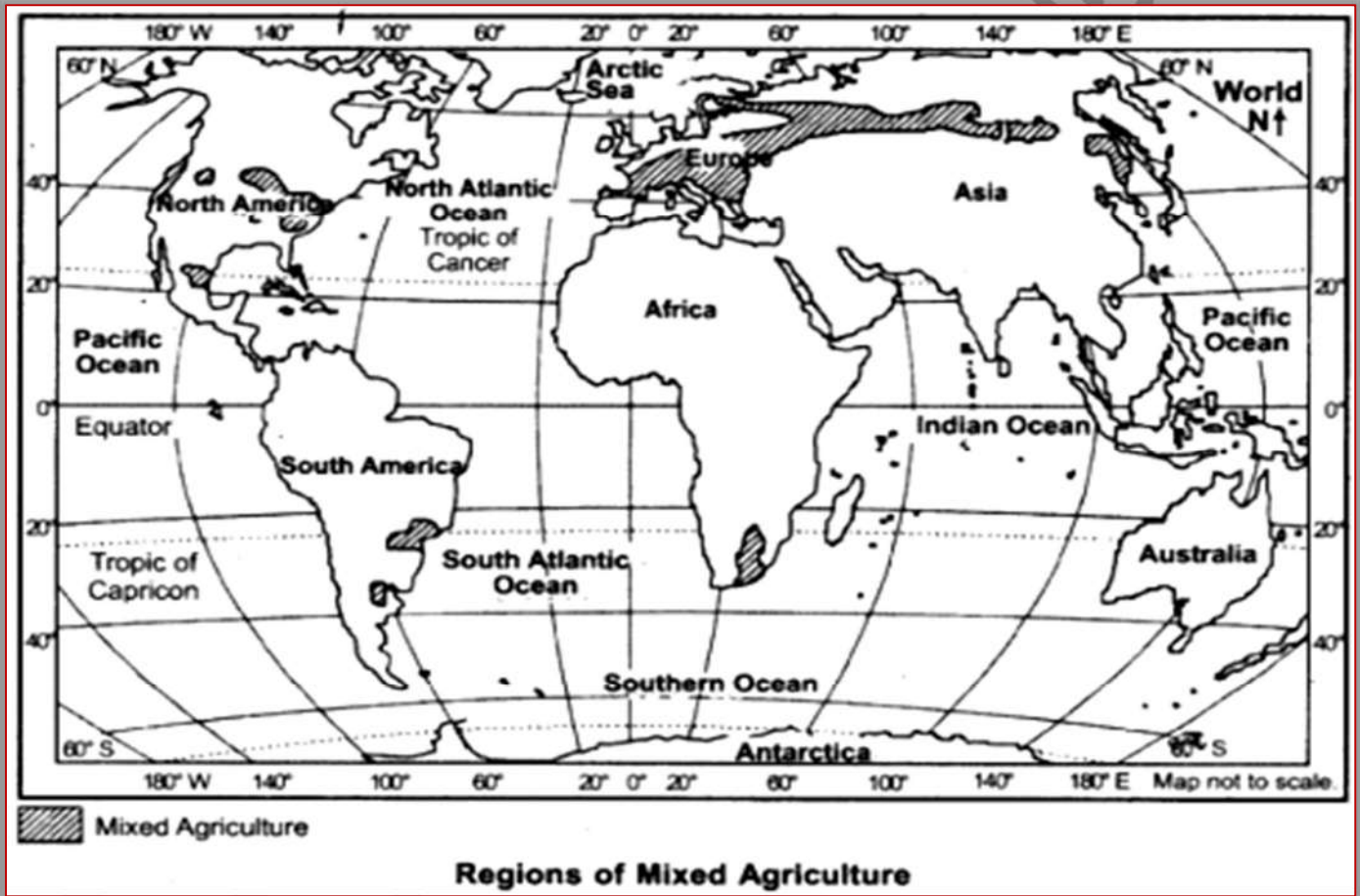
Plantation agriculture is a new mechanised form of agriculture as introduced by the Europeans in colonies situated in the tropics. Key plantation crops include tea, coffee, cocoa, rubber, cotton, oil palm, sugarcane, bananas, and pineapples. This type of farming is characterized by large estates or plantations, substantial capital investment, managerial and technical expertise, scientific cultivation methods, specialization in single crops, inexpensive labour, and a robust transportation system connecting estates to factories and markets for export. Today ownership of the majority of plantations has passed into the hands of the government or the nationals of the countries concerned.



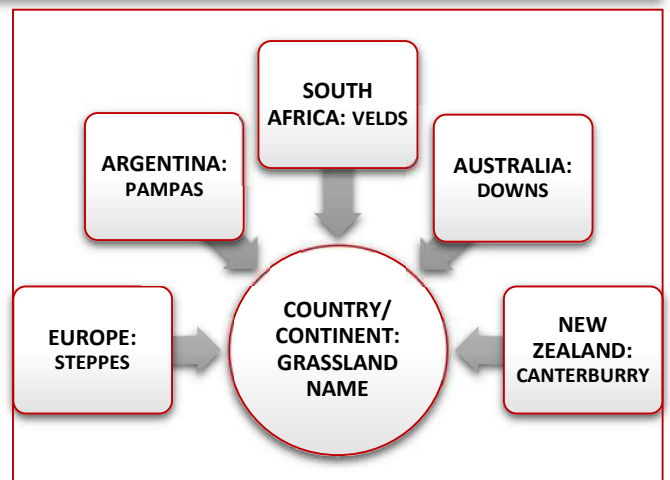
1. The French established cocoa and coffee plantations in West Africa.
2. The British set up extensive tea gardens in India and Sri Lanka, rubber plantations in Malaysia, and sugarcane and banana plantations in the West Indies.
3. Spanish and American investments focused on coconut and sugarcane plantations in the Philippines.

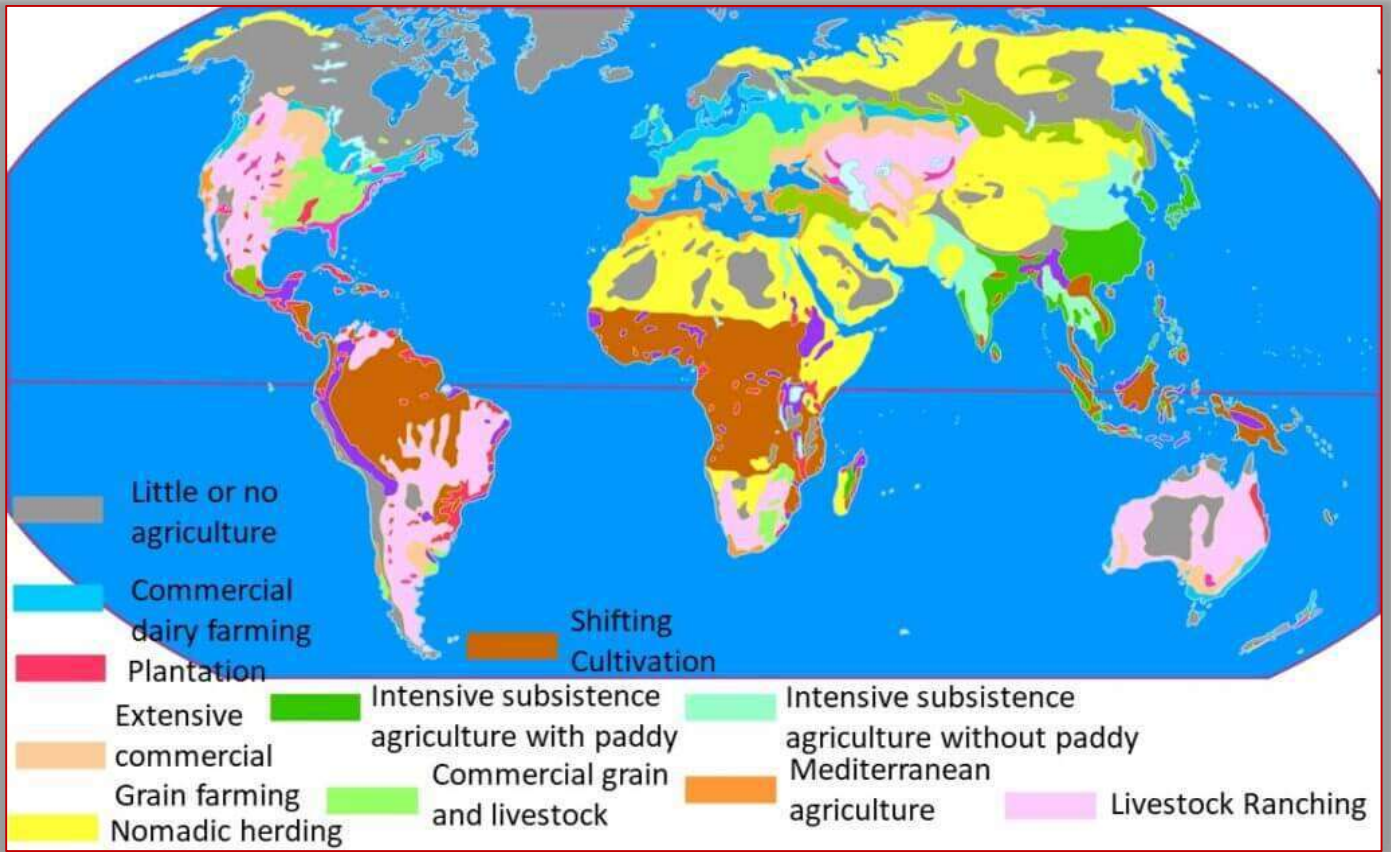
4. The Dutch once had monopoly over sugarcane plantation in Indonesia.
5. Some coffee fazendas (large plantations) in Brazil are still managed by Europeans.

**MIXED FARMING:** Mixed farming is famous form of agriculture is found in the highly developed parts of the world, e.g. *North -Western Europe, Eastern North America, parts of Eurasia and the temperate latitudes of Southern* continents. Mixed farms are moderate in size and usually the crops are associated with it are wheat, barley, oats, rye, maize, fodder and root crops. It is a high capital expenditure on farm machinery and building extensive use of chemical fertilisers and green manures.

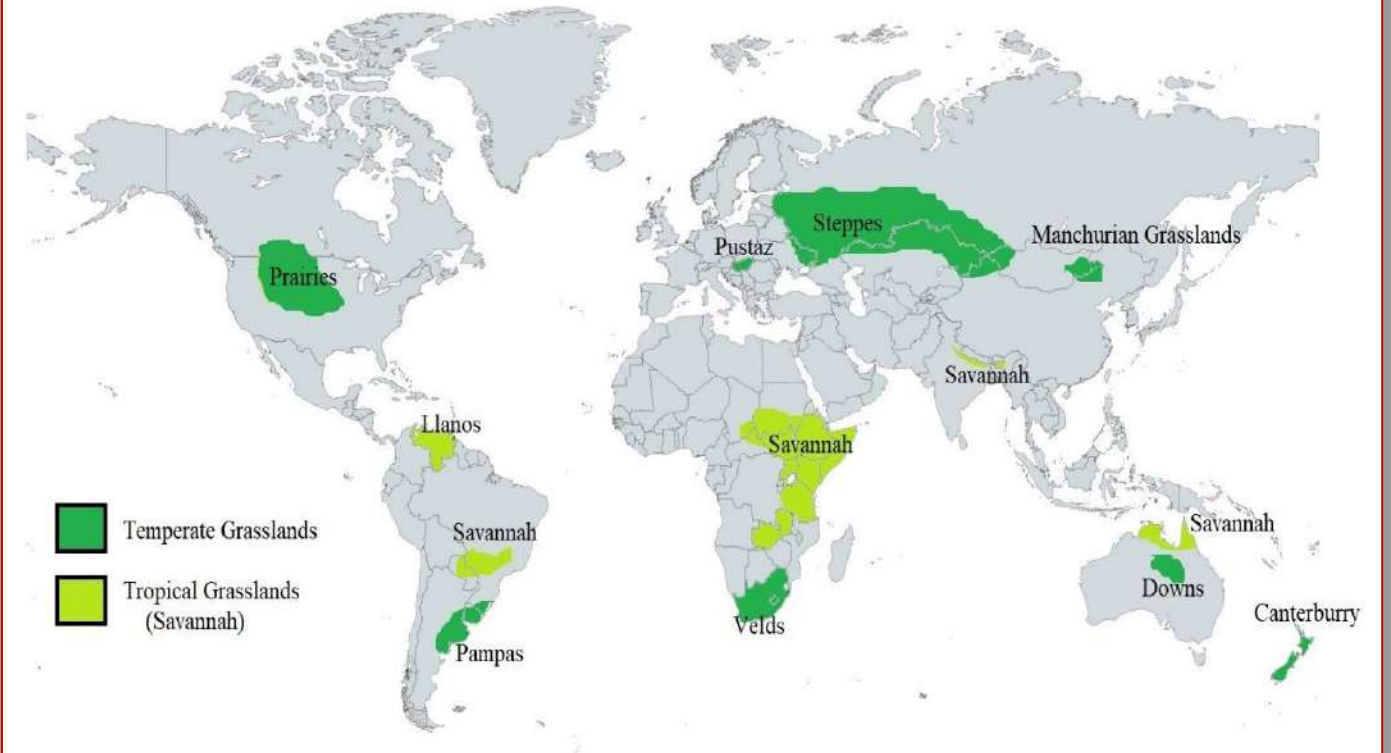


**DAIRY FARMING:** Dairy is the most advanced and efficient type of rearing of milch animals. It is highly capital intensive. Animal sheds, storage facilities for fodder, feeding and milching machines add to the cost of dairy farming. The inputs involved in dairy farming include **rigorous care, feeding and milching**. The major regions of commercial dairy farming are **North Western Europe (Largest)**, **Canada (Second largest)** and **South Eastern Australia, New Zealand and Tasmania (Third largest)**.





### Grasslands of the World





**MEDITERRANEAN AGRICULTURE:** Mediterranean agriculture is commercial agriculture, it is practised in the countries on either side of the Mediterranean Sea in Europe and in north Africa from Tunisia to Atlantic coast, Southern California, central Chile, south western parts of Australia. This region is an important supplier of citrus fruits. **Viticulture, a grape cultivation** is a speciality of the Mediterranean region. Quality wines in the world with distinctive flavours are produced from high quality grapes in various countries of this region. Olives and figs are produced in this region.

**MARKET GATHERING AND HORTICULTURE:** Market gardening and horticulture focus on growing high-value crops like vegetables, fruits, and flowers specifically for urban markets. Farms involved in market gardening and horticulture are typically small and situated near areas with excellent transportation links to urban centres where high-income consumers reside. This type of farming is both labour and capital intensive, emphasizing the use of irrigation, high-yield seeds, fertilizers, insecticides, greenhouses, and artificial heating in cooler regions. It is well-developed in densely populated industrial areas of northwestern Europe, northeastern United States, and the Mediterranean region. For example, the Netherlands is known for its specialization in growing flowers and horticultural crops, particularly tulips, which are exported to major cities across Europe. It also includes truck farming and factory farming.

### CATEGORISING FARMS ACCORDING TO FARMING ORGANISATION

**COOPERATIVE FARMING:** Farmers often form co-operative societies by pooling their resources to achieve more efficient and profitable farming while keeping their individual farms intact. These societies assist

farmers in acquiring essential inputs, selling products under favourable terms, and processing quality goods at lower costs. The co-operative movement, which began over a century ago, has thrived in many Western European countries such as Denmark, the Netherlands, Belgium, Sweden, and Italy. In Denmark, the movement is so successful that nearly every farmer is a member of a co-operative.

#### Truck farming

The regions where farmers specialise in vegetables only, the farming is known as truck farming. The distance of truck farms from the market is governed by the distance that a truck can cover overnight, hence the name called truck farming.

#### Factory farming

It is a modern advancement in industrial regions of Western Europe and North America. It involves raising livestock, especially poultry and cattle, in stalls and pens where they are fed manufactured feed and closely monitored for disease. It requires significant capital investment for infrastructure, machinery, veterinary services, and climate control. Key aspects of factory farming include selective breeding and scientific approaches to enhance livestock production.



**COLLECTIVE FARMING:** Collective farming is based on the principle of social ownership and collective labour. This model, known as **Kolkhoz**, was introduced in the former Soviet Union to address inefficiencies in agriculture and boost production for self-sufficiency. Farmers pooled their resources, including land, livestock, and labour, while retaining small personal plots for their own needs. The government set annual production targets, and produce was sold to the state at fixed prices. Surplus produce was either distributed among members or sold on the market. Farmers paid taxes on their produce and hired machinery. Payment to members was based on their work, with exceptional efforts rewarded in cash or kind. **This system, implemented under the socialist regime, has been modified or discontinued in post-Soviet states but influenced agricultural practices in other socialist countries.**



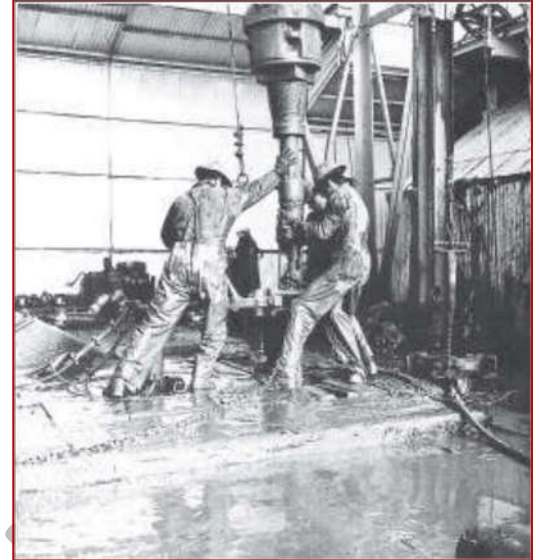
Aspect	Cooperative Farming	Collective Farming
Principle	Voluntary pooling of resources for efficiency and profit	Social ownership and collective labour
Resource Use	Individual farms remain intact; pooled resources for shared benefits	Resources like land, livestock, and labour are pooled
Personal Plot	Individual farms are maintained	Small personal plots retained for personal needs
Government Role	Minimal; assists with inputs, selling, and processing	Sets annual production targets and fixes prices
Produce Handling	Products sold at favourable terms, surplus distributed or sold	Produce sold to the state at fixed prices; surplus distributed or sold
Taxation	Generally minimal	Taxes on produce and machinery
Payment System	Based on individual contributions and market value	Based on work performed, with exceptional work rewarded
Historical Context	Developed over a century ago, successful in Western Europe	Introduced in the Soviet Union; influenced other socialist countries
Current Status	Thriving in many Western European countries	Modified or discontinued in post-Soviet states

## MINING

Discovery of minerals in the history of human development is reflected in many stages in terms of copper age, bronze age, iron age. The use of minerals in ancient times was largely confined to the making tools, utensils and weapons. Industrial development and revolution made a boon its importance is continuously increasing.

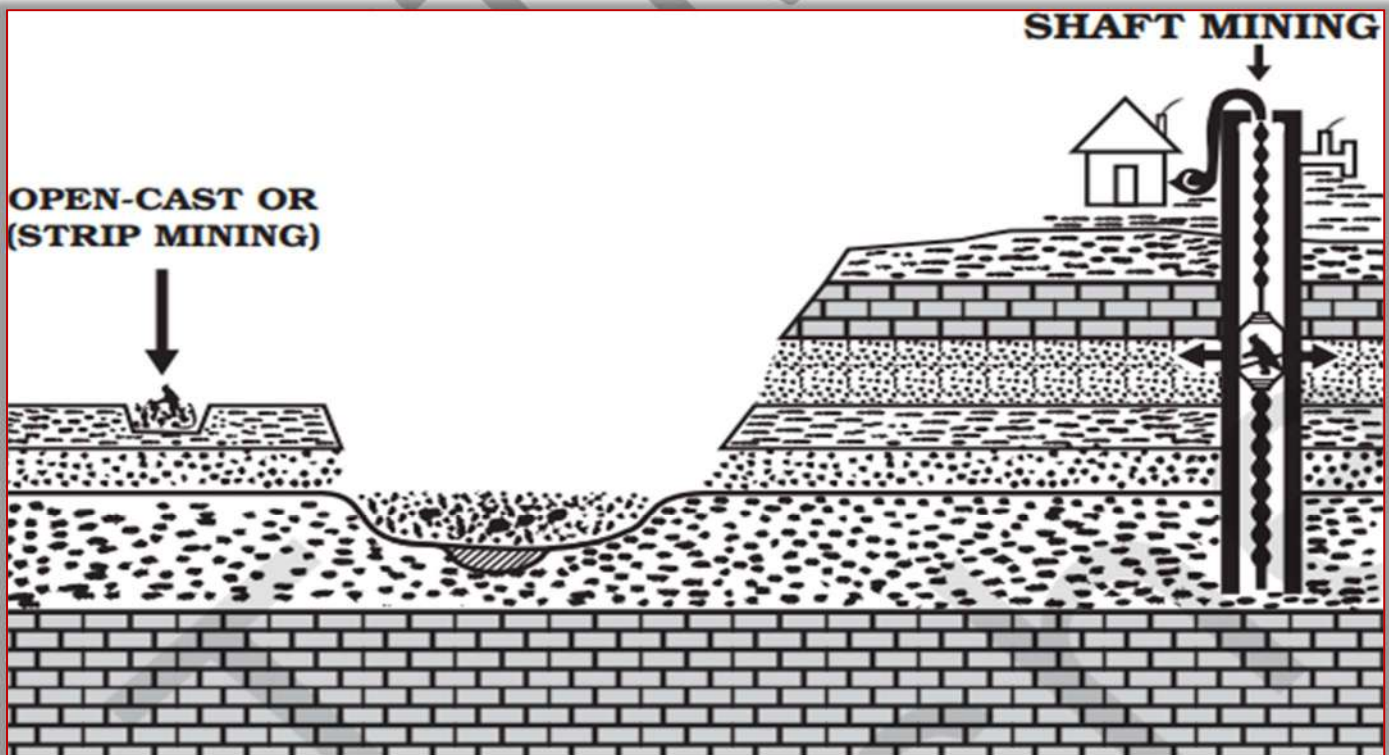
**FACTORS AFFECTING MINING ACTIVITY:** The profitability of mining operations thus, depends on two main factors:

1. Physical factors include the size, grade and the mode of occurrence of the deposits.
2. Economic factors such as the demand for the mineral, technology available and used, capital to develop infrastructure and the labour and transport costs.



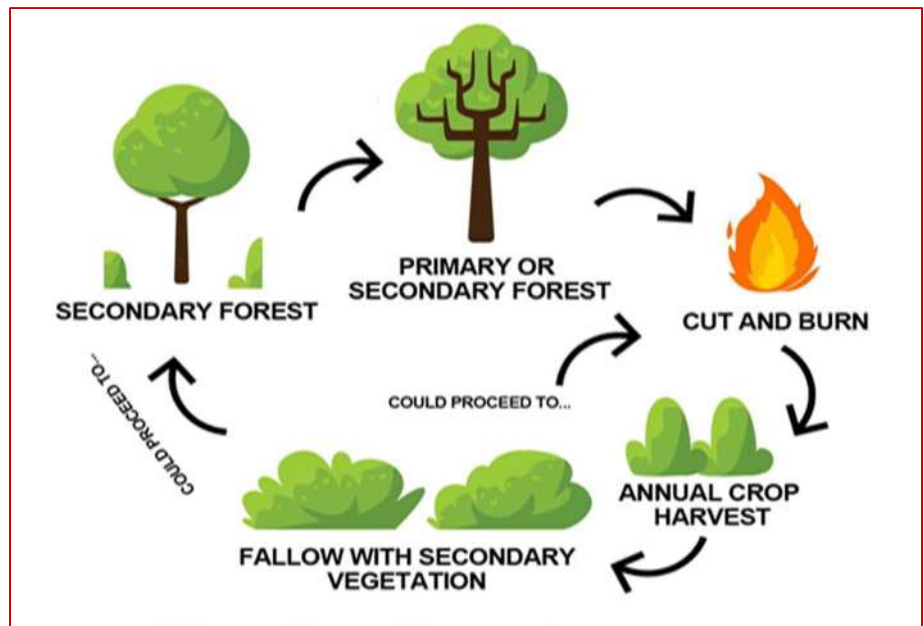
### METHODS OF MINING

**Surface mining**, also known as **open-cast mining**, is the easiest and most cost-effective method for extracting minerals that are close to the surface. In contrast, for minerals that lie **deep below the surface**, the **underground mining** method, specifically the **shaft method**, must be employed. This involves drilling vertical shafts to reach the minerals. Developed economies are increasingly retreating from the **mining, processing, and refining stages** of production due to high labour costs. In contrast, **Africa, South America, and Asia** derive over **50% of their earnings** from minerals alone.



## SHIFTING AGRICULTURE

Shifting agriculture, also known as slash-and-burn agriculture, is a traditional form of farming practiced primarily in tropical regions. It involves clearing a piece of land by cutting down and burning the vegetation, cultivating crops for a few years, and then abandoning the land when its fertility declines. Farmers then move to a new area and repeat the process. This method allows the natural ecosystem to regenerate, and after a fallow period, the land can be reused.



### DIFFERENT NAMES OF SHIFTING AGRICULTURE IN VARIOUS COUNTRIES

1. **Jhum - India (Northeast):** In the northeastern states of India, particularly in Assam, Meghalaya, Mizoram, and Nagaland, shifting cultivation is commonly known as Jhum cultivation.
2. **Milpa - Mexico and Central America:** In Mexico and parts of Central America, this practice is referred to as Milpa. It is often associated with the cultivation of maize, beans, and squash.
3. **Roca - Brazil:** In Brazil, shifting agriculture is known as Roca, primarily practiced in the Amazon basin.
4. **Ladang - Indonesia and Malaysia:** In Indonesia and Malaysia, this type of agriculture is called Ladang. It is commonly practiced in the mountainous and forested areas.
5. **Conuco - Venezuela:** In Venezuela, shifting cultivation is known as Conuco, often used by indigenous communities for subsistence farming.
6. **Kaingin - Philippines:** In the Philippines, shifting cultivation is referred to as *Kaingin*. It involves clearing forests for temporary agriculture.
7. **Chena - Sri Lanka:** In Sri Lanka, shifting agriculture is called Chena, where farmers clear patches of forest to grow crops.
8. **Taungya - Myanmar (Burma):** In Myanmar, the practice is known as Taungya, often involving the simultaneous planting of trees and crops.

## CONCLUSION

This chapter explored the fundamental economic functions that involve the direct use of natural resources by examining the **concept of primary activities**, which includes traditional practices such as hunting and gathering, and the more structured activities of agriculture and mining. It analysed

the **changing trends** in these activities, noting how subsistence methods have evolved into modern practices. For instance, **hunting and gathering** has been largely replaced by more organized agricultural systems, while **pastoralism** has adapted to various geographical conditions through nomadic and semi-nomadic practices. In agriculture, we observed a shift from **primitive subsistence** methods to **intensive subsistence** and **modern agricultural practices** like **plantation agriculture**, **market gardening**, and **factory farming**, each reflecting advances in technology and changes in market demands. **Mining** was discussed in terms of its methods and the factors influencing its practice. It also considered the evolution of **farming organizations**, comparing **cooperative** and **collective** farming models, and examined the role of **shifting agriculture** in different regions. Overall, primary activities remain vital to economic development and resource management, with significant transformations reflecting technological advancements, economic pressures, and changing environmental conditions. Understanding these trends provides insight into how societies adapt and evolve in response to their natural and economic environments.