

What Is Agriculture?

Agriculture is the practice of cultivating land, growing crops, and rearing animals. It is one of the oldest and most important human activities. The word "agriculture" comes from the Latin words ager (field) and cultura (cultivation).

 **Agriculture** – The science and art of cultivating soil, growing crops, and raising livestock.

Over 50% of the world's population is engaged in agriculture. In India, nearly two-thirds of the population depends on it.

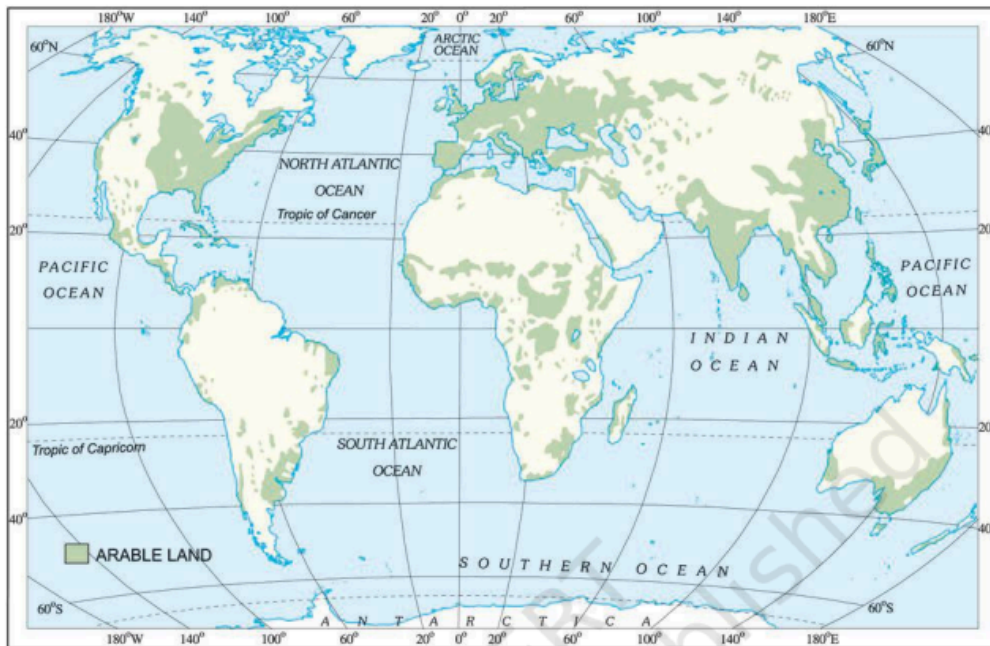


 Fig. 3.1 – World Distribution of Arable Land

Economic Activities and Agriculture

Economic activities are divided into three types:

1. **Primary** – Based on natural resources (e.g. farming, fishing)
2. **Secondary** – Processing of products (e.g. factory work, weaving)
3. **Tertiary** – Providing services (e.g. transport, trade)

Agriculture is a primary activity. It includes growing crops, vegetables, fruits, and rearing animals.

Agriculture as a System

Farming works like a system. It has:

- Inputs – seeds, fertilisers, tools, water, and labour
- Processes – ploughing, sowing, irrigation, harvesting
- Outputs – crops, milk, eggs, wool

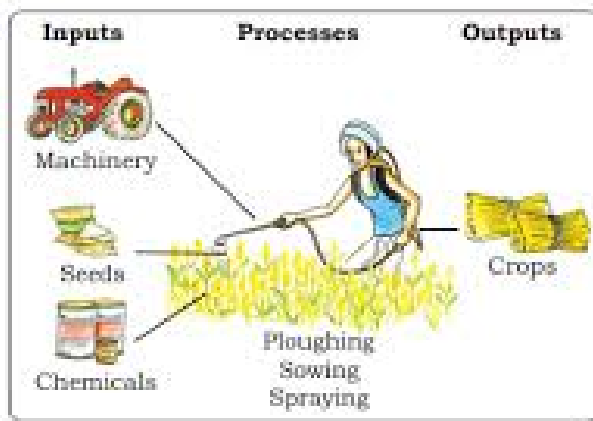


Fig. 3.2 – The Farm System

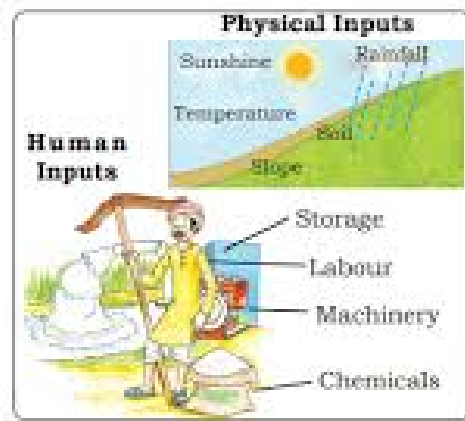


Fig. 3.3 – Inputs for farming

Types of Farming

Farming types depend on geography, technology, labour, and produce demand. Two major types are:

1 Subsistence Farming

Farming done mainly to feed the farmer's family.

♦ Intensive Subsistence:

- Small land, simple tools, lots of labour
- Common in densely populated monsoon regions (India, China)
- Main crop: Rice; others: maize, pulses, wheat, oilseeds

♦ Primitive Subsistence:

- Includes shifting cultivation and nomadic herding
- Uses traditional methods, low productivity

Shifting Cultivation – ‘Slash and burn’ method: Trees are cut and burned; ashes fertilise the soil

Also called:

- Jhumming (NE India), Milpa (Mexico), Ladang (Malaysia)

Nomadic Herding – Moving with animals in search of water and grazing land

Common in Sahara, Central Asia, Rajasthan, J&K



 Fig. 3.4 – Nomadic Herders with camels

2 Commercial Farming

Done mainly to sell crops in the market. It involves:

- Large land
- Machines
- Investment of capital

Types of commercial farming:

◆ Commercial Grain Farming:

- Large farms (USA, Canada, Russia)
- Crops: Wheat, maize
- Only one crop grown due to cold winters

◆ Mixed Farming:

- Growing crops + rearing animals on the same land
- Practised in USA, Argentina, Australia

◆ Plantation Agriculture:

- One crop grown on large area (e.g. tea, coffee, banana)
- Needs labour, transport, and nearby processing units



📷 Fig. 3.5 – Sugarcane plantation



📷 Fig. 3.6 – Banana plantation

🌾 Major Crops and Conditions

Different crops need different climates and soils:

📖 Rice – Needs high heat, rainfall, clayey soil

📌 Top producers: China, India, Japan




📷 Fig. 3.7 – Rice Cultivation

📖 Wheat – Needs moderate climate, loamy soil

📌 Grown in India (winter), USA, Russia, Ukraine





 Fig. 3.8 – Wheat Harvesting


-  **Millets – Coarse grains like jowar, bajra, ragi**
-  **Hardy crops grown in India, Nigeria, Niger**



 Fig. 3.9 – Bajra Cultivation

-  **Maize – Needs sunshine, moderate rain, fertile soil**
-  **Grown in USA, India, Brazil, Mexico**



 Fig. 3.10 – Maize Field

-  **Cotton – Needs high temp, low rainfall, black soil**
-  **Grown in China, USA, India, Brazil**



 Fig. 3.11 – Cotton Cultivation


-  **Jute – Known as Golden Fibre; grows in humid areas**
-  **Top producers: India, Bangladesh**
-  **Coffee – Warm, wet climate, hill slopes**
-  **Brazil is top producer**



 Fig. 3.12 – Coffee Plantation

-  **Tea – Cool climate, regular rain, loamy soil**
-  **India, Sri Lanka, China**



 Fig. 3.13 – Tea Plantation

Agricultural Development


 **Agricultural Development – Steps to increase farm production to meet growing demand**

Methods include:

- Expanding land
- Irrigation
- HYV (High-Yield Variety) seeds
- Fertilisers and machinery
- Training farmers

 **Organic Farming – Uses natural fertilisers and pesticides (no chemicals)**




 Fig. 3.14 – Farmers ploughing in India

A Farm in India (Munna Lal, Uttar Pradesh)

- Small land: 1.5 hectares
- Grows 2 crops/year (rice, wheat, pulses)
- Uses rented tractor, buys seeds from market
- Uses tube well for irrigation

- Owns buffaloes and hens
- Sells milk to co-operative society
- No storage facilities → sells crops even when prices are low




 Fig. 3.15 – Indian Agricultural Field

– A Farm in the USA (Joe Horan, Iowa)

- Large farm: 300 hectares
- Grows corn after soil testing
- Uses computers linked to satellites
- Sprays fertilisers only where needed
- Uses machines: harvester, seed drill, tractor
- Stores grains in automated silos
- Works like a businessman



 Fig. 3.16 – US Farm

Important Terms

Term	Meaning
Agriculture	Growing crops and rearing animals
Subsistence Farming	Farming for family use
Commercial Farming	Farming to sell produce
Shifting Cultivation	Slash and burn method
Nomadic Herding	Moving with animals for grazing
Organic Farming	Uses natural fertilisers, no chemicals
Plantation	Large farm growing one crop
Agricultural Dev.	Improving farm productivity
HYV Seeds	High-yielding variety seeds