AGRICULTURE

1. Why agriculture is called mainstay of Indian economy?

- ✓ 60% of our population depends on agriculture for their income.
- ✓ It provides raw material to industries.
- ✓ It is one of the main item for export.
- \checkmark It contributes to the GDP.
- ✓ It provides food security to India.

Types of Farming.

Subsistence farming- A farming in which the main production is consumed by the farmer's household.

Primitive subsistence farming

- This type of farming is primitive because old and traditional methods are used.
- Practiced on small patches of land.
- Depends on monsoon, soil fertility and environment.
- Productivity is low.
- This is also called slash and burn method. When soil looses its fertility it is left vacant and new patch of land is cleared for cultivation.

Intensive subsistence farming

- Practiced in the areas with high population.
- It is labour intensive and fertilizers and irrigation is used to increase the productivity.
- Most of the farming in India is of intensive subsistence type, as most of the farmers are small farmers.
- Practiced in most of the regions in India.
- Eg- wheat production in north india.

Commercial farming

- Farming is practiced to earn profit.
- modern methods like machines, HYV seeds, irrigation and fertilizers are used on large scale.
- Plantation crops are generally commercial crops.
- It requires huge investment.
- mostly practiced by farmers with large land holding.
- Eg- Tea, coffee.

Note- 1. Slash and burn method is known by various names throughout the world. Jhumming is the term used in North eastern India. 'Bewar' or 'Dahiya' in Madhya Pradesh, 'Podu' or

'Penda' in Andhra Pradesh, 'Pama Dabi' or 'Koman' or Bringa' in Odisha, 'Kumari' in Western Ghats.

Plantation agriculture- It is a type of farming in which a single crop is grown for the entire year. The main objective here is the profit making.

- \checkmark It is capital intensive.
- ✓ Modern techniques are used.
- ✓ Suitable for farmers with large land area.
- ✓ Tea plantation is Assam, Coffee production in Karnataka, Sugarcane production in western UP are some examples.

Cropping pattern



Rabi crop

1. sown in winter from october to December and harvested in summer from April to June.

2. wheat, barley, peas, gram and mustard are important Rabi crops.

3. Grown mostly in North and North western parts of India.

4. Winter rain helps in the cultivation of Rabi crops.

5. These are also called winter crops



Kharif crop 1. Sown during the onset of monson and harvested from september to october.

2. rice, maize, millets, jowar, bajra, tur (arhar), moong, urad, cotton, jute, groundnut and soyabean.

3. Monsson rain helps in the cultivation of Kharif crop.

4. Rice is most important crop, grown throughout India.

5. These are also called rainy season crop



Zaid crop

1. Grown in between Rabi and Kharif crop.

2. These are grown during summer season.

3. watermelon, muskmelon, cucumber,

vegetables and fodder crops.

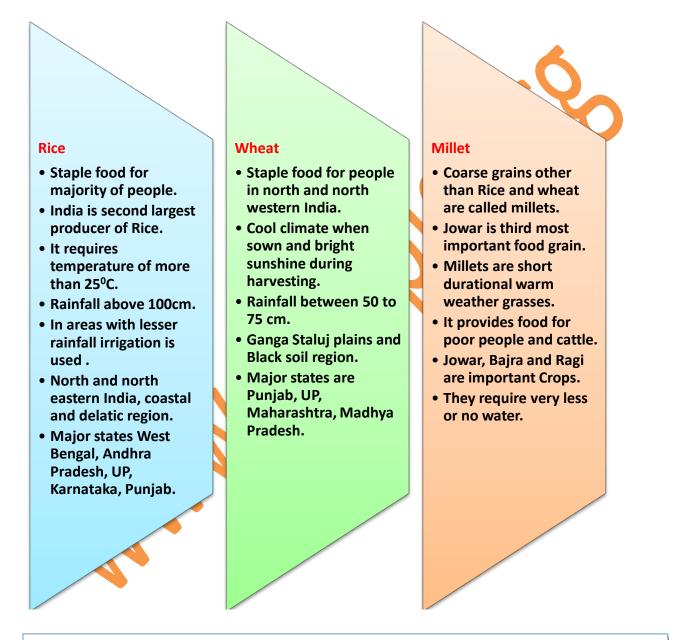
4. These crops gives extra income to farmers.

Important points-

- **1.** Agriculture is a state subject.
- 2. Gross cropped area- it is the total area sown once and more than once in year. The area is counted as many times as there are sowings in a year.
- 3. Arable land- area which is suitable to grow crops.

- 4. Fallow land- The area which is suitable to grow crops but no crop has been grown in recent years.
- 5. Barren land- Not suitable for cultivation of crop.

Important crops



Maize- 1. Used as food and food.

2. Temperature range 21 to 27^oC. Low temperature and very high temperature are harmful for its growth.

- 3. 50-100cm rainfall.
- 4. It requires well drained fertile soil. Best soil is old alluvial soil.
- 5. Important sates Karnataka, UP, Bihar and Andhra Prasesh.

 Pulses need less moisture and survive well in dry conditions. Major pulses that are grown in India are tur (arhar), urad, moong, masur, peas and gram. Pulses requite low rainfall and high temperture. Rich source of protein. These are leguminous plants and helps in restoring soil fertility. Can be grown on all type of soil. Madhya Pradesh, Rajasthan, Maharashtra, Uttar Pradesh and Karnataka. 	Pulses Pulses requite low rainfall and high temperture. • Rich source of protein.
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Tea

Food crops other than Grains

Sugarcane

 Hot and humid climate, temperature between 21-27°C.
 Average rainfall of 75-100cm.
 Irrigation is required in low rainfall areas.
 It can be grown on variety of soils.
 India is second largest producer of Sugarcane.
 UP, Maharashtra, Karnataka, Punjab, Andhra Pradesh are

important states.

Oil seed

1. Main oil-seeds produced in India are groundnut, mustard, coconut, sesamum (til), soyabean, castor seeds, cotton seeds, linseed and sunflower. 2.Most of these are edible oils and used for cooking. 3. Groundnuts accounts for half of total oilseeds. 4. Gujarat is the highest producer of Groundnuts.

Tea is important beverage crop. It grows well in tropical and sub tropical areas. Tea bushes requires warm and moist climate throughout the year. Frequent rain

showers are good for

5. Assam, west Bengal,

Kerala, Tamil Nadu are

important states.

plants growth.

Coffee

 Indian coffee is known for its good quality.
 cultivation of coffee is confined to the Nilgiri in Karnataka, Kerala and Tamil Nadu.
 Temperature range-15-28°C.
 Rainfall between 150-250cm.
 Generally grown under shady trees.

Horticulture crops- India is one of the largest producer of fruits and vegetable in the world.

India produces both tropical and temperate fruits.

Non Food crops

Rubber

 It is an equatorial crop, but under special conditions, it is also grown in tropical and sub-tropical areas.
 It requires moist and humid climate with rainfall of more than 200 cm. and temperature above 25°C.
 It is important industrial raw material.
 mainly grown in Kerala, Tamil Nadu, Karnataka and Andaman and Nicobar islands

and Garo hills of Meghalaya.

Cotton

 Cotton plant requires abundant sunshine.
 Grows well in black cotton soil of deccan plateau.

3. Moderate to light rainfall.

4. Major cotton-producing states are– Maharashtra, Gujarat,

Madhya Pradesh, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Punjab, Haryana and Uttar Pradesh.

5. Used in textile industry.

Jute

1.It is known as the golden fibre. 2.Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year.

 3. High temperature is required during the time of growth.
 4. West Bengal, Bihar, Assam, Odisha and Meghalaya are the major jute producing states.
 5. Used for making gunny bags, carpets, mats, ropes etc.
 6. Because of its high cost, it is losing market to synthetic fibres.

Problems of Indian Agriculture.

- Pace of agricultural development is low due to absence of advanced technologies.
- Dependency on monsson.
- Dependency on natural fertility.
- Dependency of large population on agriculture sector.
- Lesser money for investment by farmers.

Measures taken by government-

 Institutional reforms- Collectivization(Redistribution of land), consolidation of holding(Bringing together land for making a single holding), cooperation and abolition of zaminadri. Agriculture was given top priority during first five year plan.

- 2. Policy reforms- Green and white revolution were some of the strategies used to improve the production.
- 3. Comprehensive land development plan- This plan was launched in 1980s and 1990s. included both institutional and technical reforms. Provision for crop insurance against drought, flood, cyclone, fire and disease, establishment of Grameen banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest were some important steps in this direction.
- 4. Public procurement system- Agriculture price commission declares prices of agriculture products in advance, so that farmers may know what they are going to earn from a particular crop.
- 5. Technical reforms- Public broadcaster Doordarshan has launched a 24 hour channel dedicated to famers. Advanced weather forecast, soil testing, establishment of agriculture research centers, universities and mobile labs are some of the steps taken by government.
- 6. Subsidies- Upto 80% subsidies are provided on farm equipments. Apart from this fertilizers like urea are provided to farmers at subsidized rates. HYV variety of seeds are being provided by government at cheaper rates.
- 7. Economic support- Loans at cheaper interest rates are being provided to farmers form banks and other financial institutions. Cooperatives has been set up to help farmers. Crop insurance scheme helps farmers to recover losses due to natural calamities.

Economy and agriculture

- Agriculture sector is the largest employer.
- •Share of agriculture in Indian economy is declining.
- •This declining trend can have adverse impact on Indian society.
- •To overcome this government is focusing on modernisation of agriculture, research and infrastructure.
- Comptetion from internatonal markets is a huge challenge for our farmers.

Agriculture and globalisation

- Indian farmers are unable to match the subsidised production in developed countries.
- Overuse of fertilizers and pesticides leads to poor quality of production(though quantity increases).
- •Introduction of Genetically modified crops has increased the production in developed countries but India is lagging in this direction.
- Diverse cropping and organing farming are the need of the hour.

Important terms-

- **1.** Bloodless revolution- Was a voluntary land reform movement initiated by Vinoba Bhave. It is also known as Bhoodan Movement.
- **2.** Atma Nirbhar Bharat- It is a movement initiated by the government of India to make a self reliant nation in all sectors. It has five pillars Economy, Infrastructure, System, Vibrant demography and Demand.
- **3.** Horticulture- Production of Fruits, vegetables and flowers.

Important fruit producing states-Mango- Maharashtra, Andhra Pradesh, Telangana, UP and West Bengal. bananas of Kerala, Mizoram, Maharashtra and Tamil Nadu lichi and guava of Uttar Pradesh and Bihar pineapples of Meghalaya and grapes of Andhra Pradesh, Telangana and Maharashtra apples, pears, apricots and walnuts of Jammu and Kashmir and Himachal Pradesh