ODM Teachers' Note

Class	VIII	Subject	Geography	Plan For	Toppers

Prd	1	Chapter	5 Agriculture

Sub-Concepts	1. What is Agriculture? 2. Factors influencing Agriculture **3.** Inputs of Agricultures
Teaching Aid To be used	**Chat paper presentation**

Sl. No	Step Wise (What to be done)
1	**Agriculture** is the cultivation of animals, plants and fungi for food, fiber, biofuel, medicinal plants and other products used to sustain and enhance human life. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization.
2.	The Latin root of agriculture is **agri,** or "field," plus **cultura**, "cultivation." Cultivating a piece of land, or planting and growing food plants on it, is largely what agriculture means. • Economic activities are of three types: (i) Primary Activities, (ii) Secondary Activities, (iii) Tertiary Activities. • Primary activities are those activities which are connected with extraction and production of natural resources, for example, agriculture, fishing, etc. • Secondary activities are concerned with the processing of natural resources to manufacturing products like baking of bread, weaving of cloth, etc. • Tertiary activities provide services like transport, trade banking, insurance, advertising, etc.
3.	**1. Physical Factors** Physical factors affecting agriculture are: (i) climate (ii) soil and (iii) topography. **(i) Climate.** Climate plays a dominating role in agriculture. Plants require sufficient heat and moisture for their growth. Normally, regions having maximum temperature of less than 10°C are not suitable for plant growth. In the tropical regions, where temperature is high throughout the year, agriculture is successfully done. Plant life is not possible in dry areas except that with the help of irrigation. The moisture requirements vary from plant to plant and region to region. In the lower latitudes, where temperature is high, plants need more moisture for their growth (75cm to 100cm). On the other hand, in the higher latitudes where summers are cool, winds are not dry, rainfall of 50-62 cm is sufficient for plant growth.

(ii) Soils.

The richness of soil is another important physical factor affecting agriculture. Soils differ in respect of physical and chemical composition. Soils may be fine or coarse, porous or non-porous. In general fine soils like loam or silt are very fertile. The chemical composition of the soil determines its productivity.

Generally, the soils which are found at the place of their origin, known as residual soils, are poorer than those which have been transported from the place of their origin. The transported soils are rich and have a variety of minerals in them. The transported soils are: (a) loess, transported by wind (b) alluvial, transported by river water (c) glacial, transported by glaciers.

The fertility of the soils decreases with constant cultivation. Soils become infertile if the fertility is not renewed. This can be achieved by leaving the land fallow, by rotation of crop and by use of manures and fertilizers.

Soil erosion and water logging have become major problems with soils as such these should be checked by adopting contour farming, terrace farming, constructing dams and dykes.

(iii) Topography.

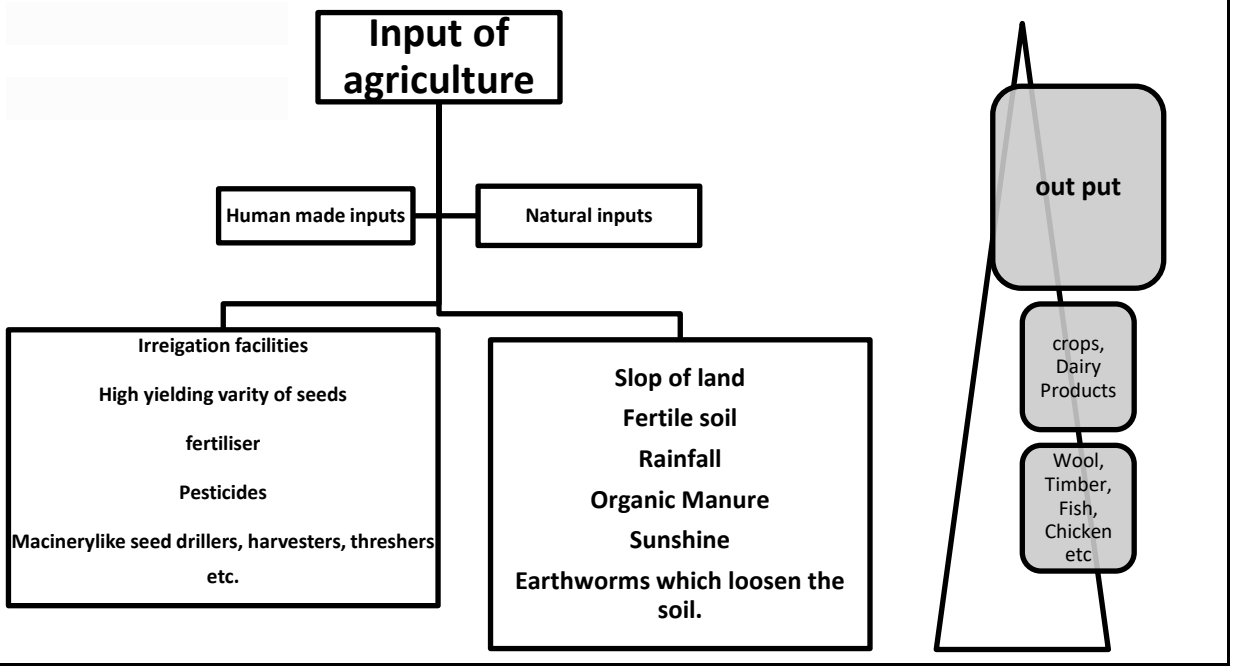
The nature of topography plays a significant role in the development of agriculture. It determines extent of soil erosion, methods of cultivation and mode of transportation. In the mountainous and hilly regions, soil erosion is common; terrain restricts use of machinery and development of means of transportation.

However, in the flat regions, there is no such problem. Plain regions have fertile soils. The flat topography facilitates use of machines. Means of transportation can be easily developed in the plain areas.

Moreover, dense population in the plain regions provides cheap agricultural labour and a huge market for the products. The alluvial plains, the river valleys and the deltas are very suitable for agriculture.

3. Other Factors (i) The level of scientific and technological development has a great bearing on agriculture. Farmers, using primitive methods obtain poor yields. But on the other hand, where farmers are using modern farm technology in the shape of fertilizers, pesticides, machinery and high yielding variety seeds etc. the farm yields are high.

4.



ODM Teachers' Note

Class	VIII	Subject	Geography	Plan For	Toppers

Prd	2	Chapter	5 Agriculture

Sub-Concepts	**1.** Types of Farming
Teaching Aid To be used	**Chat paper presentation/Smart board**

Sl. No	Step Wise (What to be done)
1	Types of Farming **Subsistence farming and Commercial farming**– main types of farming depending upon the geographical conditions, demand of produce, labour and level of technology.
2.	**Subsistence farming-** classified as **intensive subsistence and primitive subsistence farming.**
3.	See table below

Subsistence farming	**Intensive subsistence agriculture**	**Primitive subsistence agriculture**
The type of farming is practised to meet the needs of the farmer's family.	The farmer cultivates a small plot of land using simple tools and more labour. Climate with a large number of days with sunshine and fertile soils permit growing of more than one crop annually on the same plot.	Includes shifting cultivation and nomadic herding. **Shifting Cultivation**– a plot of land is cleared by felling the trees and burning them. The ashes are then mixed with the soil and crops are grown. After the soil loses its fertility, the land is abandoned and the cultivator moves to a new plot. Shifting cultivation is also known as **'slash and burn' agriculture**. **Nomadic Herding**-herdsmen move from place to place with their animals for fodder and water, along defined routes. This type of movement arises in response to climatic constraints and terrain.
Main Crop **Other Crops**	Rice Wheat, maize, pulses and	**Shifting Cultivation**– maize, yam, potatoes and cassava

	oilseeds	**Nomadic Herding**-Sheep, camel, yak and goats are most commonly reared. They provide milk, meat, wool, hides and other products to the herders and their families.
Areas	Prevalent in the thickly populated areas of the monsoon regions of the south, southeast and east Asia.	**Shifting Cultivation**-practised in the thickly forested areas of Amazon basin, tropical Africa, parts of Southeast Asia and Northeast India different places – **jhumming** in North –east India , **Roga** in Brazil and South America, **Mipla** in Mexico and Central America, **Masole** in the Congo Basin and **Ladang.** **Nomadic Herding**– practised in the semi-arid and arid regions of Sahara, Central Asia and some parts of India, like Rajasthan and Jammu and Kashmir.

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ODM Teachers' Note

Class	VIII	Subject	Geography	Plan For	Toppers

Prd	3	Chapter	5 Agriculture

Sub-Concepts	1. Commercial Farming
Teaching Aid To be used	World Map/Smart board

Sl. No	Step Wise (What to be done)
1	**Commercial Farming** Commercial grain farming, mixed farming and plantation agriculture

2.

Commercial Farming	Commercial grain farming	Mixed Farming	Dairy Farming	Plantation Agriculture
Crops are grown and animals reared-sale in market. The large area is cultivated and a large amount of capital is used. Work done by machines.	Crops are grown for commercial purposes. These areas are sparsely populated with large farms spreading over hundreds of hectares. Severe winters restrict the growing season and only a single crop can be grown.	The land is used for growing food and fodder crops and rearing livestock **Ranching:-** Raising livestocks for meat or wool on privately owned land, along with the use of some public land.	The rearing of cattle on a large scale on the outskirts of cities to meet the demand for milk and animal products is called dairy farming	A type of commercial farming where a single crop is grown. Large amount of labour and capital are required. The produce may be processed on the farm itself or in nearby factories. The development of a transport network is thus essential for such farming.
Crops	Wheat and maize	Food crops, fodders crops, livestocks.	Milk and animal Products.	Tea, coffee, sugarcane, cashew, rubber, banana or cotton
Areas	Temperate grasslands of	Practised in Europe,	Australia, New Zealand, India,	Major plantations found in the tropical

	North America, Europe and Asia	eastern USA, Argentina, southeast Australia, New Zealand and South Africa	Denmark and Netherlands.	regions of the world. Rubber in Malaysia, coffee in Brazil, tea in India and Sri Lanka	

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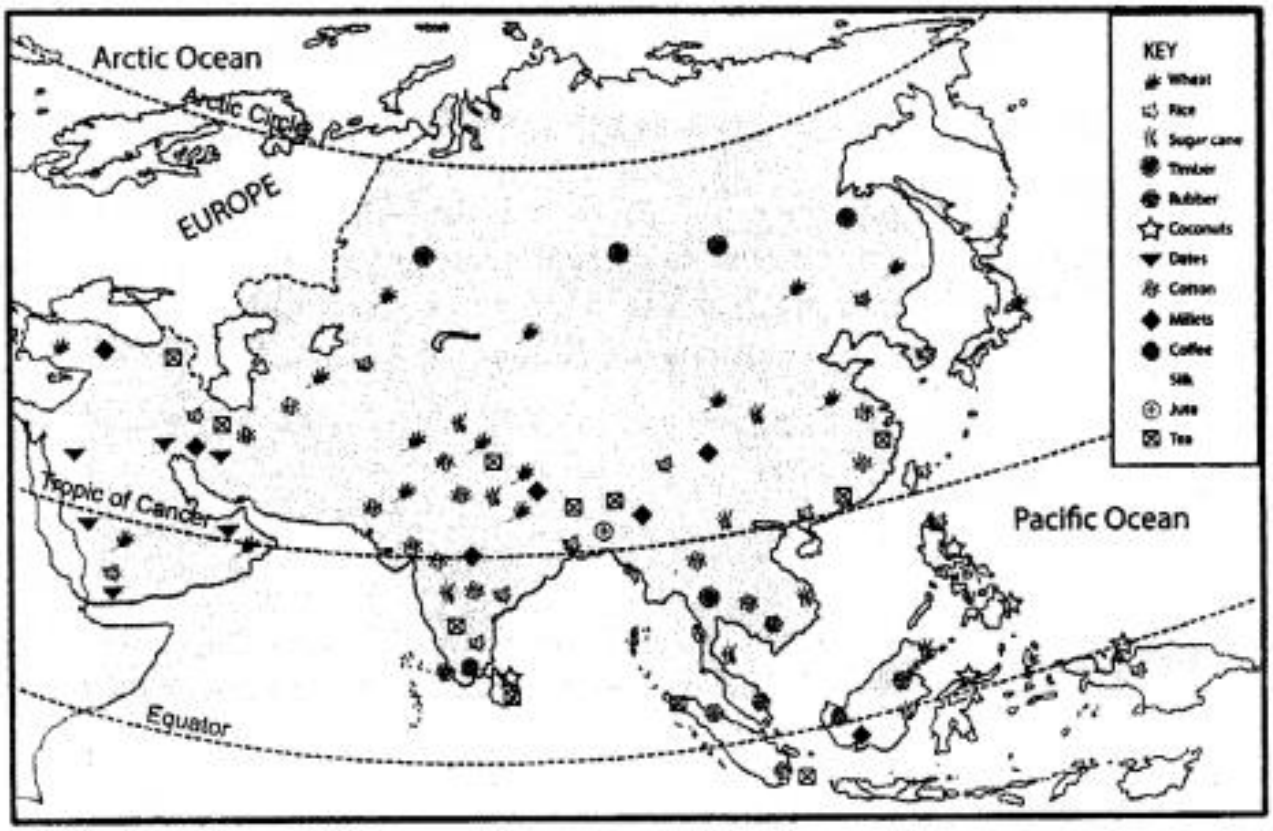
ODM Teachers' Note

Class	VIII	Subject	Geography	Plan For	Toppers

Prd	4	Chapter	5 Agriculture

Sub-Concepts	1. Major Crops
Teaching Aid To be used	World Map/Smart board

Sl. No	Step Wise (What to be done)
1	**Major Crops** • **Major food crops**– wheat, rice, maize and millets. • **Fibre crops**-jute and cotton • **Important beverage crops**-tea and coffee **Rice-** the staple diet of the tropical and sub-tropical regions-needs high temperature, high humidity and rainfall-grows best in alluvial clayey soil, which can retain water-Leading producers of rice are China, followed by India, Japan, Sri Lanka and Egypt-In favourable climatic conditions like West Bengal and Bangladesh 2 to 3 crops are grown in a year. **Wheat**– requires moderate temperature and rainfall during the growing season- bright sunshine at the time of harvest- thrives best in well-drained loamy soil-grown extensively in USA, Canada, Argentina, Russia, Ukraine, Australia and India- grown in winter in India. **Millets**– known as coarse grains-can be grown on less fertile and sandy soils-a hardy crop that needs low rainfall and high to moderate temperature and adequate rainfall- Jowar, bajra and ragi are grown in India-also in Nigeria, China and Niger. **Maize**-requires moderate temperature, rainfall and lots of sunshine-needs well-drained fertile soils- grown in North America, Brazil, China, Russia, Canada, India, and Mexico. **Cotton**– requires high temperature, light rainfall, 210 frost-free days and bright sunshine to

	grow-grows best on black and alluvial soils-Leading producers of cotton are China, USA, India, Pakistan, Brazil and Egypt-main raw materials for the cotton textile industry. **Jute**-known as the 'Golden Fibre'-grows well on alluvial soil- requires high temperature, heavy rainfall and humid climate- grown in the tropical areas-Leading producers of Jute are India and Bangladesh. **Coffee**– requires a warm and wet climate and well-drained loamy soil-Hill slopes are more suitable for the growth of crop-Leading producers are Brazil followed by Columbia and India. **Tea**– a beverage crop grown on plantations-requires cool climate and well-distributed high rainfall throughout the year for the growth of its tender leaves-needs well-drained loamy soils and gentle slopes-Kenya, India, China, Sri Lanka produce the best quality tea in the world.
2.	**In India there are three major cropping seasons, i.e. Rabi, Kharif and Zaid.** 1. **Rabi:** Crops are sown in winters between October to December and harvested between February to April. Major crops of this season are: wheat, barley, peas, gram, and oil seeds. 2. **Kharif:** Crops are sown in summers between May to July and harvested after rain i.e. between September to October. Major crops of this season are: rice, maize, jowar, bajra, sugarcane, jute. 3. **Zaid:** In between Rabi and Kharif crops zaid crops like: watermelon, cucumber are grown between April to June.
3	**World Map (Major Cash Crops)** 

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ODM Teachers' Note

Class	VIII	Subject	Geography	Plan For	Toppers

Prd	5	Chapter	5 Agriculture

Sub-Concepts	1. Agricultural Development 2. Agriculture in India
Teaching Aid To be used	World Map/Smart board

Sl. No	Step Wise (What to be done)
1	**Agricultural Development** refers to efforts made to increase farm production in order to meet the growing demand of increasing population. This can be achieved in many ways such as: 1. Increasing the cropped area. 2. Multiple cropping (Number of crops grown in a year) 3. Improving irrigation facilities 4. Use of fertilizers and high yielding variety of seeds. 5. Mechanization of agriculture is also another aspect of agricultural development.

2	**Food Security:** 1. The number of people who do not have food security is disproportionately large in some region of our country particularly in economically less developed states with the higher incidence of poverty. 2. The focus of the policy is on fixing the support price for procurement of wheat and rice to maintain their stocks. Food Corporation of India. 3. The FCI procures food grains from the farmers at the government announced minimum support price. 4. The competition for land between non – agriculture uses such as housing etc., 5. The farmers are badly affected by the uncertainties of production and market. 6. The higher the supply the lower is the demand.
3	**Agriculture development in India:** 1. Agriculture which provides a livelihood for more than 60 per cent. 2. The government of India embarked upon introducing agricultural in the 1960s and 1970s 3. The government also announces minimum support prices remunerative and procurement prices for important crops. 4. Consolidation of holdings, cooperation and abolition of zamindari, etc. were given priority to bring about institutional reforms in the country after independence. 5. The green revolution based on the use of package technology and the white revolution (operation flood) were some of the strategies initiated to improve a lot of Indian agriculture. 6. Land reform was the main focus of our first five-year plan. 7. Development in few selected areas. In the 1980s and 1990s, a comprehensive land development programme was initiated, which includes both institutional and technological reforms. 8. Provision for crop insurance against drought, flood, cyclone, fire and disease. 9. Establishment of Grameen Banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest. 10. Kisan credit cards and personal accident insurance schemes introduced. 11. Special weather bulletins and agricultural programmes for farmers were introduced on radio and T.V. 12. The government also announces minimum support price. 13. Remunerative and procurement prices for important crops to check the exploitation of farmers by speculators and middleman.

ODM Teachers' Note

Class	VIII	Subject	Geography	Plan For	Toppers

Prd	6	Chapter	5 Agriculture

Sub-Concepts	**Case study of India and USA**
Teaching Aid To be used	**World Map/Smart board**

Sl. No	Step Wise (What to be done)

1

A farm in USA	A farm in India
1. The size of the farm is large.	1. here the size of the land is comparatively small.
2. Owner's house is in the farm.	2. Owner lives in a main village and travels to the farm every day.
3. The farmer makes sure that soil and water resources meet the needs of the crop.	3. Due to inadequate supply of water and fertile soil, farmers have to purchase high yielding variety (HYV) seeds from market every year.
4. The farmer takes the help of technology and sends the soil samples to a soil testing lab to check whether the nutrients are sufficient or not.	4. The farmer in India takes advice from his friends and elders as well as government agricultural officers regarding farming.
5. The farmer uses tractors, seed drills, harvester and all kinds of modern	5. The farmer takes a tractor on rent, and many still rely on traditional bullocks for

agricultural machinery.	ploughing the land.
6. The farmer owns a storage facility in the farm where he stores the crops before sending it to market.	6. He sells his crops in the *mandi / market* located in the nearby town. Since majority of the farmers do not have storage facilities and crops rot most of the time.
7. The farmer in USA works like a businessman.	7. Many farmers in India are peasants and get exploited by traders.