**STUDY METARIAL NO… 46**

**FOR T.D.C PART- II (GEOGRAPHY HON’S)**

 **Paper – 4th ( Economic Geography )**

 **BY**

 **Dr. ALPNA JYOTI**

 **Deptt. of Geography, Marwari College, Darbhanga**

 **LNM University, Darbhanga**

**Q. -COMMERCIAL GRAIN FARMMING :-**

Introduction –

 *Commercial grain farming is an extensive and mechanised form of agriculture. This is a development in the continental lands of the mid-latitudes, which were once roamed by nomadic herdsmen. The continental position, well away from maritime influence, and the low precipitation (between 305 and 660 mm/12 and 26 inches) make crop cultivation a calculated risk. It was the invention of farm machinery which enabled farmers to cultivate grain on a large scale, and there is a marked specialisation in wheat monoculture in many areas. Communication with the outside world is mainly by railways and the bulk of the grain harvest is exported.*

 *Just as the name suggests, in this method, farmers grow grains and trade them in the market. Wheat and maize are the most common crops of commercial grain farming. Farmers of Asia, Europe, temperate grasslands of North America generally practice this type of farming.*

*Characteristic Features of Commercial Grain Farming::*

***(a) High Man /Land ratio:***

 *Availability of land is the greatest reason for the success­ful development of commercial grain farming in temperate regions. Low density of population (50-200 persons/ sq. km.) facilitates higher per capita land avail­ability.*

***(b) Farms are very large:***

 *The wheat farms in mid-latitudes are very large, ranging from 240 to 16,000 hectares. Though average size of the farm in the USA is about 400 hectares. In these areas land is cheap that makes it possible for a farmer to own very large holdings.*

***(c) Specialisation in single crop:***

 *Commercial grain farming is highly specialised and generally one single crop is grown. In most commercial grain regions that crop is wheat. Both winter wheat and spring wheat is grown in these areas.*

***(d) Lack of Manual labour:***

 *Due to the development of secondary and tertiary sec­tors (mining, manufacturing, trade and commerce) in this whole region, agricul­ture is no more a lucrative occupation. As population density is low and better scope of employment in other sectors exist, labour becomes costly.*

***(e) Low production per unit of land:***

 *Due to abundance of land, emphasis is not generally given to increase production per unit area of land. Average production remains below 2,000 kg./hectare.*

***(f) Highly mechanised:***

 *The commercial grain farming is highly mechanised. Cultivation from ploughing to harvesting is often entirely mechanised. The use of tractors ploughs drills and combines harvests which reap, thresh, winnow and sack the grain all in one operation is common.*

***(g) Low yield per acre but high yield per man:***

 *In this farming wheat grown gives comparatively low yields. The average yield is seldom more than 1,700 kg per hectare, whereas under intensive cultivation the yield is more in many countries. But because of mechanisation, less labour force is required; therefore, yield per man is high.*

*Efforts are always made to increase productivity per person, even if the production per acre remains low.*

***(h) Dominance of Single crop/Monoculture:***

 *Overwhelming dominance of wheat cultivation is the characteristic feature of commercial grain farming. Only in some fringe areas, i.e., drier parts, Maize and Millets are grown.*

***(i) Dependence on Market and Export:***

 *Commercial grain farming, as the name suggests, is entirely dependent on export. The cultivators consume very little, thus bulk of the product is sent to market for export. It is indeed, the market that governs the magnitude of production and nature of the crop. Slightest change of international price may badly affect the entire agricultural system.*

*Constant vigil is made to keep international price in a stable position. Often ‘valorization’ proc­ess is adopted to keep high international price level. In this regard, excess prod­uct is destroyed to restrict supply of the product in the market which, ultimately, maintains stability of demand and price.*

***(j) Absence of manual labour and dominance of machines:***

 *Manual labour is rela­tively fewer. Entire sowing and harvesting operation is carried out by machines. Tractors, harvesters, winnowers, thrashers and other machines are employed dur­ing cultivation. Apart from these, for marketing, hayracks, wagons, mowers, stokers and even airplanes for spray of pesticides are also necessary. It involves millions of dollars.*

***(k) Huge expenses:***

 *Huge expenses both fixed and recurring are involved in this system. Fixed overhead expenses are immense that includes machinery, farm build­ing, construction, and restoration of land. The other important cost is insurance. it protects farmers from devastating effects of crop failure.*

***(l) Transport and communication:***

 *Speedy and smooth transport system is a pre­requisite for commercial grain farming as it is entirely dependent on export mar­ket. The area is crisscrossed by super highways and railways to facilitate smooth export business.*

***(m) Government participation:***

 *As this agriculture involves large amount of money, the government remains keen for its success. Any major debacle may adversely affect the national economy. So, the government provides indirect support in infra-structure building and export subsidies.*

***(n) Participation of Financial institution:***

 *Financial institutions bank, insurance etc. provide substantial financial assistance to the cultivators.*

***(o) Farm ownership:***

 *Most of the farms are owned by individuals. Co-operative and state participation is almost absent.*

***(p) Climatic influence:-***

 *Climate plays a very important role in extensive commercial farming. Low rainfall (30 to 60 cm), bright sunshine during harvesting season and, practically, no irrigation facilities are major characteristic features of this cultivation.*

 *Major areas where commercial grain farming is pracised are temperate grasslands of North America, Europe and Asia. 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.*

 *Commercial grain farming has successfully developed in economically developed tem­perate region where population density is low, availability of land is high and only a small fraction of the population is dependent on agricultural activities.*

*The major countries where commercial grain farming has successfully developed are U.S.A. and Canada in N. America; Argentina in S. America; Australia and New Zealand in Oceania and Ukraine, Russia, Germany, France, Netherlands etc. in Europe. The Eurasian steppes, N. American prairies, Argentinian pampas, S. African veld, Canterbury plains in New Zealand and downs grasslands of S. Africa exhibit greatest devel­opment of commercial grain farming.*

**

***Location of Commercial Grain Farming:-***

 *Asia is noted for several plantation cash crops, of which the most important are tea, rubber, palm oil, coconuts, and sugarcane. Jute, a commercial fibre, though it has decreased in significance, remains a major export crop of Bangladesh.*

*Origins of agriculture, the active production of useful plants or animals in*[*ecosystems*](https://www.britannica.com/science/ecosystem)*that have been created by people. Agriculture has often been conceptualized narrowly, in terms of specific combinations of activities and organisms wet-rice production in*[*Asia*](https://www.britannica.com/place/Asia)*,*[*wheat*](https://www.britannica.com/plant/wheat)*farming in*[*Europe*](https://www.britannica.com/place/Europe)*,*[*cattle*](https://www.britannica.com/animal/cattle-livestock)*ranching in the Americas, and the like but a more*[*holistic*](https://www.merriam-webster.com/dictionary/holistic)*perspective holds that*[*humans*](https://www.britannica.com/topic/human-being)*are environmental engineers who disrupt terrestrial*[*habitats*](https://www.britannica.com/science/habitat-biology)*in specific ways.*[*Anthropogenic*](https://www.merriam-webster.com/dictionary/Anthropogenic)*disruptions such as clearing vegetation or*[*tilling*](https://www.britannica.com/topic/tillage)*the*[*soil*](https://www.britannica.com/science/soil)*cause a variety of localized changes; common effects include an increase in the amount of light reaching ground level and a reduction in the competition among organisms. As a result, an area may produce more of the plants or animals that people desire for*[*food*](https://www.britannica.com/topic/food)*,*[*technology*](https://www.britannica.com/technology/technology)*,*[*medicine*](https://www.britannica.com/science/medicine)*, and other uses.*

*Harvesting wheat on a farm in the grain belt near Saskatoon, Saskatchewan, Canada. A potash mine appears in the distant background. George Hunter*

*Over time, some*[*plants*](https://www.britannica.com/plant/plant)*and*[*animals*](https://www.britannica.com/animal/animal)*have become domesticated, or dependent on these and other human interventions for their long-term*[*propagation*](https://www.merriam-webster.com/dictionary/propagation)*or survival.*[*Domestication*](https://www.britannica.com/science/domestication)*is a biological process in which, under human selection, organisms develop characteristics that increase their utility, as when plants provide larger seeds,*[*fruit*](https://www.britannica.com/science/fruit-plant-reproductive-body)*, or tubers than their wild progenitors. Known as cultigens, domesticated plants come from a wide range of families (groups of closely related genera that share a common ancestor; see*[*genus*](https://www.britannica.com/science/genus-taxon)*). The*[*grass*](https://www.britannica.com/plant/grass)*(Poaceae),*[*bean*](https://www.britannica.com/plant/bean)*(Fabaceae), and*[*nightshade*](https://www.britannica.com/plant/nightshade)*or*[*potato*](https://www.britannica.com/plant/potato)*(*[*Solanaceae*](https://www.britannica.com/plant/Solanaceae)*) families have produced a disproportionately large number of cultigens because they have characteristics that are particularly*[*amenable*](https://www.merriam-webster.com/dictionary/amenable)*to domestication.*

 *Domesticated animals tend to have developed from species that are social in the wild and that, like plants, could be bred to increase the traits that are advantageous for people. Most domesticated animals are more*[*docile*](https://www.merriam-webster.com/dictionary/docile)*than their wild counterparts, and they often produce more*[*meat*](https://www.britannica.com/topic/meat)*,*[*wool*](https://www.britannica.com/topic/wool)*, or milk as well. They have been used for traction, transport, pest control, assistance, and companionship and as a form of wealth.*

 ***North America :-***

 *In North America, there are several areas of commercial grain farming. The largest area runs from Alberta, through Saskatchewan and Manitoba to Dakotas. Another centre is in Kansas and spills over into neighbouring states. Smaller regions appear in eastern Washington and Oregon, eastern Illinois and northern Iowa.*

***South America :-***

 *In South America, Argentina has a large region of commercial grain farming. Australia has two areas, one in the south-west and another in the south-east. In fact, commercial grain farming is a mid-latitude activity and mostly done in between 30° to 55° N and S latitudes.*

 *south America is one of the leading players in the global agricultural market and accounts for approximately ten per cent of the world’s agricultural product export. South America also has many commercial farms, especially in Argentina, Brazil, Chile, Uruguay, and Colombia.*

***Growth in South American Agriculture:-***

 *The last ten years has shown considerable growth in agricultural production within South America. The underlying reasons for this growth are:*

* *New techniques and technology are being used to bring formally unusable and barren lands into productivity*
* *The introduction of hybrid and disease resistant seeds, fertilizers and pesticides*
* *New demands from an increasingly sophisticated high end market*
* *Increased demand for meat*
* *Increase in demand from other markets*

*The primary producer is Brazil, with abundant land and a significant rural labour force. Brazil’s Cerados region covers an estimated 207 million hectares (equal to twenty six per cent of the US lower forty eight states agricultural land). The area that can be cropped is estimated to be around 120 million hectares. Less than 100 million hectares are currently utilised, with irrigated land covering around 30 million hectares and the remainder under pasture.Development of the Cerados began in the 1970’s with creation of extensive livestock operations, this was followed by intensive soybean production and soil management techniques. Significant migration into the region occurred from the 1980’s onwards.*

***Africa :-***

 *Colonialism brought large-scale farming to Africa, promising modernisation and jobs but often dispossessing people and exploiting workers. Now, after several decades of independence, and with investor interest growing, African governments are once again promoting large plantations and estates. But the new corporate interest in African agriculture has been criticised as a “*[*land grab*](http://www.tandfonline.com/doi/abs/10.1080/03066150.2011.559005)*”.*

 *Small-scale farmers, on family land, are still the mainstay of African farming, producing*[*90% of its food*](http://www.fao.org/fileadmin/templates/est/Investment/Agriculture_at_a_Crossroads_Global_Report_IAASTD.pdf)*. Their future is increasingly uncertain as the large-scale colonial model returns.*

 *To make way for big farms, local people have lost their land. Promises of jobs and other benefits have been slow to materialise, if at all.*

*The search is on for alternatives to big plantations and estates that can bring in private investment without dispossessing local people and preferably also support people’s livelihoods by creating jobs and strengthening local economies.*

 *Farming often touted as an “inclusive business model” that links smallholders into commercial value chains. In these arrangements, smallholder farmers produce cash crops on their own land, as ‘Out growers’, on contract to agroprocessing companies.*

 *Then there is growth in a new class of “*[*Middle Farmers*](https://boydellandbrewer.com/africa-s-land-rush-pb.html)*”. These are often educated business people and civil servants who are investing money earned elsewhere into medium-scale commercial farms which they own and operate themselves.*

 *These different models formed the*[*focus of our three-year study*](http://www.tandfonline.com/doi/full/10.1080/03066150.2016.1263187)*in*[*Ghana*](http://www.tandfonline.com/doi/full/10.1080/03066150.2016.1259222)*,*[*Kenya*](http://www.tandfonline.com/doi/full/10.1080/03066150.2016.1260555)*and*[*Zambia*](http://www.tandfonline.com/doi/full/10.1080/03066150.2016.1276449)*. Evidence suggests that each model has different strengths. For policy makers, deciding which kind of farming to promote depends on what they want to achieve.*

***Australia :-***

 *about 22 million hectares are planted annually to commercial grain crops across Australia. During the past decade, state-of-the-art farming systems, new plant varieties and new techniques have increased the reliability of grain production in Australia's growing environment. Because it is a cultural phenomenon, agriculture has varied considerably across time and space. Domesticated plants and animals have been (and continue to be) raised at scales ranging from the household to massive commercial operations. This article recognizes the wide range of activities that*[*encompass*](https://www.merriam-webster.com/dictionary/encompass)*food production and emphasizes the cultural factors leading to the creation of domesticated organisms. It discusses some of the research techniques used to discern the origins of agriculture as well as the general trajectory of agricultural development in the ancient societies of Southwest Asia, the Americas, East Asia,*[*Southeast Asia*](https://www.britannica.com/place/Southeast-Asia)*, the Indian subcontinent, and*[*Europe*](https://www.britannica.com/place/Europe)*. For specific techniques of habitat alteration and*[*plant*](https://www.britannica.com/plant/plant)[*propagation*](https://www.britannica.com/science/propagation-of-plants)*, see*[*horticulture*](https://www.britannica.com/science/horticulture)*. For techniques of*[*animal*](https://www.britannica.com/animal/animal)*propagation, see*[*livestock farming*](https://www.britannica.com/topic/livestock-farming)*;*[*poultry farming*](https://www.britannica.com/topic/poultry-farming)*.*

**India :---**

*This type of farming is what contributes to the country’s*[*economy*](https://www.toppr.com/guides/general-awareness/economy/indian-economy/)*with huge*[*volumes*](https://www.toppr.com/guides/maths/how-big-how-heavy/volume/)*of yield. In fact, the crops grown commercially in India are used as an export item across the world.*

 *In this farming method, the Indian farmer uses a high amount of fertilizers, pesticides, and*[*insecticides*](https://www.toppr.com/guides/biology/microorganisms/microorganisms-and-its-uses/)*to enhance and maintain the growth of the crops. Depending on the crop best suited to the respective weather and soil, commercial farming in India varies across different regions.*

*For example, Haryana, Punjab and West Bengal grow rice commercially, while it is a subsistence crop in Orissa. Major crops grown commercially in India are wheat, pulses, millets, maize and other grains, vegetables, and fruits.*

*Another method of commercial farming is ‘plantation’. Plantation farming is a blend of agriculture and industry, practiced across a vast area of land. It is a labour-intensive farming method that also uses the latest technological support for sustaining, cultivating and yielding. The produce yielded from plantations is treated as raw materials to be subsequently used in their respective industries.*

*Crops grown: Some of the significantly grown crops in plantation farming are tea, coffee, rubber, sugarcane, banana, coconuts, etc. Farming is one of the oldest*[*economic activity*](https://www.toppr.com/guides/commercial-knowledge/business-and-commercial-knowledge/what-are-economic-activities/)*in our country. Different regions have different methods of farming. However, all these methods have significantly evolved over the years with changes in weather and climatic conditions, technological innovations and socio-cultural practices. Farming methods prevalent in India can be classified as follows*

***Different names of this farming method are:***

*‘Jhumming’ in the North-Eastern states of Assam, Meghalaya, Mizoram, Nagaland, Pamlou district of Manipur, Baster district of Chhattisgarh, and in the Andaman and Nicobar Islands.*

*‘Bewar’ or ‘Dahiya’ in Madhya Pradesh*

*‘Podu’ or ‘Penda’ in Andhra Pradesh,*

*‘Pama Dabi’ or ‘Koman’ or Bringa’ in Orissa*

*‘Kumari’ in the Western Ghats*

*‘Valre’ or ‘Waltre’ in South-eastern Rajasthan*

*‘Kuruwa’ in Jharkhand and*

*‘Khil’ in the Himalayan region*

*Crops grown: Some of the crops grown through the primitive method are bananas, cassava, rice, maize, and millet.*

 **-------------------------------00000------------------------**