Climate Characteristics Influence Economic Development | Sample Answer

Examine how climate characteristics influence economic development.

(2016 Q24)

Climate has a profound effect on all areas of economic development. In this answer I will discuss how climatic characteristics influence primary economic development in the form of agriculture and tertiary economic development in the form of tourism.

Aspect 1 – Difficult characteristics on agriculture

The first aspect that I will discuss is how difficult climatic characteristics influence agricultural development. These climatic conditions can be found in areas on the fringe of cool or warm temperate maritime climates.

Climate can be defined as prevailing weather conditions of a region over a long period of time; + 35 years. Climate determines the location and the productivity of all agricultural activities.

Climate will affect agriculture through rainfall, temperature and other conditions. The type, intensity, distribution and reliability of rainfall influences agricultural production in regions all over the world.

Similarly, temperature determines the length of the growing season. Climate directly influences the type of agriculture that can take place in a given area by determining the type of crops that can be grown and the style of farming that is practised.

Extensive subsistence farming tends to be found in regions where climatic conditions are more difficult and productivity per hectare is low. This is evident in the peripheral West of Ireland region where the climate has greatly influenced the development of agriculture.

The climate of the Western region, like the rest of Ireland, is cool temperate oceanic. The climate is mild and wet throughout the year and very windy. This is directly linked to the prevailing south westerly winds and frontal depressions, which are forced to rise over the mountainous, western coastline.

These create relief rain especially over the mountains. Precipitation can be higher than 1,500 and 2,000 mm annually, with more than 250 days of rain in the year, considerably more than the east coast of Ireland.

A combination of year-round rainfall and the upland relief of the area results in peaty and waterlogged soils. These soils are not very fertile and there are large areas of blanket bog in the Western region.

The heavy rainfall is an obstacle to the development of agriculture in the region. As a result, farm production in the Western region is based on pastoral farming, especially sheep in the upland areas and cattle rearing on the lower ground.

Very little land in the region is suitable for tillage. Similarly, the Falkland Islands also practise sheep farming on an extensive scale because the cool temperate climate of the region dominated by the Atlantic Ocean and the poor soils that have developed as a result of it have hindered any profitable alternatives.

Climate also negatively influences agricultural production in the Warm temperate Mezzogiorno region of Italy. During the summer this region is influenced by Sirocco winds, which blow up from the Sahara causing drought in the region. Precipitation is unreliable. As a result, agriculture in the Mezzogiorno is unproductive in some areas.

Aspect 2 - Favourable characteristics on agriculture

The second aspect I will discuss is how favourable climatic characteristics influence agricultural development. Intensive farming tends to be found in regions where climatic conditions are good for agriculture and output per hectare is high. These regions tend to be found in temperate zones of the world where few extremes experienced climatically, e.g. Cool temperate oceanic regions.

This is evident around the Greater Dublin Area in Ireland. There is a variety of intensive commercial agriculture in the G.D.A. Arable farms growing wheat are large and profitable producing almost 12% of Ireland's wheat crop.

Climate is an important factor in determining the productivity of agriculture in this region. The climate of the region is cool temperate, but it is warmer and drier than the West of Ireland.

There is less rainfall and it tends to fall evenly throughout the year with a summer minimum. On average 554mm of rain falls in a year and this helps crop growth and soil development.

Frost is rare due to the influence of the Irish sea; the growth season is longer. There are almost 20 more growing days in the GDA than in the west of the country.

Another core area, the Paris Basin, is one of the most productive agricultural regions in Europe. Its successful development can in part be attributed to climatic conditions.

The Cool Temperate Maritime Climate and Transitional / Continental Climate are favourable for crop growing as there is little variation (range) in temperature.

Summer temperatures average 19-16°C. This makes it ideal for growing cereals. This region is known as the 'granary of France' as 60% of French cereal production occurs there.

The Paris basin produces 54 million tonnes of cereal each year. Wheat accounts for 58% of all crops grown. The region also produces some of the best wines of in the world especially the 'Champagne' region to the east of Paris.

The climate also allows the development of a very healthy dairy industry in areas such as Brie where this distinctive 'Pays' produces world famous cheese. This is partially due to the spring / summer max in rainfall that feeds the grasses for the cattle.

Aspect 3 - impact on tourism

The third aspect that I will discuss is how climatic characteristics have influenced the economic activity of tourism in the Mediterranean region of Europe. A Mediterranean climate can attract many visitors to regions that experience its climate regime.

Over 220 million tourists visit the Mediterranean annually and tourism represents an important economic activity in many Mediterranean countries. According to the World Tourism Organization; the Mediterranean receives one third of the income generated by international tourism.

The most popular tourist destinations in the Mediterranean include the Costa Brava in Spain, the Côte D'Azur in France, the Adriatic Coast of Italy and the Balearic Islands.

The development of tourism in the Mediterranean has been influenced by climate. The region experiences a warm temperate oceanic climate (Mediterranean).

Summers are hot and dry with clear, cloudless skies and temperatures between 25°C and 35°C. Winters are cooler and wetter; however, average temperatures are 10-12°C.

Climate has been recognised as the main factor in influencing people's choice of tourist destination. The majority of tourists to the Mediterranean come from North and Western Europe where they want to escape the cooler temperatures and experience more hours of sunshine.

The climate is the main reason visitors are attracted to the Mediterranean. People travel to the Mediterranean to experience sunny, coastal holidays as the climate offers ideal conditions for relaxation and a variety of water based and outdoor sports.

The climate of the Mediterranean differs from the wet, unsettled weather conditions that characterise Northern Europe. Climate determines the type of tourist activities available in the region and the activities associated with beach holidays continue to attract large numbers of tourists to the Mediterranean.

Peak tourism occurs during the summer months when conditions are most favourable i.e. June, July & August. This is peak tourist season due to several factors but mostly due to the number of days sunshine available (+300 days).