

How Geographic Features Influence Settlement



The development of cities throughout the world is influenced by geographic features. Each feature offers advantages and disadvantages to the settlement of large groups of people. Most cities are located where there are more geographic advantages than disadvantages. The boundary between two different features, for example where mountains meet the flat lands or where land meets the sea, may offer the advantages of both features. These locations offer opportunities for people to develop trade and industry.

Although there are other geographic features, some of the most important features that influence the growth of cities are [water](#), [landforms](#), [vegetation](#), [soil](#) and [climate](#). Each of these is discussed below.

Water



Most cities are found on coastlines of lakes, rivers, streams, oceans, seas, bays, canals, or natural harbors.

Food: Bodies of water may offer sources of drinking water as well as food such as fish, crabs, oysters, and kelp. Rivers provide irrigation for food production.

Resources for Companies: Moving water provides power for industries.

Transportation: Water also offers an opportunity for transportation. Some ships bring goods from lands across the sea, and others take goods away. Large ships can sail to some inland cities through wide rivers and canals. Harbors provide shelter for ships.

Recreation: Many people enjoy recreational activities on the water such as boating, fishing, swimming, etc.

Safety: People settling near water need to be concerned with storms that could cause flooding. Some cities near water offer natural protection from enemies while others make the site more open to attack.

Examples: Examples of cities that developed on water include Sydney, Australia; and Istanbul, Turkey.

Landforms



The shape that land can take are known as landforms. Some landforms are high places such as mountains, hills, plateaus, and volcanoes. Some landforms are low places such as valleys, canyons, and plains.

Safety: Cities are built on hills and mountains to protect people from their enemies. People in mountainous cities are sometimes affected by severe weather conditions such as heavy snow, ice, mudslides, and forest fires.

Resources for companies: Natural resources of the mountains such as coal, silver, lead, lumber, tin, and gems attract settlers.

Food: Although it can be difficult to farm on steep slopes, people find ways to build flat terraces on the mountain slopes. Streams on mountains provide natural watersheds, making water available as a resource.

Transportation: The slope of the mountains can limit building opportunities and transportation.

Recreation: Mountains offer unique recreational experiences. People enjoy hiking, camping, and natural walks in the mountains. Sometimes the scenic views from high on the mountains are spectacular.

Examples: Madrid, Spain; Mexico City, Mexico developed on different types of landforms.

Vegetation



The plant life that is natural to an area is called vegetation. Vegetation can be classified into four broad categories: forests, grasslands, desert, and tundra. Soil drainage, slope and climate are factors determining the kinds of vegetation in a region.

Forests: Forests provide many resources. Wood is important as building material, as fuel, and as a raw material for paper and chemicals. Other things forests can provide are fruit, rubber, and medicines. Forests play an important role in farming. They provide shelter from the sun and winds and prevent rain from washing away precious topsoil. Forests provide protection for living creatures. As population and size of a settlement in a forest increases, land is often cleared of the trees and natural vegetation.

Grasslands: Grasslands are areas where grass is the major natural vegetation. A grassland is present in places where there is not enough rain to form a forest, but more than enough to form a desert. Most of the major grasslands are found in the interior parts of continents. The rich soil of grasslands makes it useful for pastures and for growing crops. Grasslands provide habitat for various species of animal life. During dry season fires can destroy large sections of grasslands.

Desert: A desert is an area where little rain falls and few kinds of plants grow. Deserts are made of sand, bedrock, gravel, boulders, and soil. When the wind blows, sand piles up, and dunes are formed. Deserts can take the form of flat land, mesas, and mountains. Deserts are located in all parts of the world, including tropical and polar

regions. Desert life is not easy for plants or animals. Although there is little rainfall, deserts have a water supply that is underground. This water sometimes rises to the surface. A fertile green area called an oasis may be found near such a water source.

Tundra: A tundra is a cold area with very few plants. Only plants with short roots such as grasses, mosses, and lichens can survive. The tundra is home to foxes, polar bears, wolves, caribou, musk oxen, lemmings and millions of birds. In the polar tundras, valuable mineral deposits are found under the soil.

Examples: Vegetation has affected the development of the cities of Jerusalem, Israel as well as the United States city of Lander, Wyoming.

Soil



Soil is the material which covers most of the earth's land surface. Soil can be made of various amounts of sand, silt, clay and other materials. The climate and the make-up of the soil in an area determine which plants will grow and whether erosion will occur. The soil contains nutrients for plant growth. The type of soil in an area is an important factor in the growth and development of a city.

Examples: The soils of Huntsville Alabama; and Aksum, Ethiopia affect the agriculture and industrial development of these cities.

Climate



Climate refers to the year-round weather conditions of an area. Different parts of the world have different climates. Climates can be classified as tropical, dry, mild, continental, polar, and high elevation. Climate can be an influence on the development of cities. Certain weather conditions such as temperature, atmospheric pressure, wind, humidity, precipitation, and cloudiness affect the vegetation and animal life in an area. People often choose to live or not live in an area because of its climate.

Examples: Kiana, Alaska; and Rio de Janeiro, Brazil have different climates and have developed in different ways.

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