

Major Landforms of Earth

A landform is a natural or artificial feature of the solid surface of the Earth or other planetary body. Landforms together make up a given terrain, and their arrangement in the landscape is known as topography.

This article will give details for Major Landforms of the Earth. They will be useful in the Geography segment of the IAS Exam.

Classification of Major Landforms of Earth

The surface of the earth is uneven, some parts may be rugged and some flat. The earth has an immeasurable variety of landforms.

These landforms are a result of two processes and they are:

1. Internal process- The Internal Process leads to the upliftment and sinking of the earth's surface.
2. External process- It is the continuous wearing down and rebuilding of the land surface and includes two processes namely:
 - **Erosion**- It is the wearing away of the earth's surface.
 - **Deposition**- It is the rebuilding of a lowered surface (occurred due to erosion).

The erosion and deposition processes are carried out by running water, ice and wind.

Landforms can be grouped based on the elevation and slope and they are:

- Mountains
- Plateaus
- Plains

Mountains

A mountain is an elevated portion of the Earth's crust, generally with steep sides that show significant exposed bedrock. A mountain differs from a plateau in having a limited summit area, and is larger than a hill, typically rising at least 300 metres (1000 feet) above the surrounding land. A few mountains are isolated summits, but most occur in mountain ranges

- **Any natural elevation of the earth's surface is called a Mountain.**
- **Range**- Mountains arranged in a line.
- **Glaciers** – Glaciers are permanently frozen rivers of ice in mountains.

There are three types of mountains and they are:

1. **Fold Mountains**

- They are rugged relief and high conical peaks.
- g. Himalayan Mountains and the Alps (Young fold mountains)
- The Aravali range in India (oldest fold mountain system in the world)
- The Appalachians in North America and the Ural mountains in Russia (very old fold mountains)

2. **Block Mountains**

- Created when a large mass of land is broken and displaced vertically.
- g. The Rhine valley and the Vosges mountain in Europe

3. **Volcanic Mountains**

- Formed due to volcanic activity.
- g. Mt. Kilimanjaro in Africa and Mt. Fujiyama in Japan.

How are the Mountains are useful?

- Mountains are very useful in various ways.
- They are the storehouse of water and many rivers have their basis in the glaciers in the mountain.
- Reservoirs are made and water is harnessed for the use of people.
- Water from the mountains is also used for irrigation and generation of hydro-electricity.
- Mountains have a rich variety of flora and fauna.
- The forests provide fuel, fodder, shelter and other products like gum, raisins, etc.
- Mountains also provide a tranquil site for tourists.

Plateaus

In geology and physical geography, a plateau, also called a high plain or a tableland, is an area of a highland consisting of flat terrain that is raised sharply above the surrounding area on at least one side. Often one or more sides have deep hills.

- A plateau is an elevated flat land.
- It is a flat-topped tableland standing above the surrounding area.
- e.g. The Deccan plateau in India is one of the oldest plateaus.
 - The Western plateau of Australia, the East African Plateau in Kenya (The Tanzania and Uganda), the Tibet plateau (the highest plateau in the world) etc.

How are Plateaus useful?

- Plateaus are very useful as they are rich in mineral deposits.
- E.g. African plateau is famous for gold and diamond mining
- Chhotanagpur plateau in India is a huge reserve of iron, coal and manganese

Plains

In geography, a plain is a flat expanse of land that generally does not change much in elevation, and is primarily treeless. Plains occur as lowlands along valleys or at the base of mountains, as coastal plains, and as plateaus or uplands

- Generally, plains are not more than 200 metres above mean sea level.
- Generally, plains are very fertile; hence these plains are very thickly-populated regions of the world.
- E.g. largest plains made by the rivers are found in Asia and North America
 - Large plains in Asia are formed by the Ganga and the Brahmaputra in India and the Yangtze in China.

How are the Plains useful?

- Plains are the most useful areas for human habitation.
- Building houses, construction of the transport network, as well as for cultivation is easy.
- In India, the Indo-Gangetic plains are the most densely populated regions.