

## **13. Georelief – Basic Characteristics of Georelief**

The complex of shapes of the Earth's surface is called **georelief (relief)**. Georelief is a landmark between solid lithosphere and pedosphere and liquid hydrosphere and gaseous atmosphere on the other side.

Processes that create georelief are **geomorphological processes**. By influence of them many **landforms – forms of georelief** are formed, such as slopes, valleys, mountains etc. These landforms has also hierarchy, smaller forms are parts of larger ones. For example riverbed is a part of a valley, valley is a part of mountains, mountains are part of continent.

Science about the georelief which studies the formation, evolution and character of relief forms and geomorphological processes is **Geomorphology**.

### **Geomorphological processes**

#### **Endogenic processes**

Endogenic processes or inner geomorphological processes are processes which come within the Earth. They form rough (great) features of the Earth's relief, such as continents, mountain ranges, volcanoes etc.

Main endogenic processes are **earthquakes, volcanoes, folding and faulting activity**.

#### **Endogenic processes**

Exogenic processes or outer geomorphological processes are caused by exogenic geomorphological factors and create small relief forms – **sculptures**, e.g. river valleys, waterfalls and coral reefs

Exogenic factors are **water, snow, glacier, wind, organisms and human**.

Exogenic process consist of 3 main stages:

- ✓ *weathering of rocks or erosion*
- ✓ *transportation of the material*
- ✓ *deposition of material*

**Weathering** is process of decomposition of rocks. Weathered material then stay in the same place. There are two main types of weathering, mechanical and chemical.

**Mechanical weathering** is influenced by different temperatures, frost or organism's activity. It is typical for desert (dry) and polar areas.

**Chemical weathering** is caused by air and water (by chemical processes). Weathered rock is changed and has different nature compared to the previous one. This type is typical for very wet (humid) areas, for example in rainforest.

**Erosion** is also process of decomposition of rocks, but material is transported somewhere else. Erosion is caused by water, wind and glacier.

#### **Keywords**

complex, georelief, landmark, landform, slope, valley, riverbed, endogenic (inner) processes, exogenic (outer) processes, rough feature, sculpture, mechanical/chemical weathering, erosion, transportation, deposition, decomposition, nature, desert, rainforest