The effect of Erosion in formation the surface of the earth

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Erosion

It is a distinctive geomorphological processes that leave clear effects on the surface of the Earth where it has worked through a long ages to change its features continuously without stopping by varying degrees depending on the forces causing it and the environment in which it occurs dry or humid, reflecting its effects on human activity in the areas exposed to it (1)

It is a natural process that leads to the separation of rocks or soil from the surface of the earth in spot and move to another spot and includes three initial processes: weathering, erosion, and transport . Erosion usually extends to the extent of thousands or even millions of years (2)

Some human activities, such as mining, can accelerate their occurrence and may benefit from this process by helping them to build new soil from rocks.

Research problem

Does erosion have a role in shaping the earth's surface?

— Erosion has a role in bringing about changes in the topography and landmarks of the Earth's surface.

Hypothesis of research

The research hypothesis determines the solution of a problem that needs to formulate an unproven hypothesis and whose purpose is to reach results.

Types of Erosion

1- Water Erosion

Water Erosion occurs from the impact of raindrops on the surface of uncoated soil as the dynamic energy carried in these falling drops leads to the jumping of the grains of the soil from the impact site, and the jumping of the grains in the direction of the slope is greater than in the opposite direction and this leads to soil erosion (3)

-2River Erosion

Water flows on the surface of the earth from the rains fall on the plateaus and mountains, and gather the bulk of the rain water to turn into rivers and floods make their way between the hard rocks and soft ground from its sources to its estuaries, while the other side of the river water drainage into the pores of the earth's surface and then explodes look like springs or congregate or full wells.

After the river consists of concentrating its efforts in deepening the stream in order to reach the base level (sea level) so it becomes more active in breaking up the rocks and carry the tiny rocks to the sediment .

3-Marine Erosion

It means the movement of water by the effect of the action of waves and the movement of ebb and flow and sea currents .

4-Icy Erosion

Snow falls in the cold regions of the far north of the continents of Asia, Europe , North America, Antarctica and on the tops of mountains and high plateaus. Snow accumulates year after year until it eventually forms great surfaces of ice, sometimes hundreds of meters thick. Earth .

5- Wind Erosion

The active of Wind appears in hot and coastal and hot desert areas is seen to activate wind jet near the Earth's surface because wind-borne materials abound in the lower air layers.

Wind is the most important phenomena that form the surface in the desert areas of dryness and cracking presence due to daytime expansion and shrinkage at night, wind is a very important geologic factor in dry desert areas and generally the wind comes in the third degree after water and snow in the process of erosion and transport, but its importance in this field Increasing as the amount of rain decreases , we always notice the strength of the winds in Saudi Arabia and see dust and sand columns driven in some seasons.

Forms of Erosion

1. Membrane Erosion

This type of erosion is produced under the impact of rain drops collision on the surface of the earth, where increasing the amounts of rain and stability for a period of time is formed a plate of water with a certain thickness begins to run on land where there is no vegetation cover and along the slopes to form sewers with a centimeter dimension where this type of Gonorrhea is a barrier represented by plant residues or stones, from which a second branching is carried out.by splash so we can be said that this phenomenon is related to the action of the impact of the impact of rain on the surface and sporadic so it may be characterized at the level of flat areas (plains)

-2 Groove erosion

A phenomenon related to the action of accumulated blowing as the water plate moves along the disparity slopes where they work on cracking and erosion of the surface, especially at the level of soft formations that run blowing deepen the sewage, and we find the latter classified according to the degree of deepening to: -

A — reefs — This type of erosion is located at the level of weaken sloping, of a different lithological nature .

B — Thrombosis : It is the process of development of the grooves where blowing water works each time to deepen the sewage and can be observed phenomenon of soft rock nature.

3- Erosion by gravity) landslides (

It is one of a species dynamic mass as the phenomenon has a parallel relationship with the worker chemical and mechanical in attacking the solid rock of the mountain masses and so by the special lime ice cracking, and can sign the phenomenon in the study basin in the south side of the block level (head of Persia) and (Ras Ayouche) In the north, we observe it at the level of the northern foot of the AL-Rakrah arm.

Conclusions

1- Erosion contributes to changes in the topography and landmarks of the Earth's surface.

2- Erosion is the process that leads to the separation of rocks or soil.

3- The presence of changes in the Earth's surface forms due to the activity of geomorphological processes in terms of erosion and sedimentation.

4- The natural processes leave a negative and positive impact be positive and negative effects (positive effects help in the formation of soil and formations geological picturesque and negative effects of soil erosion — the destruction of fields by grooves.

Sources

1 — Terrain book , behind Hussein Dulaimi , p. 229.

2 — The book of natural geography, Ruba Suleiman Haddad, 2001, p 131.

3- The Book of Forms of the Earth, Salah El-Din Behairy, Contemporary House of Thought, Beirut, 1979.

4- Applied Geomorphology , Khalaf Hussein Ali Al-Dulaimi, First Edition, Al-Safa Publishing House, Amman, Jordan, 1999.

Internet Resources

1- http: // www.mogatel.com open share be hoht / geography / sec / 163. doc- cvt — htm .

2- h ttp: // www.mogatel.com open share behoht / geography / sec / 16 4.

3- http: // www.use70com / vb.1717 — 3 — 8. 6 (8) htm .