The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 | **Pages:** 136-139
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-21

IMPACT FACTOR
2021: 5. 634

OCLC - 1121105553

Morphological Types Of Central Asian Deserts And Their Geographical Aspects

Istat Elmurodovna Mirzoyeva
Senior Lecturer, Department Of Ecology And Geography, Bukhara State University, Uzbekistan

Guzalbonu Fazliddin Kizi Tukhtaeva
3rd Year Student Of Geography Education, Bukhara State University, Uzbekistan

ABSTRACT

This article provides detailed information on the types of deserts formed by the soil and surface cover deposits in the natural geographical region of Central Asia and their specific geographical features.

KEYWORDS

Desert, erg, cocies, nefud, hamada, sand, lyoss, man-made, slag, clay, bald, sandy, temperature, climate, feldspathic rock, clay shale, quartz, Cooper Creek.

INTRODUCTION

Deserts are rare areas that embody the unique blessings of nature. Their rarity is primarily due to the abundance of sunlight and temperature, which is the source of life for the living world, and the extreme scarcity of water resources.

But water can be brought to the desert by the human intellect and power, and there is no sunlight or heat. Another rare feature of the deserts of Central Asia, including Uzbekistan, is that the Amudarya and Syrdarya rivers flow

The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 | **Pages:** 136-139
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-21

IMPACT FACTOR
2021: 5. 634
OCLC - 1121105553

from their center to the west - to the Aral Sea. These rivers are a gift from the Tianshan-Pamir mountains. The mountains collect water and finally pass it to the deserts. This grace of the mountains to the deserts has been going on for a long geological and historical period. And people have used this ancient grace to build beautiful places in the deserts - oases and cultural values.

The formation of deserts in Central Asia is based on alpine deformation. According to the opinions of scientists A.G. Babaev and Z.G. Freikin, the desert is a natural area with a very dry and hot climate, extremely low rainfall and relatively sparse vegetation. Such places are characterized by low atmospheric precipitation (up to 250 mm) and their uneven distribution over the seasons, as well as several times higher evaporation than precipitation. There is no constant flow of water in the deserts. The natural zone with such climatic features occupies a large part of Central Asia.

The following deserts are divided according to the soil and surface deposits and the porous rocks of the ancient alluvial plains: sandy deserts, gravel and sand-gravel deserts in the gypsum plateau and foothills, gypsum plateau and gravel gypsum deserts in the foothills, flat plateau deserts, sandy deserts on low carbonate sandy soils, lyoscic deserts in foothill plains, clayey barren deserts in place of ancient foothills and river deltas, loamy high deserts in low mountains composed of saline marl and clay rocks, and saline shores.

Sandy desert is a porous sedimentary rock consisting of edged or polished (round) particles with the size of 0.01 mm to 2 mm. Depending on the formation of sands they are divided into sea, lake, river, desert, glacial sands. The sand contains a lot of quartz from minerals, in addition to feldspar, clay shale and other mineral particles. Sandy deserts are formed in very large depressions composed of alluvial sediments, which cover large areas and are called sand in Central Asia, erg in Africa, and nefud in Arabia. The Syrdarya, Zarafshan, Amudarya, Tarim River, which crosses the Kyzylkum and Karakum deserts in different places, the Tarim River, which crosses the Taklamakan desert, and the Cooper Creek and other rivers, which cross the sandy deserts of Australia. The Kalahari Desert is composed of lake-river sands, and the lands of the Sahara Desert are covered by Quaternary streams. In rocky deserts, there are sand massifs formed by the physical erosion of rocks, which can also be called eolian and proluvial sands. Such sand massifs are found in the Central Kyzylkum, Gobi Desert and other surfaces.

Clay deserts are formed in sea, lake, river and proluvial clay deposits. They are deposited in areas where large deposits do not reach the lower reaches of rivers. The size of clay particles is 0.01 mm and less, in ancient times the Zarafshan River formed many lakes in the Alat district, from the sedimentation of clay particles at the bottom, the clay layer is close to the surface, and therefore forms many lakes from burning oil. These waters evaporate during the oil-free period. Salts have accumulated on the surface of the hard bottom of the lake. From such deposits clayey deserts are formed.

It is a much wider, almost flat area, occupying lowlands in the barren and semi-desert regions. The surface is mainly composed of clay rocks. During the rainy season, water often accumulates and turns into shallow lakes. As the days heat up, the water evaporates and

The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 | **Pages:** 136-139
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-21

IMPACT FACTOR
2021: 5. 634
OCLC - 1121105553

chaotic cracks form on the surface of the bald spot. The baldness occurs in the depressions between the sand dunes, on the flat lowlands. Most often found in ancient river valleys, deltas and foothills.

Coccies are naturally shallow basins found in baldness in the Central Asian deserts. Water accumulates in the cocoons during spring rains. With the advent of summer, the water dries up and the surface turns into a bald spot covered with a layer of salt. In Turkmenistan and Uzbekistan, ponds (reservoirs) being built to collect spring water in clayey areas can also be called coke. The water is used temporarily to irrigate livestock.

Salt marshes are soils with high salt content in the upper layers of deserts and semi-deserts. As a result of the evaporation of groundwater, salts rise to the surface and form a crust. The top layer may contain 10-15% salt.

Saline - swampy saline soils, which are formed as a result of the outflow of mineralized groundwater in the lower parts of the land (clayey-saline deserts are called saline), the drying up of lakes in the summer. For example: soil salinity in Ustyurt.

Lyoss - (German lyoss - porous) is a yellowish or pale yellow, fine-grained small sedimentary rock and rich in calcium carbonate). Lyoss is especially common in China, Central Asia, Ukraine, reaching a thickness of several tens of meters. Lyoss soils are similar in appearance to sand and gravel, with the last two bodies showing a slight stratification, the larger particles are darker and whiter, and the walls are not as steep as lyoss if they form a jar.

Rocky deserts or hamlets (the rocky deserts of North Africa are so named by the indigenous peoples, the term can be applied to all deserts of this type) crystalline bedrock are located close to the earth's surface and therefore belong to non-alluvial bedrock massifs. Their surface is covered with large stones of erosion products. Hamadas are widespread in the mountains and foothills of Mangyshlak, Kyzylkum, Africa, Australia, in the deserts of Nurata, Zarafshan, Gissar. The wind enters the cracks between the rocks and blows away the small rocks, constantly stripping the rocks and causing them to heat up and cool down again.

Gypsum deserts - the surface of rocks is carbonate and has a thick layer of gypsum. When water is released into such soils, the gypsum in the soil layers and under it melts and forms underground cavities, which are called sliding lungs. All the water in the irrigated lands goes underground through these lungs. Such deserts include Ustyurt, Malikchul, some parts of Karnob desert, massifs around Shurkul reservoir, etc. It is also found on the plateaus and foothills of other lands.

In short, geographers must first consider that relief is the leading component of the landscape. From this point of view, it is worthwhile to study in depth the following aspects of relief. Morphography, morphometry, genesis, age, stages of development, dynamics of relief, as well as geomorphological processes are studied when conducting any natural geographical research.

The laws governing the occurrence of landforms in relation to the development of the earth's crust are discussed in more detail. Therefore, the current state of the relief is important to determine its further development, especially to predict geomorphological processes.

The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 | **Pages:** 136-139
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-21

IMPACT FACTOR
2021: 5. 634
OCLC - 1121105553

It is necessary to study in detail the man-made reliefs on a scientific basis to solve the problems of ecology, desertification, nature protection, rational use of natural resources, which arise as a result of human impact on nature. Therefore, serious issues such as the study of the formation of man-made landforms, management of geomorphological processes, reclamation, prevention of unforeseen events (sand movement, landslides, landslides, landslides, etc.) should be in the focus of geographers.

REFERENCES

1. Abdulkosimov A.A., Abbosov S.B. Origin, formation and geographical distribution of deserts. // Information of the Geographical Society of Uzbekistan. Volume 28 –Tashkent, 2007. –P. 6-10.
2. Mamatkulov M. Geomorphology of Central Asia. —T.: "Universitet" publishing, 2008.
3. Nazarov I.K. Abiogenic flows in arid geosystems: optimization of nature management. — Tashkent. "Fan" publishing, 1992. 100 p.
4. Toshov Kh.R., Mirzoyeva I.E. Quantitative and seasonal distribution of precipitation in Bukhara region. Proceedings of the Republican scientific-theoretical-practical conference "Geographical bases of efficient use of resources of desert landscapes" .- Bukhara, 2010.-P.110-111.
5. Mirzoyeva I.E. Solutions to the desertification process and its negative consequences. Collection "Problems of increasing, maintaining, protecting and restoring soil fertility and materials of the Republican Scientific-Practical Conference.- Bukhara-2018. April 6-7. – P. 226.