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# Desert Landscape Types and Main Features in Kashkadarya Region (On the Example of Karshi Desert)

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***Abstract:*** *This article will scientifically analyze the natural and geographical features of desert landscapes, especially the Karshi desert, located on the territory of the Kashkadarya region. The fact that the formation of a desert landscape depends on long geological and geomorphological processes is substantiated by its inextricable relationship with climatic factors, soil cover, flora and fauna. The relief, geological structure, internal waters, climate and landscape structures of the Karshi desert are comprehensively studied. Also considered are the role of the area in the economy, its natural resources and environmental problems caused by anthropogenic factors. The article serves as an important scientific and practical resource in the study of desert zones.*

***Keywords:*** *Kashkadarya region, counter desert, desert landscapes, geological structure, natural resources, climate, soil types, vegetation cover, anthropogenic impact, environmental problem.*

**Introduction.** The formation of desert landscapes in the rugged Basin has long geological and geomorphological stages of development. It occupies an important place among the physical nurash processes among the relief-forming processes in the rock bottom. The intensive coverage of these processes is manifested in all places. And the composition of desert landscape types in a basin is formed in such a way that it always depends on the components associated with one and the factors that shape them. The extreme scarcity of moisture in the formation of desert landscapes in the Rocky Bottom, the dryness of the climate - caused a wide-ranging acceleration of desert landscapes. The basin has sufficient conditions for the formation of desert landscapes. It was formed in connection with its geological development.he extreme scarcity of moisture in the formation of desert landscapes in the Rocky Bottom, the dryness of the climate - caused a wide-ranging acceleration of desert landscapes. The basin has sufficient conditions for the formation of desert landscapes. It was formed in connection with its geological development. The undulating plains formed in the Rocky Bottom, the opposing desert lying flat among a series of sand hills, the Azkamar plateau, the Qarnab desert and the Nishan desert are a clear example of this (the amount of fat throughout the year is very low, the climate is hot and dry). In this article, we will mainly dwell in more detail on the location, geological structure, climatic conditions, soil cover, flora and fauna, landscape types and other data of the Karshi desert..

**Main part**. The undulating plains formed in the Rocky Bottom, The Lying opposite steppe, the azkamar plateau, the Karnob desert and the Nishan desert formed between the rows of sand hills. Among them-the opposite steppe stands out from its characters, which are characteristic of other desert landscapes. The Qarshi desert (in some sources Qarshi steppe) is a plain in southern Central Asia.ain part. The undulating plains formed in the Rocky Bottom, The Lying opposite steppe, the azkamar plateau, the Karnob desert and the Nishan desert formed between the rows of sand hills. Among them-the opposite steppe stands out from its characters, which are characteristic of other desert landscapes. The Qarshi desert (in some sources Qarshi steppe) is a plain in southern Central Asia. The Karshi desert floor was formed during the Paleozoic era. It was flooded several times during the later geological periods. By the end of the Paleogene and the beginning of the Neogene, seawater had retreated and become land. . The upper layer of the above - ground structure is covered with sand-mudflats, gravel and loamy deposits,

which are drained by rivers and streams. The upper floor of the Earth's surface is covered with sand, mainly by the streams brought by rivers and streams — mudflats, gravel and loamy deposits.he upper layer of the above - ground structure is covered with sand-mudflats, gravel and loamy deposits, which are drained by rivers and streams. [1]

It is located in the western part of the kashkadarya region and the eastern part of Turkmenistan. The total area is 13 thousand km2. To the East I carved the mountains of Hisor and Zarafshan-deep sloping Plains, to the north the Karnob desert, to the West and Southwest the Devkhona plateau, to the south and Southeast it is bordered by the hills separating the amudaryo and Kashkadarya basins. The main part of the Karshi desert is occupied by the steppe of Kashkadarya.t is located in the western part of the kashkadarya region and the eastern part of Turkmenistan. The total area is 13 thousand km2. To the East I carved the mountains of Hisor and Zarafshan-deep sloping Plains, to the north the Karnob desert, to the West and Southwest the Devkhona plateau, to the south and Southeast it is bordered by the hills separating the amudaryo and Kashkadarya basins. The main part of the Karshi desert is occupied by the steppe of Kashkadarya. The natural border between the Karakum Desert and the Karshi Desert runs through the Shorsoy Depression. The Karshi desert is separated from the Karnob desert by the saltwater swamp. The absolute height of the Karshi steppe is on average 400-500 m in the eastern part, and relatively low in the western part-200-260 meters. The main area of the Karshi desert is composed of an internal platform structure of the syneclysis type. According to its location, the desert was located in the eastern extreme of the Turonian plate. In the bosom of the desert are the bogies of the Qurishtov, Kosonsoy, Maimanoktov, Alovuddin, Doltalitov, Karakir, Saksondara, along with a number of Shursoy and Choragil, which are mainly small burmalibbalandans. These elevations are composed mainly of Silurian, Devonian, Carboniferous, high chalk, poleogenic and high Neogene rocks.n the bosom of the desert are the bogies of the Qurishtov, Kosonsoy, , Akjar, Azkamar, Setalantepa, and Buyerman.

**Climate.** The climate of the Karshi desert is sharply Continental, the winter is short — January with an average temperature of 1.5° C, the lowest temperature is 28° C. Spring comes early, but, it starts hot very quickly. The summers are long and very dry and hot. The average July temperature is 28.2°-31.6°. The highest temperature is 47°.limate. The climate of the Karshi desert is sharply Continental, the winter is short — January with an average temperature of 1.5° C, the lowest temperature is 28° C. Spring comes early, but, it starts hot very quickly. The summers are long and very dry and hot. The average July temperature is 28.2°-31.6°. The highest temperature is 47°. The growing season is 226-248 days. The amount of precipitation is low throughout the year and spread unevenly across the territory. Precipitation is 146 mm in the western part of the desert and up to 230 mm in the East. The bulk of the precipitation falls during the winter and spring months. Wind and dust dust dust storms blow along with garmsel. The average wind speed during the warm period is 3-4 m/sec [2]. (Table 1)

**Inland waters.** There are very few permanent sources of water in the Qarshi desert, excluding the Qarshi River. In order to improve the water supply of the acquired lands and introduce new lands into the economic circulation, smaller reservoirs of Pine, Pachkamar and others were built in the Kashkadarya Basin. It receives this from the Zarafshan River via the old Anhor canal. The Karshi main canal and Tallimarjan reservoir were built.nland waters. There are very few permanent sources of water in the Qarshi desert, excluding the Qarshi River. In order to improve the water supply of the acquired lands and introduce new lands into the economic circulation, smaller reservoirs of Pine, Pachkamar and others were built in the Kashkadarya Basin. It receives this from the Zarafshan River via the old Anhor canal. The Karshi main canal and Tallimarjan reservoir were built. Its length is 78 km, the water consumption in the catchment area is 195 m3 per second. There are densely populated collector-plant networks.

**Soil cover**. In the eastern and northeastern chala desert part of the Karshi desert there are hungry-toned oxen, in the western area there are dense, surging soils, and their level of salinity is varied, in saltwater, gravel swamps and in the grasslands there are scattered saltwater, saltwater, riverine and irrigated

lands.oil cover. In the eastern and northeastern chala desert part of the Karshi desert there are hungry-toned oxen, in the western area there are dense, surging soils, and their level of salinity is varied, in saltwater, gravel swamps and in the grasslands there are scattered saltwater, saltwater, riverine and irrigated lands. The Karshi steppe was appropriated as a cultural landscape as a result of human economic activity. However, in recent years, negative effects of the anthropogenic factor on desert landscapes have also been observed. For example: irrigated land has been subject to processes of soil salinity, erosion, and wind blowing. The irregular grazing of livestock as pasture results in the loss of the vegetation cover here. It assumes that a number of measures will be taken in order to reduce the negative effects of the anthropogenic factor on desert landscapes.

**Plant world.** There are a wide variety of plant species. The reason is that the relief of the desert zone is different, as well as the soil cover is also different from each other. In the desert region, Wormwood, singren, zhuzghun, Quail, keyreuk, yantak and yulghun plants are common.lant world. There are a wide variety of plant species. The reason is that the relief of the desert zone is different, as well as the soil cover is also different from each other. In the desert region, Wormwood, singren, zhuzghun, Quail, keyreuk, yantak and yulghun plants are common. Found in thick dunes along with rabbit, walrus, White saxaul, Celine, Willow, black saxaul on calcareous soils. Partesingrene and various ephemera are distributed in the boggy soils. In the shurkhoks grow mainly sarsazan, sage, ajar, saline. The river is made up of Willow, yantok, sometimes, black saxaul, various ephemera, which are woven plants near ozani. Ephemeral-ephemeroid, semi-shrubby vegetation is common in the Togolese-adir region. In particular, conch, hookworm, Wormwood, cinch plants are common.

| Indications | Description |
|---|---|
| Location | It is located in the western part of the Kashkadarya region, adjacent to the eastern part of Turkmenistan. In the east, it is bordered by the Hissar foothills, in the north by the Karnob Desert, and in the south by the Amu Darya basin. |
| Geological structure | It has a geological development beginning in the Paleozoic. There were underwater periods. The relief is undulating plain, sandy hills, ridges and swamps. |
| Climate | Sharply continental. Winters are short and summers are long and hot. The temperature in July is 28-31 °C, with a maximum temperature of 47 °C. The fat content is 146-230 mm. Windy, dust-dusty. |
| Soil cover | Light gray soils in the east, barren and saline soils in the west, and meadow soils near the river. Salinization and erosion are observed in some areas. |
| Plant world | Wormwood, saxaul, juzgun, ephemerals, willow, quinoa and other desert plants. Varies depending on soil type. |
| Farm importance | Rich in natural gas and oil reserves (Saltan, Zevardi, blueberry fields). Irrigated farming, industrial centers (side, blessed, Bowl). |

***Table 1. Natural-geographical description of the Karshi desert***

**Importance in the farm**. The Karshi desert is rich in natural gas and oil reserves. There is a famous Saltane natural gas field, as well as large oil and gas condensate fields such as Zevardi, blueberries and others. With the development of new land, the opening of crude oil and gas fields (in the vicinity of Mubarak, Pomuk), industry developed in the Qarshi desert.mportance in the farm. The Karshi desert is rich in natural gas and oil reserves. There is a famous Saltane natural gas field, as well as large oil and

gas condensate fields such as Zevardi, blueberries and others. With the development of new land, the opening of crude oil and gas fields (in the vicinity of Mubarak, Pomuk), industry developed in the Qarshi desert. In the desert, large administrative and industrial centers such as Tallimarjan, Mubarak, Koson, Kasbi, Nishan were built. Samarkand-Karshi railway (144 km), Bukhara — Karshi power lines were built and put into operation. The largest industrial city in the Qarshi desert is Qarshi [3]. The opening of various ore deposits from the Karshi desert and the growing expansion of irrigation farming areas, grazing livestock and the development of various farm activities are damaging to the natural environment. Under the influence of the atropogen factor, there are cases of increasing shrinkage of water, soil and pastures, salinity of irrigated lands, increased erosion.

**Conclusion.** The steppe landscapes of the kashkadarya region, in particular the Karshi desert, have a natural-geographically distinctive and complex structure, the formation of which is the result of long geological and geomorphological processes. The main forms of the desert landscape – the barren desert, the Carnation, the Azkamar and the badge deserts-form unique components along with the relief, climate, soil, flora and fauna.onclusion. The steppe landscapes of the kashkadarya region, in particular the Karshi desert, have a natural-geographically distinctive and complex structure, the formation of which is the result of long geological and geomorphological processes. The main forms of the desert landscape – the barren desert, the Carnation, the Azkamar and the badge deserts-form unique components along with the relief, climate, soil, flora and fauna. An important role in their formation is played mainly by the sharply continental character of the climate, low humidity, high temperatures and winds. The quasi-desert is characterized by its morphostructural structure, natural zoning, and typical signs of desert landscapes. The land structure in the area, soil types (peat, taqirli, saltwater, grassland), plant species (Wormwood, yantok, saxaul, ephemeris, etc.) and the hydrological state is fully consistent with desert-specific characteristics.he quasi-desert is characterized by its morphostructural structure, natural zoning, and typical signs of desert landscapes.

The article also covers the role of the desert area in the farm with special attention. In particular, the presence of natural gas and oil fields, the formation of large industrial facilities (Saltan, Mubarak, Koson) increased the economic importance of the counter desert.he article also covers the role of the desert area in the farm with special attention. In particular, the presence of natural gas and oil fields, the formation of large industrial facilities (Saltan, Mubarak, Koson) increased the economic importance of the counter desert. At the same time, in recent years, it has also been suggested that anthropogenic pressure on desert landscapes is increasing, environmental problems – soil salinity, erosion, plant loss, and increased grazing erosion. In the example of the Karshi desert, the desert landscape types of the Kashkadarya region are analyzed in depth, showing their ecological, climatic, geological and economic potential. In the future, maintaining natural balance in these areas, rational use of resources, protection of landscapes and reduction of anthropogenic pressure are some of the important scientific and practical tasks.

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