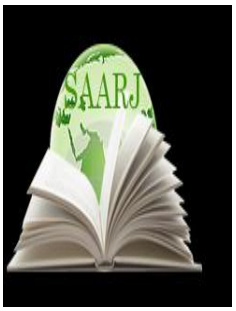

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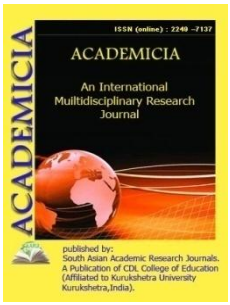

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RELIEF FORMS OF MIRZACHUL OASIS

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ABSTRACT

The article explores the forms of relief in the Mirzachul oasis, the stages of formation of relief forms, the role of the relief component in the formation of oasis landscapes. In the operation of irrigated lands and hydraulic structures, the development of new protected lands should be monitored and all natural processes occurring in the area should be taken into account. Each of its components plays a unique role in landscape development. In landscape development, the study of their role plays an important role in the assessment of landscape development because their components are interconnected and interact together. At the end of the epoch, it rose epherogenically, but as early as the Paleogene, the southeastern part of the Central Asian region began to fill up again below sea level due to subsequent bending, and included a shallow coastal basin or lagoon-type basin. Marine transgression lasted until the Lower Oligocene.

KEYWORDS: *Anticline, Bending, Depression, Erosion, Eolian, Accumulative Structures Of Relief.*

INTRODUCTION

Today, when the impact of human economic activity on nature is growing, there is a growing interest in studying, analyzing and classifying changes in nature and some of its components. In determining the general trends in the development of the nature of the Mirzachul oasis under study, it is necessary to determine the current natural components and the time of formation of natural complexes, to reveal their aspects in modern landscapes. The study of the development and dynamics of the formation of landscapes of Mirzachul oasis, their division into morphological units, genetic sequencing, the study of factors of composition of natural and

anthropogenic landscapes is of particular importance today in the development of an important sector of the economy.

Climate, relief, and surface water flows serve as the three main geographical factors in landscape formation. Climate plays an important role in the formation and development of the landscape and its components across latitudes. But the role of relief in the formation of the landscape of certain small areas is incomparable. The direction of surface water flow is closely related to the relief structure [4, 35-38]. Each of its components plays a unique role in landscape development. In landscape development, the study of their role plays an important role in the assessment of landscape development because their components are interconnected and interact together. The study of the relief component in the study of landscapes of the Mirzachul area makes it more convenient to divide the area into landscape morphological units. Lithogenic factors - relief, lithological composition of the rock that forms it play a key role in the separation of landscape types in the Mirzachul region. It is relatively stable among landscape-forming factors, is the foundation of the landscape, and determines the rock and soil conditions of the landscape.

The main part

The landscapes of the Mirzachul oasis have been formed since ancient times in the conical deposits formed by the ancient rugged terraces of the Syrdarya, the deposits brought by permanent and temporary runoff from the Turkestan and Nurata ridges. One of the factors involved in the formation of the landscapes of the Mirzachul oasis is its relief. The relief of the area is peculiar, orographically open on the north side, and bordered on the south by mountain ranges. Such orographic structure of the earth's surface, in turn, plays an important role in the formation of the climate of the region. Due to the obstruction of the mountains in the south by air masses coming from the north, several permanent and temporary streams - rivers and streams - formed. The proluvial plains, which have long been formed and formed in the part of the outflow of rivers and streams, have also formed oases such as Zaamin and Jizzakh in the conical distributions [3, C 131-134].

The analysis of the geological-relief component in the study of landscapes of the Mirzachul area makes it easier to divide the area into landscape morphological units. It is necessary to pay attention to the stages of development of the relief component in the composition of the landscapes of the Mirzachul region. The Mirzachul region is structurally part of the boundary zone between the Turan plate and the Western Tianshan mobile orogenic zone, and occupies the western half of the Tashkent-Mirzachul basin. In the Meso-Cenozoic rocks of the basin there are large structural elements, the largest of which is Chirchik-Mirzachul. Its direction is close to the latitudinal direction, and the bottom is complicated by dense Paleozoic rocks, mainly limestone and shale.

The southern part of the Chirchik-Mirzachul fold is bordered by the Mehnatkash-Pistalitog anticline zone and consists of eastern (Mehnatkash) and western (Pistalitog) uplifts. The outer surface of the former is somewhat bare, with the Neogene strata exposed in the bedrock of the eastern uplift, and the Paleozoic strata in the west. The anticline zone is represented by the Pistalitog, Baliklitog and Khanbanditog, and in the east by the Mogultog remnant mountains. Between the Mehnatkash-Pistalitog anticline and the Turkestan ridge branches is the Lomakin (Zarbdor) fold, bordered on the west by the Koytash intermittent basin and on the east by the Fergana Depression. The bedrock of Paleozoic shale and limestone, granitoid intrusions in the

fold area reaches a depth of 1400 m. The fold is filled with thin deposits of Cretaceous and Paleogene periods and relatively thick Neogene-Quaternary rocks.

The tectonic development of the Tashkent-Mirzachul basin is divided into two stages: platform (Upper Paleozoic - Middle Oligocene) and postplatform (Upper Oligocene - Anthropogenic). During the Triassic and Jurassic periods, the subsurface probably covered a flattened area, and the Paleozoic period formed a surface erosion crust. Paleogeographic evidence testifies that the first significant bending and transgression of the Tashkent-Mirzachul basin took place at the beginning of the Upper Cretaceous. At the end of the epoch, it rose epherogenically, but as early as the Paleogene, the southeastern part of the Central Asian region began to fill up again below sea level due to subsequent bending, and included a shallow coastal basin or lagoon-type basin. Marine transgression lasted until the Lower Oligocene.

The Mirzachul region is usually divided into two parts: the ancient valley of the Syrdarya in the north and northeast, and the plain part of the foothills - in the south. The foothill plain is bounded on the south by the Turkestan and Nurata ridges, and the part of the plain consisting mainly of deluvial-proluvial plumes and spreading cones of rivers includes the accumulative terrace of the Syrdarya. AA Rafikov (1974) as a result of large-scale mapping and analysis of Mirzachul relief shows the division of the following types of relief according to genetic and hypsometric features:

I Structural-erosion relief - low mountains and residual heights;

II Sculptural-erosion relief - sculptural plains (Koshkent ridge);

III Erosion-accumulative relief: 1) foothill deluvial-proluvial sloping plains; 2) less proluvial plain with mountain slope (conical spreads of rivers and streams); 3) deluvial-proluvial plane of flatness; 4) oblique deluvial-proluvial plane in the depressions between the diffusion cones; 5) Lomakin (Zarbdor) plateau - ascending wavy proluvial plane; 6) flat low proluvial plane at the pouring edges of the diffusion cones; 7) proluvial-alluvial plane in the central part; 8) flat-bottomed lowland; 9) wavy alluvial plain in the northern and northeastern parts; 10) undulating terraced plain on the lower terraces (Syrdarya valley); 11) Boyovut erosion massif; 12) The plain at the site of Lake Tuzkon

VI. Eolian-accumulative relief is a wavy plain of sandy sandstone.

The structural-erosion relief type includes the Molguzar Mountains, the northern branches of the Nurata Mountains, in particular, the Pistalitog, Baliklitog, Etimtog and Khanbanditov lowlands. In the sculptural-erosion relief type, the Koshkent ridge includes a raised surface with a general slope in the north-west and is branched in the meridional direction by many ravines - rivers, in particular, Shurbuloksay, Koshkentsay, Kattasay, Donasay, Altikotonsay. The erosion-accumulative relief type is occupied by steep deluvial-proluvial plains, Turkestan ridge, Koytash Mountains, Baliklitog, Pistalitog mountains. The proluvial plains of the foothills are located at the foot of the northern slopes of the Turkestan and Nurata ridges. The deluvial-proluvial plains of the flat plateau are located between the northern slopes of the Koytash Mountains and the southern foothills of the Pistalitog, Baliklitog, and Etimtog. The sloping deluvial-proluvial plane in the basin of the range of distribution cones occupies the area between the Zominsuv cone distribution in the west, Khojamushkentsoy and the foothills of the Turkestan ridge in the west. The ascending-wave-proluvial plane - the Lomakin (Zarbdor) plateau - ends between the Sangzor and Zominsuv conical distributions.

The confluence of the conical formations is a flat lower proluvial plane at the edge, the third part of the Sangzor, Ravotsay, Pshagarsay, Zominsuv, Khovossoy cones. The flat proluvial-alluvial plain in the central part of Mirzachul is located between the margins of the cones in the south and the streamless basin in the north. , small hills and lowlands. The flat-bottomed, streamless basins are located in the central part of Mirzachul and extend from south-east to north-west. These are Ettisoy, Sardoba, Karakaray, Arnasay basins.

The small wavy proluvial-alluvial plains in the northern and north-eastern part of Mirzachul are part of Terrace III and are lithologically and geomorphologically related to the activity of the Syrdarya, Ahangaron and Chirchik rivers. The small wavy terraced plain of the lower terraces occupies the present valley of the Syrdarya. The terrace I rises 2.5 m above the river crossing. Terrace II rises 2.5-5.0 m above the river. The stream-shaped streamless Shurozak basin occupies the western part of the terrace. The Boyovut erosion massif stretches along the southeast of the Mirzachul Plain, including several elevated low-sloping plains, sloping to the northwest, and is the terrace III of the Syrdarya. The Tuzkon Lake Plain is located in the southwestern part of the Mirzachul Plain and has the shape of a streamless plateau, at the center of which is present-day Tuzkon Lake. The Arnasay basin is partially flooded due to discharge water from the Chordara Reservoir and the Central Mirzachul Canal drainage stream. Eolli-accumulative relief. The Kyzylkumoldi sandy wave plateau is located in the western part of Mirzachul and serves as a border zone between Kyzylkum and Mirzachul. The relief is fragmented: sandy-sandy gryada and ridges, clayey-suglinka basins with no flowing clay height and depth of 2-5 m and above.

In connection with the development of the Mirzachul region since the middle of the last century, various anthropogenic landforms have emerged. The area of irrigated lands in the area, soil composition, groundwater level and mineral composition were studied. Here, vertical and horizontal drainage networks have been constructed, taking into account the rising groundwater level and soil salinity during irrigation. Horizontal drainage networks were excavated in the form of ditches, and the soil excavated during excavation formed anthropogenic relief forms in the series of hills along the edge of the ditch. In the developed areas, flat landforms suitable for irrigation have been created [1, pp. 25-30].

The various forms of natural and anthropogenic landforms in the Mirzachul region are an important component in the formation of landscapes, each of which reflects its own latitudinal zoning and altitude regional laws. In the plains, the difference in climate, groundwater, soil and biocomponents varies in latitude, while in the foothills and mountainous areas, the elevation varies regionally and the landscapes change. This, in turn, in the study of landscapes in the Mirzachul area requires their division into different landscape morphological units - landscape type, types of tracts and facies [2, pp. 96-98].

CONCLUSION

In the study of landscapes of the Mirzachul area are important natural processes of reclamation significance that may occur in connection with the relief. In the operation of irrigated lands and hydraulic structures, the development of new protected lands should be monitored and all natural processes occurring in the area should be taken into account. Depending on the dynamics and nature of the formation, these processes depend on the coefficient of land use (EFC), water resources, construction and placement of engineering structures, the volume and cost of work.

The processes occurring in nature in the Mirzachul region in the following periods are associated with the following activities of reclamation significance: wind - eolli, evaporation; surface water - soil leaching, irrigation and deepening erosion, cliff formation, suffocation and karst formation, coastal leaching, floods, turbidity of irrigation facilities, landslides, vegetation cover, groundwater - intensive salinization, trace the slope of irrigation facilities exit, their lateral deflection; groundwater and surface water - swamps, landslides, rising groundwater levels.

REFERENCES

1. Rafikov A.A. Natural-ameliorative assessment zemel Golodnoy stepi ". T. Fan, 1976. 25-30 p.

2. Toshboev Z.M. Relief forms of Mirzachul area. Information of the Geographical Society of Uzbekistan. Volume 51. Tashkent, 2017. 96-98 p.

3. Toshboyev Z.M., Yarashev Q.S. Formulation and Development of Mirzachul Landscapes. Marsland Press. Nature and Sciense. Volume 18, Number 2, February 25, 2020.

4. Urozboev A.K. The role of structural doctrine in the study of landscapes of Tashkent-Mirzachul and Western Tianshan districts. Uzbekistan GJ axb. Volume 30 T. 2008. 35-38 p.

5. Mirkomil, G., & Matluba, G. (2020). WAYS TO DEVELOP MODERN ECOTOURISM IN THE ZAAMIN BASIN. *International Engineering Journal For Research & Development*, *5*(7), 5-5.

6. Mirkomil, G., Bakhtiyor, Z., & Dilfuza, I. (2020). Predicting Changes In Landscapes Around The Aydar-Arnasay Lake System. *The American Journal of Engineering and Technology*, *2*(10), 6-12.

7. Mirkomil, G., & Bakhtiyor, Z. (2020). METHODS OF STUDYING THE LANDSCAPES AROUND THE AYDAR-ARNASAY LAKE SYSTEM. *International Engineering Journal For Research & Development*, *5*(7), 5-5.

8. Sh, S., Gudalov, M., & Sh, S. (2020). Geolologic situation in the Aydar-Arnasay colony and its atropny. *Journal of Critical Reviews*, *7*(3).