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FERGANA VALLEY DISTRIBUTION LANDSCAPES ESTABLISHMENT AND EXPLORATION

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ABSTRACT

This article deals with the formation of distribution landscapes in the Fergana Valley and the research of specialists. The conical spreads of Uzbekistan, including the Fergana Basin, are still experiencing a significant rise and expansion. The rise of conical distribution and dry deltas, as well as the dynamic changes in their morphological structure, have found their bright expression in their upper and middle parts. Delta or conical distributions can be in water and on land, which differ in the natural properties of the environment in which they are formed. The main reason for this is that the rivers and streams that flow from the mountain ranges that surround the basins on all sides flow into the foothill plains, splitting into branches and laying out the muddy rocks that have flowed. The greater the number of streams, streams, and rivers flowing from the mountains, the greater the number of conical distributions and dry deltas, or conversely, the lower the number of rivers and streams, the lower the number of conical distributions and dry deltas.

KEYWORDS: *Depression, Delta, Relief, Accumulation, Oasis, Geosystem, Landscape Productivity, Arid, Valley.*

INTRODUCTION

The geographical distribution of oasis landscapes in the territory of Uzbekistan is inextricably linked with river and river valleys, intermountain basins, foothill proluvial-alluvial plains, mountain slopes, conical distributions and springs. All the oasis landscapes in our country - from the most ancient to the modern oasis - are located in the valleys of the Amudarya, Syrdarya and

Zarafshan rivers, in the basins of Fergana, Tashkent, Mirzachul, Zarafshan, Surkhandarya and Kashkadarya, in the deltas of major rivers.

Spreading landscapes are widespread in the foothills of the republic. The main reason for this is that the rivers and streams that flow from the mountain ranges that surround the basins on all sides flow into the foothill plains, splitting into branches and laying out the muddy rocks that have flowed. The long-term accumulation process creates large-thickness conical spreads and creates favorable conditions for the formation of landscapes.

The formation of conical distributions is typical of large rivers with large volumes of force that allow large amounts of suspended rock to flow into the lower reaches of the river. Delta or conical distributions can be in water and on land, which differ in the natural properties of the environment in which they are formed. The first is that the conical distributions in the water are azonal in nature, and the second is that the conical distributions on land are zonal in nature and are formed in desert and semi-desert climates.

Formation and peculiarities of conical distributions in our republic have been studied by AA Abdulkasimov (1966, 1983, 2005, 2006), VN Weber (1929, 1930), NP Kostenko (1970), KV Kurdyukov (1948, 1950), M.Sh.Ishanqulov (1979, 1986), N.I.Sabitova [2002], I.Abdug'aniev (2003), K.M.Boymirzaev [1995, 2004, 2007, 2020], O. Kuzibaeva (2004, 2009), K.Yarashev, (2018, 2020), B.Eshquvvatov (2020) at different times and are still being studied.

The concept of conical distributions has been in the geographical literature since 1841. The study of dry deltas (conical distributions) in Uzbekistan began in the 30s of the last century [5]. The main factors of the conical distribution formed on land are the outflow of the river from the mountain range to the plain, the rapid change of river slope, the rapid evaporation of river water, the rapid decrease of river water as a result of infiltration into deposits.

In 1929, V.N. Weber studied the deltas in the Fergana Valley for the first time in Uzbekistan. In his famous article "Migration of the Fergana dry deltas" published in 1929, he was the first to highlight the unique landscape features of the deltas. N.I. Nikolaev (1946) wrote that there are genetic differences, morphological and lithological differences between the dry delta and conical distribution of rivers. The geographical distribution and density of the formation of conical distributions is directly related to the degree of fragmentation of the mountain slopes and the density of the hydrographic network [1].

Due to the extremely dry climate of Central Asia, including the mountainous regions of Uzbekistan, large rivers form well-formed dry deltas. N.P. Kostenko cites the dry deltas of Sokh and Isfara in the Fergana Basin as an example. In addition to geomorphological and genetic descriptions of conical distributions and dry deltas, he divided their surface structure into the following types depending on the characteristics of fragmentation by flow networks: 1) the type of typical conical distributions; 2) type of free conical distributions; 3) the type of conical extensions that are reinforced in a particular case.

The formation, formation, geographical distribution and abundance of conical distributions are directly related to the degree of fragmentation of the mountain slopes and the density of the hydrographic network. The greater the number of streams, streams, and rivers flowing from the mountains, the greater the number of conical distributions and dry deltas, or conversely, the lower the number of rivers and streams, the lower the number of conical distributions and dry

deltas. Therefore, each stream and river flowing from the mountain branches out after reaching the foothills, forming its own independent conical distribution and dry delta, and developing sustainably [7].

Some rivers and streams flow from a single stream to the exit of the foothills, branching near the hills that cross it, and cross the hills to form two or three conical spreads. For example, the Shohimardon River, which flows from the southern slope of the Fergana Basin, flows into three branches at the confluence with the Vodil Fortress. These branches are Margilansay, Fayziobodsoy and Oltiariqsay, which cross the Chimgan and Kapchigay hills. The rivers rise to the hillside plain and form the Margilansay, Fayziobodsay and Oltiariqsay conical distributions [2].

Scientists say that the role of the latest tectonic movements in the formation and development of conical distributions is great. The conical spreads of Uzbekistan, including the Fergana Basin, are still experiencing a significant rise and expansion. The rise of conical distribution and dry deltas, as well as the dynamic changes in their morphological structure, have found their bright expression in their upper and middle parts. In conical and dry deltas, rivers and streams are deepening, and denudation processes are proceeding at an active pace. As a result, the lower parts of the spreads expand, leading to the formation of new distribution networks or their migration in some places [8]. Therefore, such processes occurring in nature are called "dry delta migration" [3].

The study of conical distributions from the landscape-typological point of view began much later in Uzbekistan. A.A. Abdulkasimov [1966] was engaged in landscape-typological study, mapping and zoning of the Fergana basin, which separated the Sokh-Fergana semi-desert region in the basin. He gave a complex landscape-typological description of the Sokh conical distribution in this region and noted that the natural geographical complexes in the region have long been developed by human activity and turned into anthropogenic landscapes.

A.A. Abdulkasimov (1966) makes a comprehensive analysis and mapping of the morphological structure of the landscapes of Central Asia, including the Fergana basin, as well as the spread landscapes. As a result of mapping, the typological, geomorphological, hydrogeological and other features of the distribution landscapes were divided into the following micro-zones depending on their differences on the slopes and their internal differences: 1) upper slope microson, 2) middle slope and 3) lower slope. At the same time, Sokh created a landscape-typological map of the Kokand oasis, which was formed under the influence of anthropogenic factors in the conical distribution [1].

The research conducted by KM Boymirzaev [1995, 2004, 2007] in the Fergana Basin is devoted to determine the age, thickness and geographical distribution of agroirrigation deposits formed in the oasis landscapes due to irrigated agriculture, measures for their rational use in agricultural development and crop yields. In order to fulfill the task set by the author, he selected the Sokh and Chartaksay conical distributions as the object of research and made scientific and practical achievements by comprehensively analyzing the agro-landscapes that have been irrigated since ancient times [1, 7].

M.Sh.Ishankulov [1979, 1982] proposes to study the conical distributions formed in the arid climate of Kazakhstan as a geosystem and to consider them as a separate landscape product.

Cone-spreading landscapes go through several stages during their emergence, formation and sustainable development. The researcher studied the widespread landscapes on the northern slopes of Talas Alatov, gave a complex description of their morphological units and created a landscape map of the distributions using the methodology of relief plastics developed by I.N. Stepanov [5].

I.A. Ilin (1959) noted that rivers and streams flowed from the mountain ranges surrounding the Fergana Valley to the surface of the valley created hundreds of large and small conical distributions. For instance, Isfara, Sokh, Altiariq, Aksuv, Chartaksay, Kosonsoy, Rezaksay, Khojabakirgan, Fayzabad, Margilansay, Isfayram, Aravon, Akbura, Govasay, Maidonsay, Moylisuv, Chustsay, etc. Can be given as example [2].

Various changes are also observed in the oases formed in the distribution landscapes under the influence of human economic activity. In this regard, the irrational use of water in irrigated agricultural lands, the re-salinization of cultivated soils, swamping, intensification of irrigation erosion should be noted. Such phenomena can be found in all oasis landscapes of the Fergana Valley. Therefore, along with the study, mapping and classification of the distribution landscapes of the Fergana Valley, issues such as the optimization of their geo-ecological status are also relevant.

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