



Scientific and Practical Measures of Analysis of Plains and Landscapes

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Abstract: The article examines the study of conical landscapes and dry deltas in Central Asia and Uzbekistan, as well as the scientific and practical significance of the study of mountainous plains and steppe landscapes in the Republic of Uzbekistan, their use in the economic sectors.

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1. Introduction

Natural and anthropogenic geosystems, which are widely distributed in the territory of Uzbekistan, are characterized by the formation, sustainable development, morphological structure, the level of assimilation under the influence of anthropogenic and man-made factors, their use in the sectors of the economy, geoecological conditions and others. Among the existing natural and anthropogenic geosystems, cone-shaped landscapes, whose formation, dynamic development, and morphological structure are directly related to the alluvial-proluvial landscapes caused by rivers and streams and floods, are of special importance.

The cone-shaped landscape, one of the main cultural centers of humanity, occupies large areas and is widely known in the foothills of proluvial and alluvial plains and mountain slopes, is still one of the poorly explored geographical sites. Therefore, comprehensive research of cone-shaped landscapes, drawing up their landscape-typological, landscape-ecological, landscape-land-reclamation maps, research and evaluation of the existing geoecological situations and reclamation conditions are of great scientific and practical importance. Consequently, the cone-shaped distribution requires a detailed study of landscapes, the isolation, classification, mapping of morphological units, and the development of scientific bases and methods for research to optimize geoecological situations.

2. Material and Methods

Cone spreads and dry deltas in Central Asia and Uzbekistan were first developed by V. N. Weber (1929), N. I. Nikolaev (1946, 1948), N. V.

Rogovskaya (1956), D. P. Rezvoy (1957), N. P. Kosthenko (1962, 1970) and others by geological, geomorphological, hydrogeological studies and divided them into upper, middle and lower parts depending on their geomorphological and lithological structures. However, the aforementioned authors have not paid attention to the cone-shaped plains from the perspective of landscape science and have not done research (Boymirzaev, 2007; Yarashev, 2018).

The study of cone-shaped plains and dry deltas as independent landscape complexes, the separation, classification and mapping of their morphological units started by geographers in 1965.

Many authors made a great contribution for the study and in the publication of scientific works dedicated to cone-shaped landscapes in Uzbekistan and Central Asia. They are A. A. Abdulkosimov (1966, 1983, 2009, 2015), K. Boymirzaev (1995, 2004, 2007), A. Abdulkosimov (1996, 2004, 2007), A. A. Abdulkasimov, O. M. Kuzibaeva (2004, 2005, 2006, 2009), S. B. Abbosov (2013, 2015), Y. Sultonov (1974), KS Yarashev (2008, 2018), A. K. Urazboev (1998), M. Sh. Ishankulov (1979, 1982, 1986) and many others.

A. A. Abdulkasimov (1966) deals with landscape-typological mapping and natural geographical zoning of the Ferghana gulf, and in the southern part of it separates Soh-Ferghana valley. He describes the Sohan cone land shaft as a landscape-typological complex, which is a component of the type of settlement located in this natural geographical region, noting that the natural geographical complexes in its territory have been developed and influenced by human activities since ancient times.

The author analyzed and mapped the morphological structure of the Central Asian slopes, including the cone-shaped landscapes, and distinguished the following sloping microstructures based on their typological, geomorphological, hydrogeological features, soil-vegetation cover and internal zonal differences: 1) upper slope microzone, 2) middle slope microzone, and 3) lower slope microzone. He also created a large-scale landscape-typological map of the Kokand oasis, built by anthropogenic factors in the Sohonic conical distribution (Abdulkosimov, 1974, 1973).

The research done by K. M. Boymirzaev (2004, 2007) in the Ferghana Valley determines the age, thickness and regularity of geographical distribution of agro-irrigated habitats caused by irrigated agriculture in the region's landscapes, and their rational use in agricultural development and cultural crop productivity development. To accomplish the task assigned to the author, Soh and Chortaksay selected conical rollouts as the research objects and achieved scientific and practical achievements by conducting a comprehensive analysis of the ancient irrigated agricultural lands. K. M. Boymirzaev has subdivision of three oasis subgroups based on the relief of the oasis of the oasis in the Soh cone distribution, the mechanical composition of the litho logy, the thickness of the agro-irrigational sediments, the different depths of the ground waters, the hydrogeological regime and other factors: 1) Oasis landscape complexes in the upper part of Soh distribution; 2) Oasis complexes in the middle part of Soh distribution, 3) Oasis complexes in the lower part of Soh distribution. It is also noted that the Soh and Chartaksay cone-shaped landscapes have similar and non-identical features.

3. Results

N. I. Sabitova (2002) interpreted cone-shaped plains, including the upper Zarafshan Ravkhozhouja and adjacent areas as an erosion-accumulative relief, each with its own surface and groundwater basin. Because cone-shaped spreads are separated from each other by low-lying planes, lowlands. Characteristic of low-lying zones is that it also acts as a paradinamic zone of communication that connects the arc. The author considers cone-shaped distributions in the erosion-accumulative relief type and divides them into three parts geomorphologically. These are the upper, middle and lower parts of the plain.

A. Maksudov (1990) has studied in detail the geographical distribution, thickness, mechanical composition, agrochemistry, humus content and other features of agro-irrigated deposits formed on the irrigated oasis landscapes in the Fergana basin for many years. As a result, he also created a map diagram

showing the geographical distribution and thickness of the agro-irrigational deposits. The map shows the following gradations of agro-irrigational beds based on qualitative and quantitative indicators: 1) Thin agro-navigation beds with thickness not exceeding 30 cm; 2) Thin agro-irrigational beds, from 30 cm to 50 cm thick; 3) Agro irrigation beds of average thickness from 50 cm to 100 cm; 4) thick agro-irrigational beds, thickness from 100 cm to 200 cm; 5) Irrigation beds in excess of 200 cm. The quantitative data presented above show that the thickness of the agro-irrigational beds is unevenly distributed in all irrigated oasis landscapes of the Fergana basin. This is due to the fact that, firstly, the occurrence and irrigation history of the oasis landscapes began at different stages, gradually, and secondly, the accumulation process of the agro-irrigated deposits directly depends on the slope of the terrain.

M. Sh. Isankulov (1982, 1986) proposes to study geosystems of cone-shaped distributions formed in arid climatic conditions of Kazakhstan and consider them as a separate landscape product. The author acknowledges the cone-shaped spreads in arid lands of spatial and temporal nature, and their morphological structure, which differs from geosystems, which are adjacent to their unstable, regenerative and regenerative properties. It is known that cone-shaped landscapes go through several stages during its formation, formation and sustainable development. These are the stages of the formation of the spreading, the long-forming phase and the stage of sustainable development.

4. Discussions

M. Sh. Isankulov (1982, 1986) is widespread in arid climate of Kazakhstan and in the northern foothills of the Talas Alatov range. Talas chose the cone-shaped landscape as the main object for the study of the distributions, studied it in detail, gave a comprehensive description of its morphological units and made a map of the landscape. He used the method of relief plastics developed by I. Stepanov to create a large scale map of the fossil.

Consequently, when looking at the extent of the study of cone-shaped landscapes and dry delta by geographers, a number of works have been done in this area, which have scientific and practical significance. Formation of cone-shaped landscapes in arid climates, peculiarities of zonal and regional features, geographic components, i.e. slopes of slope relief, mechanical composition of lithology, selection of alluvial deposits, climatic conditions, hydrological regime of surface and ground waters, soil and ground waters. Processes such as species change have been adequately described (Yarashev, 2018; Abdulkosimov, Kuzibayeva, 2009).

Sustainable development of scientific achievements and technologies and new interdisciplinary scientific directions are now being explored in conjunctive geosystems prevalent in Uzbekistan and Central Asia for the purpose of economic development, as well as the scientific justification of the sloping micronechanical differentiation of sloping landscapes. Scientific directions have been developed: land management, landscape architecture, landscape design, landscape cadastre.

Existing problems such as optimization of geotechnical situation, recultivation of technogenic landscapes, mapping of large scale maps of anthropogenic oasis and urban landscape, forecasting dynamic changes of all types of geosystems, carrying out recreational research for the development of international tourism are expected from landscape geographers.

References:

1. Abdulkosimov A. A. Landscape zoning of the Ferghana basin // Landscapes of Uzbekistan. T.: Fan Publishing House, 1966. 57 p.
2. Abdulkosimov A., Kozhibayeva O. Conuscular distribution landscapes of Uzbekistan and their formation. // Information from the Geographical Society of Uzbekistan. Volume 24 —Tashkent, 2004. —p. 38–42.
3. Abdulkosimov A., Kozhibayeva O. Microstructure and amelioration of Soh distribution landscapes. - Samarkand, 2009. -174 p.
4. Boymirzaev KM Oasis landscapes: formation, formation and development features. // Information from the Geographical Society of Uzbekistan. Volume 24 Tashkent, 2004. -p. 49–51.
5. Boymirzaev KM Use and protection of the Fergana valley oasis. - Tashkent: Science, 2007. 132 p.
6. Sabitova NI New morphogidrogeometricheskogo metoda pri reshenii geographo-hydrogeologicheskikh zadach. // Autoref. doc. dis. - Tashkent, 2002. -49 p.
7. Maksudov A. Substantial Ferganskoy doliny pod anthropogenic ward. Tashkent. Science. 1990. 92 p.
8. Ishankulov M. Sh. Landshafty cones and shapes for morphological structures. // Voprosy Geography, No. 121. –M.: Mysl, 1982. –p. 63-79.
9. Ishankulov M. Sh. Landshafty cones vynosa aridny area. // Autoref. doc. –M., 1986. –37 p.
10. Yarashev Q. S. Paragenetic landscape complexes of Surkhandarya and their geoecological zoning. // PhD disser. autoref. -Tashkent, 2018. -19 p.

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