

---

# The Experience of Landscape Classification (On the Example of the School of Samarkand State University)

---

*X. R. Toshov, M. K. Ergasheva*

*Lecturers of Bukhara State University, Uzbekistan*

---

**Abstract:** this article refers to scientific works, monographs, some textbooks and teaching aids related to the study of natural geography and especially landscape studies in Samarkand State University. Also, the views of the scientists of geography of Samarkand State University on the classification of landscapes were studied.

**Keywords:** landscape science, classification of landscapes, natural geography, zoning, district, type of landscapes, landscape class, inductive, deductive, dissertation, and monograph.

---

## Introduction

There are similar concepts in science such as classification, grouping, generalization and taxonomy. The concepts of classification and grouping are very close to each other as they combine colorful and diverse objects and events in a certain order through maintaining a systematic position or scale. Students are familiar with the classification of plants in botany, the classification of living things in zoology. Similar classifications exist in other disciplines. There are also views of scientists on the classification of landscapes as they are so-called "classification" of categories. According to the Latin interpretation of the term, there are classes, groups and categories. Classification is a general, universal activity in which the world of landscapes is synthesized. It provides a scientific basis for creating descriptions of landscapes and making recommendations for their effective use. The number of landscapes in the world is measured by 5-6 numbers. Classifying is a very complex issue. There are a number of developments in this regard. However, there is no ground rule yet. It is expedient to combine inductive, deductive approaches in classification. The classification is determined from the lower unit to the upper in the inductive approach, and the higher unit (taxon) is determined in the deductive, and from top to bottom - to the smallest. In this case, zonal, azonal, sectoral laws play an important role in the formation of landscapes. The classification of the object of study of each science has both scientific and practical significance. Its scientific significance lies in the fact that when classifying an object, all its characteristics, such as its origin, structure, development, should be studied and all information about it should be analyzed in detail.

In fact, there are so many specific landscapes on the surface and it becomes impossible to study and describe each of them individually. It is necessary to group landscapes for specific purposes (e.g., agriculture, urban planning, etc.) and to plan the same type of activities accordingly. It shows the practical importance of classifying landscapes. The more diverse and complex of the object of study of science, the more complex will be its classification. It is important to have a complete and clear understanding of the object when performing any classification. Different interpretations and understandings of an object lead to the structure

of different classification histories.

### Materials and Methods

The science of landscape classifies specific objects and many various distinctive features like other natural sciences. It is very important to create a well-designed classification table that fully meets the scientific and logical requirements for landscaping. Otherwise, it will not be possible to study or even map a landscape properly unless it identifies the similarities or differences between the many different landscapes on earth and puts each in a certain order while maintaining its position.

The scholars who classified the landscapes in Uzbekistan such as L.N. Babushkin, N.A. Kogay, M. Umarov, Sh.S. Zokirov, P. Baratov, S. Nishanov, P. Gulomov, M. Umarov, Yu. Sultanov, A. Saidov, A. Abdulkasimov, L. Alibekov, T. Jumaboev, A. Rahmatullaev, S.B. Abbasov and others. The geographers of Samarkand State University such as M. Umarov, S. Nishanov, A. Saidov, A. Abdulkasimov, L. Alibekov, T. Jumaboev, A. Rahmatullaev and S.B. Abbasov have been working effectively in this field.

The theory and application of landscape science in the scientific research of Samarkand scientists was widely developed in the 60-80s of the last century and in the 2000s. Effective scientific research has been conducted in this regard, dissertations have been defended and monographs have been published.

The collection "Landscapes of Uzbekistan" was published under the editorship of M. Umarov in 1966. It contains 7 articles by such scientists as SA Nishanov, M. Umarov, A. Abdulkasimov, A. Saidov, M. Kuziev and L. Alibekov on the issues of landscape zoning in Uzbekistan, natural geographical processes in the regions and development. Several monographs were published by these scholars later in the following:

- 1) Umarov M. (1967). Natural resources of the lower reaches of the river. Zarafshan and its use. Tashkent. Science Publishing House. p.174.
- 2) Saidov A. (1967). Landscapes of the right bank of the Middle Zerafshan. Tashkent. Science Publishing House. p.132.
- 3) Alibekov L.A. (1982). Landscapes and land types of the Zarafshan Mountains and adjacent plains. Tashkent. Science Publishing House. p.151.
- 4) Abdulkasimov A. (1983). Problems of studying intermountain-hollow landscapes of Central Asia. Tashkent. Science Publishing House. p.126.
- 5) Nishanov S.A. (1984). Features of landscapes, natural resources arid areas and ways of their rational use. Tashkent. Science Publishing House. p.104.
- 6) Rakhmatullaev A. (1991). Landscapes of the Aktau ridge, their rational economic use and protection. Tashkent. Science Publishing House. p.108.

The research was intensified in this direction after the independence of the Republic of Uzbekistan. Many scientific works were created in the following:

1. Abdulkasimov A.A., Abbasov S.B. (2001). Landscape-ecological studies of the Central Kyzylkum. Samarkand. p.151.
2. Abdulqosimov A.A., Abdurahmonova Yu.X., Davronov K.Q. (2017). Landscapes and geoecology of the Zarafshan oasis. Tashkent. p.301.
3. Abbasov S.B. (2019). Dynamics and ecology of Kyzylkum desert landscapes. Monograph. Samarkand. p.174.

This article discusses the views of some scholars on landscape classification. A. Abdulkasimov who was the author of the book "Landscape zoning of the Fergana basin" used the concept of place type as a synonym for the landscape among the landscape scientists of Uzbekistan. His views can be visualized by *Figure 1* below. This scheme has been supplemented and improved several times by the scholar A. Abdulkasimov.

Landscape class
Landscape small class
Landscape type
Type of place
Type of small place
Natural boundary package
Natural boundary type

**Figure 1. Classification of landscapes (A. Abdulkasimov, 1966)**

In particular, A. Saidov's monograph "Landscapes of the right bank of the Middle Zarafshan" was edited by the famous scientist L.N. Babushkin, it consists of an introduction, two parts and 10 chapters. A. Saidov acknowledges the general description of the map of the study (pp. 3-5) in the introductory part of his book. In particular, the right bank of the Middle Zarafshan has a variety of natural conditions, complex geological and geomorphological structure, the presence of significant longitudinal zonation, the formation of specific river, mountain-oasis types, as well as the direction of ridges, rivers, meteorological stations, landscape profile lines, 4 expedition routes were organized and explained by the author in 1959-1962.

The first part of the book entitled the general natural-geographical description of Central Zarafshan, which provides the history, orography and geological features of the region, geomorphology, climate, groundwater, and surface waters, soils, flora and fauna are described in eight separate chapters (pp. 6-69). The history of the geographical study of Central Zarafshan is divided into 3 periods (from ancient times to the second half of the XIX century, from the second half of the XIX century to the October Revolution and the former Soviet Union) (p.6). The author acknowledges the early periods the geographical study of Central Zarafshan (lat. Visualis - vision), and the later period the predominance of analytical studies and resulting in climatic zoning (Molchanov, 1924) (p. 7).

Saidov outlined the issues to be studied on the basis of 6 points at the end of this chapter. For example, paragraphs 5-6 are based on the fact that the natural-geographical processes and phenomena of the right-bank area, as well as the composition of natural-geographical areas and small geocomplexes are poorly studied.

The second part of the monograph provides information about the landscapes of the right bank of the Middle Zarafshan which is divided into 2 chapters (pp. 70-125). In the first chapter describes the issues of landscape zoning are analyzed (Table 1) and a landscape map was drawn up by A. Saidov (Figure 5, page 74). The right bank of the Middle Zarafshan is divided into the landscapes of Northern Nurata, Karatag-Aktag, Karachatog-Gobdun, Gallaorol, Samarkand and Kattakurgan. The second chapter describes the prospects for the use of natural resources in agriculture. A map of the landscapes of the right bank of Central Zarafshan was compiled by a scientist (pp. 74-75). Another important aspect of the monograph is that it compares several natural geographic zoning schemes of the research object.

**Table 1 Natural-geographical zoning of Central Zarafshan**

Author	Taxonomic system	Study area
M. G. Popov, 1929	The groups of the district Region	Middle Zarafshan The right bank of the Zarafshan basin
M. M. Siyazov, 1936	Small district The groups of the regions Region	Nurota ridge Middle Zarafshan Oasis, middle mountain range of the Nurata ridge, and others
S. P. Suchkov, 1950	The groups of the district Region	Central (eastern part of Zarafshan oasis) Irrigated gray soils
E. M. Murzaev, 1953	The groups of the regions Region	Middle Zarafshan Nurota ridge
S. P. Makeev, 1956	Region	Plain and foothills of the Zarafshan basin, Nurata ridge
B.A.Fedorov, 1957	Landscape group Landscapes	Middle Zarafshan Markziy Chalachul (Zarafshan valley, east of Kattakurgan city)
V. M. Chetirkin, 1960	Group of regional complexes Regional complexes	Zarafshan basin Samarkand
N. A. Gvozdetskiy, 1961	County Region	Zarafshan basin of the region Oktepa-Sanzor, the main part of the Samarkand oasis
L. N. Babushkin, 1963	County Region	Zarafshan basin Samarkand, Kattakurgan
A. Saidov, 1964	County Landscapes Place The group of natural boundary	Zarafshan basin Oqtog Low mountain, oasis River valley, natural boundary
J. Hoshimov, 1966	Region District Small district Landscapes or place types	Nurata ridge North Nurata watershed Koytash, Forish, Soybulak

### Results and Discussions

As can be seen from the table above, there is diversity in zoning and taxonomic units. There are 3 different views on zoning, the first group perceived natural areas, the second group the group of districts, and finally the third group the regional complexes or districts.

It is important to study the research of the scholar A. Saidov, who carried out natural geographical zoning in Uzbekistan. He recognized the landscape as a regional natural complex (1972). A. Saidov equates the landscape, which is the first stage in the system of natural geographical zoning, with the natural geographical region (Figure 2). The researcher called the first chapter of the second part of his monograph "Landscape law of the Middle Zerafshan" "Landscape zoning". He noted that "the concept of landscape corresponds in content to a natural geographical region" and conducted natural geographical zoning on the basis of taxonomic units such as district-landscape-location-urochisha group (1972, pp. 70-77)

County
Landscape
Place
Natural boundary group

**Figure 2. Classification of landscapes (A. Saidov, 1972)**

S.B. Abbasov (1994, 2007) is one of the leading scientists who carried a research on the study of the deserts of Uzbekistan. He identified the laws of latitudinal and longitudinal stratification of these desert landscapes, the location and type of landscape were distinguished “Kyzylkum landscapes and their geo-ecological aspects”. Abbasov (2007) divided the Kyzylkum desert into three zones, depending on the composition of the desert zone of the temperate zone, taking into account its stratification of landscape complexes, climatic features, soil and vegetation cover and zonal changes of fauna. The first is the northern desert zone, the second is the typical desert zone, and the third is the southern desert zone. Also, this region was first divided into four elevation-landscape steps by A.Abdulkasimov and S.Abbasov (1995, 2001), one elevation-landscape step was added by S.Abbasov (2007) and a total of five elevation-landscape steps were divided.

### **Conclusion**

In conclusion, it should be noted that scientists of Samarkand State University were able to create a unique school in the scientific substantiation of the morphological features of the landscapes of our country dedicated to the issues of classification of landscapes.

### **References:**

1. Abbasov S.B. (2017). Formation and development of scientific schools of Samarkand State University (dedicated to the 90th anniversary of the university). Tashkent. Volume 51.
2. Abbasov S.B. (2019). Dynamics and ecology of Kyzylkum desert landscapes. Monograph. Samarkand: SamSU. P.174.
3. Abdulkasimov A. (1966). Landscape zoning of the Fergana basin.
4. Zokirov Sh.S. (1994). Basics of landscape. Tashkent.
5. Sulonov Yu. (1974). Geography of landscapes. Tashkent.
6. Umarov M. (1967). Natural resources of the lower reaches of the river. Zarafshan and its uses. Tashkent. p.174.
7. Ergasheva M.K. (2021). Landscape (great figures). Bukhara. p.116.
8. Ergasheva M.K. (2019). Development of anthropogenic landscape in Uzbekistan. Tashkent. Volume 55. pp.23-26