

**ARID ZONE LANDSCAPES OF NORTHERN FERGANA HILLS AND USE
PROBLEMS OF THEIR**

Annotation: The northern Fergana adiris were in the context of antropogen influence from time immemorial, this process was especially taken into account of the extensive development of Agriculture from the 90 years of the 20th century. In the following years, there has been an increase in the scale and risk of arid regions and a change in landscapes, followed by climate change and a decrease in the stability of the entrap.

Key words: climate change, arid, natural landscapes, relief, endemic, steppe, vegetation, irrigation farming, land development

According to the geomorphological structure of the Fergana Valley, it consists of mountain ranges, foothills, plains of the middle of adir and the range of adir, and the plain of Adir. The widespread use of cultural landscapes along with Steppes, half steppes, hill and taillandshafts is a common feature of the nature of the valley. The occurrence of landscape regions of such a diverse height is due to the fact that the territory of the region is a trough of the trough and secondly, due to the influence of human economic activity, cultural landscapes are overlapping, and in the Fergana Valley there are no landscapes that are not directly and indirectly affected by human economic activity.

The Fergana Valley extends from the south-west direction of the valley to the north-east direction, while the northern hill extend to the territory of the Namangan region. The main part of the Chust-Pop, Namangan, Chortok, Yangikurgan districts of the region hills.

The absolute height of the hills in the territory of the region is on average 700-950 m, the relative height is 70-300 meters, the soil composition is mainly composed of a thick conglomerate, as well as its alternation with thinner layers of sandstone, clay and merkel. The northern Fergana hills have a slightly fragmented

appearance with erosion-denudation edge-hill. The morphological appearance of the hills is polished and has a slightly wavy appearance. The characteristic appearance of the hills in the relief is characterized by the interaction of the coasts with dry stirrup and ravines. Rivers and shadows crossed the slopes in several places. The width of the valleys sometimes goes from several tens of meters to 2 km. In the northern hills, the soil layer is thicker and differs in that it is washed, and not ruddy, as it develops on the lysosmic rocks. Because of the soil conditions and the carved-depth of the relief, watering is inconvenient for farming. Typical burlap soils are unsuitable for irrigation in large areas due to the fact that they are fragmented in terms of relief and the slope is different.

The landscape of the hills are occupied by ephemeroids in the south, and in the north by wormwood. From ephemeral and ephemeroids, color and bellstone are the main sagittarius edficator. In spring, productivity on average goes up to 2-3 ts per hectare. Together with them, weeds grow, barley mixed. In this situation, sagittarius productivity will increase even more. Wormwood is a subspecies sagittarius plant, which is consumed in the spring together with ephemers, and in the autumn together with virgo and steppe plants.

Since 1990-ies in Fergana began to assimilate the princes. At first, the use of favorable lands in irrigation farming began to give a good result. Subsequently, as a result of the assimilation of large masses, the development of unfavorable environmental consequences began to be felt. In their time, they had given the right assessment that it was worthwhile not to assimilate the Fergana princes. In the Fergana Valley, the population is extremely densely populated, therefore, in the hope of expanding the area of irrigated land, the cultivation of the land of hill was initiated by local company farms.

Since the middle of the two millennia BC, the first irrigation was laid on the basis of the simplest manifestations of farming. According to him, the most comfortable and fertile lands of the basins of the hill middle part of the beans and rivers such as Karadarya, Akbara, Kosonsoy and Govasoy are mastered. Historical data indicate that in the XIII-XII centuries BC it was stated that the first

manifestations of irrigation farming appeared in the north of the Fergana Valley, namely in the hill parts of the Kosonsoy and Govasoy basins [1].

Today, according to the natural landscape views of the northern Fergana hills, the adverse effects of antropogen activity and climate change are evident..

The extensive appropriation of the northern Fergana hills in order to organize farmland and economic affairs for the population causes a wide change in the appearance of the adir landscape. Population, who live in the regions of the hill region of Namangan region, is 36.3% of the aging population of the region. It is desirable to study the negative impact areas in the northern Fergana hill regions by type 2 from the point of view of natural and social geography.

1) Influence of population from the point of view of economic development in a wide range from the 1990s. During this time, more than 130 thousand hectares of different agricultural (horticulture, viticulture, gardening) sectors were formed. In the area of more than 186 thousand hectares, regions have been distributed in the field of animal. As a result of this, processes such as the change of natural ores, erosion cases in soils, reduction of vegetation and animal life of the endemic species were observed.

2) reduction of rainfall and water resources associated with climate change in the Fergana region. Climate change is evident in economic sectors in the northern Ferghana region, in the condition of living conditions of the aholini, in the distribution and reproduction of the plant and animal world, in the wake of a decrease in humidity in the soil and a sharp rise in atmospheric air, in the wake of an increase in the indicators of erosion. It is noteworthy that the lack of moisture is one of the most important features of life in the drought. Although initially the predominance of mesophyte plant groups in the regions of the adir region was felt, today in the place of this plant cover plant species of the genus xerophyte.

In general, 2625 species of plants were registered and identified in the Fergana Valley region, 246 species in Chust Pop hills, 267 species in Chortok hills, and 663 species in Chodaksoy basin. How many species of plants or animals are

distributed in a small geographic area or location is directly related to the stability of natural geographies.

1-table.

The natural and social environmental problems of the northern Fergana hills and the cases of their occurrence

№	Name given in trust	Existing problems		
		Earth and water	Biological resources	Antrap effect
1	Hills of Pop-Chust	A sharp decrease in precipitation, arid areas	Reduction of the crop and animal world of the endemic type (decrease in the productivity of feed livestock areas)	
3	Hills of Kosonsoy			Increased development of hills as a result of the formation of economic sectors
4	Hills of Chartak and Yangikurgan	Soil erosion, arid climates		

Source: table compiled by the author.

Such processes as vegetation and fauna in the regions extending from the south western part of the northern Fergana hills to the north eastern part, fertility of the soils, opportunities to live in the population, development of economic sectors are directly related to the cases of moisture and precipitation. According to gidrometeorological data, the annual precipitation in most regions of the Pop and Chust hills is 170-175 mm. Although it is established, this indicator rises with a difference of up to 190-210 mm in the eastern parts.

As a result of the emergence of problems of a natural and social character, comparative changes are taking place in the northern Fergana adir landscapes. In the current process, the occurrence of arid territories in the hill regions, which are used for the purpose of farming and livestock on account of the economy, is becoming more and more affected. As a result of gidrometeorological observations, annual precipitation under the conditions of hill is about 180-200 mm in the middle score, while annual evaporation is observed around 1000 mm. And

this leads to a violation of the stability of natural landscapes in the conditions of arid.

Based on the results of the observation, the future use of arid regions in the northern Fergana hills will require the development of effective measures to ensure the preservation and stability of natural landscapes, reduce the impact of economic sectors on nature.

References:

1. А.А. Анарбоев. Ўзбекистонда илк суғорма деҳқончиликнинг шаклланиши ва антропоген ландшафтни ташкил топиши. Я. Ғуломов номидаги республика илмий семинари материаллари. –Тошкент, 2006 йил. - 9-15-б.

2. Б.А.Камалов, С.Т. Абдурахманов К вопросу о формировании почвенной влаги. Ўзбекистон ГЖ ахбороти. -жилд, Тошкент. 2016. - б.

3. Б.А. Камалов, С.Т. Абдурахманов Опыт выращивания овощных культур в аридных условиях без орошения // Международная научная конференция, Инновация-2014. Тошкент. 2014. с.105-106.

4. Зокиров Ш.С., Боймирзаев К.М. Ландшафтшунослик асослари. Ўқув-услубий қўлланма. – Наманган: НамДУ, 2009. –Б. 100.