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ZONING FOR THE PROTECTION OF NATURE OF NORTHERN FERGANA (ON THE EXAMPLE OF NAMANGAN REGION)

Abstract: *This article focuses on natural zoning in order to protect the nature of Northern Fergana on the example of Namangan region, during which sharp differences in the landscape structure, dynamic status, nature management, and nature conservation complex are scientifically substantiated.*

Key words: *nature of Northern Fergana, zoning, Namangan region, nature conservation, Chatkal-Kurama mountains, Chust-Pap and Namangan adyrs (foothills), Central Fergana plains, pastures, meadows, water, wild animals, medicinal plants, trees and shrubs, terraces - I-II, Northern Baghdad and Achchikkul, environmental protection.*

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ЗОНА ЗАЩИТЫ ПРИРОДЫ СЕВЕРНОЙ ФЕРГАНЫ (НА ПРИМЕРЕ НАМАНГАНСКОЙ ОБЛАСТИ)

Аннотация: *В данной статье основное внимание уделяется природному районированию с целью охраны природы Северной Ферганы на примере Наманганской области, в ходе которого научно обоснованы резкие различия в ландшафтной структуре, динамическом статусе, природопользовании и природоохранном комплексе.*

Ключевые слова: *природа Северной Ферганы, районирование, Наманганская область, охрана природы, Чаткало-Курамские горы, Чуст-Пап и Наманганские адыры (предгорья), Центральные Ферганские*

равнины, пастбища, луга, вода, дикие животные, лекарственные растения, деревья и кустарники. , террасы - I-II, Северный Багдад и Ачикчик, охрана окружающей среды.

For nature protection and rational use of resources, it is advisable to divide the territory into separate parts based on landscape contours and develop a complex economy in them based on the principle of using the same type of nature. The use of natural resources, the fight against natural and anthropogenic processes, and the protection of the environment are in fact a complex, interconnected and unified process going in one direction. Therefore, it is important that this process takes place in the landscape or in the territories of their specific groups. The environmental part of this system is of particular importance and requires special research. Nature protection has a multidisciplinary, broad and deep aspect, depending on the structural dynamic features of landscapes, the process of using nature and the activity of natural phenomena (Akramov, Zolotorev, 1975; Kadyrov and others, 1999). From this point of view, it is desirable that this practical task be developed on the territory of a landscape contour or a group of them, a nature protection zone. Zoning should be based on the map of natural geographical zoning and landscapes. L. N. Bebuskin and N. A. Kogay (1964) divided two natural-geographical areas (Govasoy and Chatkal) on the territory of Namangan region [1]. Using these areas, we divided the conservation areas into 4 in a scientific article prepared as part of the study:

- Chatkal-Kurama Mountains;
- Chust-Pap and Namangan adyrs (hilly terrain);
- Banks Of The Syrdarya River;
- Central Fergana Plains

These territories differ significantly in their landscape structure, dynamic status, nature use, and nature protection complex. We will focus on the issues of

nature protection in the process of nature management the following nature protection zones.

Chatkalo-Kurama nature conservation area is located in the northwestern part of the region, occupying the mountain ranges of the same name. Mountain landscapes are used in the field of grazing, forestry, hunting, partial farming, forage production, beekeeping, recreation, harvesting of medicinal herbs and other areas. Due to the relatively high amount of precipitation on the mountain slopes, they also perform the function of collecting moisture. Consequently, a large amount of moisture is obtained through the river (Ahangaran) and small rivers (Chodaksai, Sarvaksai, Gavasai, Rezaksai) for irrigation; water resources in reservoirs (Kengkulsai, Gavasai) are collected for agricultural irrigation systems. In the mountainous region, pastures, hayfields, water, hunting for wild animals, collecting medicinal plants, trees and shrubs are widely and frequently used. Because of such use, the receipt of the product rationally and according to need, or in other words, the order of rational use is violated. On the other hand, quality violations, wastefulness are occurred. In this regard, due to gross errors in the use of pastures, their local productivity decreases. Pasture degradation occurs over large areas. Due to the development of erosion and landslides, the area of pastures decreases, and the depth of bumpy terrain increases. This condition prevails on moderately elevated mountain slopes. Due to the continuous collection of medicinal herbs on the slopes, sections of surface erosion areas are formed. This is especially common near places of population. The results of deepening and erosion of ravines can be found in many areas where woody and shrubby vegetation is cut down, as well as in areas where pastures are used more intensively. From the foregoing, it is clear that degradation in mountainous regions, in particular, land degradation, occurs as a result of deforestation, soil erosion and landslides, improper use of pastures and hayfields, and tree felling. As a result of the "tourist" activities of short-term and multi-day travelers (Akhangaron plateau, Kengkulsay, the upper

Kuidaksay), various incidents occur in small areas. In particular, because of bonfire fires, forest fires, destruction of shrubs and trees occur, and indiscriminate hunting of wild animals takes place.

In mountainous areas it is necessary to protect nature, first of all, to use pastures correctly, completely abandon the practice of chaotic haying, do not pasture cattle in one place for a long time, change pastures in certain areas depending on ripening. It is necessary to stop the felling of trees and shrubs, to carry out the procedure of felling dry trees. Trees and shrubs regulate the water regime, prevent the formation of erosion and landslides, and significantly reduce the occurrence of floods. For this purpose, it is of practical importance that both sides of the main road leading to the Kamchik pass were fenced off with protective forest stands. The southwestern slopes of the Sattortov mountains, as well as the area around the villages of Chorkesar, Madaniyat, Parda Tursun, should be surrounded by protective forest stands. Also, the mountain slope of the route leading to the pass should be developed by forest melioration on the basis of a special program and project, and engineering structures should be built against erosion and avalanches [2].

The conservation area of Chust-Pap and Namangan adyrs occupy the hilly area of the region. In hilly areas, the gap between the adyrs and the plains beyond the adyrs, where nature changed the most, is actively used in irrigated agriculture. Now adyrs themselves are developed in convenient places and used for agricultural purposes. The western part of the region consists of pastures undeveloped due to lack of water. There are many settlements in the adyr region, which are also considered residential complexes and are an integral part of the region. According to the relief features of the region, in conditions of irrigated agriculture, taking into account meteorological factors, one can feel the widespread development of floods, hail, and erosion in the area. In other words, the Adyr region is a place of formation and development of the erosion process. According to A. Kazakov and others (2001), 36.7 percent of the slope of the

region corresponds to plains with 0-1 degrees, this region does not need anti-erosion measures, and the area with a slope of 1-3 degrees is 10.7 percent. These lands correspond to irrigated arable lands [3]. Anti-erosion measures are required: the slope of the remaining land exceeds 7 degrees and is typical of hills and mountains. In this case, first of all, it is necessary to conduct regular irrigation practices using anti-erosion measures. G. M. Makhsudov (1989) proposes the following to prevent soil erosion: 1) reduce the transverse slope of the slopes; 2) increase soil resistance to erosion and the fertility of washed soils; 3) the choice of soil protection methods and the use of irrigation equipment.

Deepening, erosion of ravines are typical for this region. A small ravine, which begins as a result of water discharge, is completely formed during the flood process, becomes complex and enters the phase of degradation. Ravines are more common in the valleys of Podshota, Chartaksay, Kasansay. Dry streams and ravines of various sizes in the west were formed as a result of the activities of temporary streams (the area between Chodaksai and Uygursai), starting from the slopes of the Kurama mountain range. Because of erosion of undeveloped adyrs, bumpiness and depth, as well as density on an area of 1 ha, are very large, which is completely unsuitable for agriculture. Given the current situation, it is important to apply a set of measures against erosion, erosion of ravines, mudflows and floods in the area. Artificial recesses are available to discharge mudflows, but more special water collection facilities will be required. In connection with the development of adyrs, the level of groundwater in the lands behind adyrs increases, in some places soil salinization occurs, therefore, it is necessary to optimally use water during irrigation. During watering on adyrs, a lot of water is absorbed into the soil, and in other places, especially behind adyrs, water accumulates and affects the salinization of the soil. Currently, the process of soil salinization is developing and is entering the stage of formation. Therefore, it is necessary to identify regional causes on the ground and take special measures. In this conservation area, in the valleys of large and small

ivers, there are settlements and cities (Yangikurgan, Kasansay, Chust, Olmos, Gova, Varzik, Iskovat, etc.). In the irrigated part of this region, they, in this respect, in appearance and form, merge with the surrounding oasis. In the west, in the desert, settlements form oases of different sizes and shapes, and this feature is radically different from the surrounding steppe. Due to pastoralism, residential landscapes are small and scattered, and the development of erosion processes requires the study of this territory within this region.

The coastal conservation area on the Syrdarya banks occupies the current river valley. The valley is engaged in irrigated agriculture, animal husbandry, hunting and other industries, oil and construction materials are extracted. As a result of the economic activity of the population, the processes of erosion, deflation, suffusion, landslides, and waterlogging developed on a regional scale. Heavy rains often cause flooding and hail in the spring. Regular disappearing and erosion of the riverbank is a natural phenomenon that allows us to study the Syrdarya valley as a conservation area. The proper use of water and land in the valley can solve many problems. Since the groundwater level lies on the surface, hydromorphic irrigation when applying the reclamation regime and establishing water standards for irrigation of crops requires special care. Excessive irrigation with water in this mode further enhances the hydromorphic properties of the soil. Even if saline does not accumulate, the physicochemical quality of the soil is deteriorated. Erosion along the banks of the Syrdarya is strong. Starting from the Namangan meridian, the riverbed takes a curved shape, which enhances the process of washing out the banks on steep lines, accelerating landslides and erosion on steep slopes. This process intensified because of the destruction of tugai thickets. The main goal is the restoration of ancient shrub groves 1000-2000 m wide. The main object of erosion is the confluence of terraces I and II, the most acute of which is the steep slope from terrace II to terrace III. Water discharges formed ravines of various sizes during leaching on

sharply defined slopes. Covering such areas with trees 25-50 m wide prevents erosion, and leaching stops.

In the valley, there are large settlements, towns, regional centers, villages. They occupy cone-shaped branches of large and small rivers, for example, Namangan, Uchkurgan, Chartak, Turakurgan, Pap, etc. In connection with the conical distribution of rivers and streams flowing from the north of the Syrdarya and crossing the III terrace, their reclamation state is somewhat better. The shape of the intersection is well defined. The reclamation state of the conical floods of the rivers formed on the II terrace of the valley is also not bad. They do not observe a natural pattern during the conical spill in Kokand, so salinization of the soil does not occur. The regular use of a set of measures against erosion and deflation, floods and other dynamic processes in the environmental zone leads to their optimization. Consequently, the preservation of the natural environment and increased crop yields were achieved.

The conservation area of the Central Fergana Plain is part of the gigantic III terrace of the Syrdarya alluvial-proluvial plain in Namangan region. The relief consists of sandy plains, dominated by mounds of sand and dunes. The territory is part of the Karakalpak desert. Livestock husbandry and, partly, irrigated agriculture are conducted. Due to the location between northern Baghdad and Achchikkul, drainage networks were carried out. Deflation prevails in the region from natural processes. Sand reliefs were formed long ago and are now strengthened by psammophytes as a result of land melioration. Further irrigation should be included in the agricultural cycle. The focus in this area should be on strengthening sand. It is very important to intensify land reclamation involving psammophytes. It will be good if they are planted on the basis of a specific project. Growth under shrubs and trees (aksaksavul, cherkez, kandym, etc.) of ephemerals and ephemeroids helps to further strengthen the sand. In the process of cattle grazing, one of the main tasks is also the preservation of sand from destruction and decay.

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