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POSSIBILITIES OF USING SEASONAL WATER SOURCES IN CENTRAL RED

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Abstract:
This article provides for temporary watercourses and their collection, store and rational use.

Keywords: Temporary surface runoff, plastic method of relief, water resources, watering.

Organization of rational use of local water sources in Central Kyzylkum, research of land and water resources for the purpose of development of irrigated agriculture, determination of water potential of areas prone to desertification are urgent issues.
In the Action Strategy for the further development of the Republic of Uzbekistan, important tasks such as "...prevention of environmental problems that harm the environment, population health and gene pool" are defined. For the effective implementation of these tasks, research on the natural geographical basis of the rational use of local water sources in the desert regions of Uzbekistan and the improvement of its scientific and methodological basis are of great importance.

The purpose of the research- is to improve the methods of collection, storage and use of local water sources in desert areas, and regionalization of temporary water bodies. Acceleration of the desertification process in Central Kyzylkum is causing a decrease in the bioresources of landscapes and their economic potential, deterioration of the quality of the ecological environment, living conditions and health of the population. It is necessary to pay attention to the development of the region, to determine the organization of rational use of water resources.
It is desirable to map the temporary water bodies of Central Kyzylkum based on the relief plastic method. Geomorphological analysis is carried out on topographic maps of the studied area and relief elements are separated taking into account the relative height and slopes.

As a result, in Kyzylkum, certain genetically interconnected systems that form different types of water catchment basins are determined, their formation movement, accumulation and migration of streams are determined. The more accurately the structure is shown on the relief plastic map for the separation of temporary watersheds in desert areas, the more clearly the structure is shown, the relationship of natural geographical components with the relief, the basis for the study of processes is created [1]. Clear boundaries of water bodies are defined.

Central Kyzylkum region was divided into 3 regions according to the conditions of stream formation:

1. A region where there is no temporary water flow. The soil layer is sandy and loamy, the groundwater is highly saline, the slope is 0-5 degrees, and here it is 15mm. a current does not form in a rain forest.

2. A region where temporary runoff is collected on the basis of a one-sided slope. During the rains, 15% sand and clay soils spread 5 mm rain 0.075 mm/min. begins with intensity. 5mm in wet areas. rainfall produces a rate of 0.01 mm/min. If the one-sided slope is more than 50, temporary streams will start to form on the one-sided slope.

3. The region where temporary runoff is collected on the basis of a two-sided slope. The two-sided slope is greater than 50. The soil layer consists of clayey and clayey sediments. This land is barren and is very suitable for the formation of temporary streams. 5mm once in this area. when it rains, a temporary flow of water begins to form with an intensity of 0.075 mm/min. A sandy soil has a moisture content of 15%, while a clayey soil has a rainfall of 0.01 mm/min. is observed to form at high speed.

In central Kyzylkum, precipitations that temporarily form flowing water occur 3-8 times. If the medium sandy soil moisture content is 10.7%, 518,000 m3 of water will be collected on an area of 270 km2. If the rate of precipitation is 0.1 mm per minute under these conditions, the formation of 1296 thousand m3 of temporary runoff in the same area was calculated according to the Alyushinsky method.

Topographic maps served as a basis for this. The scientific basis of zoning according to the conditions of the formation of temporary surface water was determined using the relief plastic card.

The map prepared in this way is a base map with the main contours (boundaries) for soil, hydrogeological, reclamation, geobotanical and other special photos (aerospace). In this way, it allows to reflect the systematic structure of the earth's surface based on genetics, soil layer, lithodynamic and geochemical flows. In the development of the natural-geographical basis of the optimization of temporary water collection, the relief plasticity map gained great importance. On the relief plastic map of Central Kyzylkum, elevations and depressions were depicted forming certain geometric shapes. It has been scientifically proven that this map is the basis of a large-scale topographical map (scale 1: 100,000) in studying the interrelationship between the relief and other components and in determining temporary water sources [2].

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Geoecological laws can be clearly observed in the temporary water bodies of Central Kyzylkum. For example, the ecological situation worsens from the upper to the lower part of temporary water bodies. This happens due to the following factors and reasons.
1. A temporary water body has a clear boundary due to water bodies.
2. The surface of the relief of the temporary flowing water basin decreases from the upper part (relief plastic) to the lower (erosion base) part.
3. In accordance with the topography of the basin, underground (runoff, ditch waters) and underground (seepage) waters temporarily flow to the lower part of the stream.
Tasks in the study and development of water resources of the deserts are, on the one hand, to improve the traditional folk methods of water supply based on modern science and technology, and on the other hand, to find and use new water sources.

Water sources of Central Kizilkum (Kh. Tokhtaeva, 2018) (Table-1)

№	Landscape types	Low mountain landscape type	Mountain plain landscape типи	Mountain range landscape type	Barren landscape type	Concave landscape type	Aeolian sand landscape type	Total
1.	Spring	12	18	12	-	16	-	58
2.	Well	35	23	-	-	38	102	198
3.	Artesian the well	25	20	-	-	16	10	74
4.	Kaak, dirty	-	-	-	8	-	-	8
5	Сардоба	-	4	-	-	3	-	7
6	Water reservoirs	36	17	13	-	20	-	86

Each landscape type requires measures to combat desertification in its own geographical way (table-2).

Use of water sources based on landscape types in Central Kizilkum (Kh. Tokhtaeva, 2018). (Table-2)

№	Landscape types,	Water sources	Water supply
1.	Low mountain landscape type,	Surface flow formation, tectonic fissure-karst waters, springs,	Drinking water supply to the population, etc.
2.	Submontane plain landscape type	Wells, water catchment areas (plots)	Carrying out phytomelioration works, water supply, planting crops, providing water to the population
3.	Mountain range landscape type	Water reservoirs	Supplying the population with drinking water, water supply.
4.	Barren landscape type	Kaak, dirty	Water supply for livestock
5	Concave landscape type	Springs, interlayer waters, artesian waters	Watering pastures, planting forage crops and cash crops, water supply, irrigation, health and recreation
6	Aeolian sand landscape type	artesian waters, wells	Water supply.

If the use of water collection and storage ways is introduced, the issues of watering pastures in the deserts and providing the population with clean drinking water will be solved to some extent. Modern technology and constructions that temporarily store runoff water in an artificial volume create conveniences for rational use of water. Ground processing with drugs and materials, reducing infiltration, prevents flow filtration [3].

Atmospheric precipitation in Central Kyzylkum is 140 mm, and the possible evaporation size requires that farming in the deserts is carried out on the basis of artificial irrigation. In these places, the movement of water-soluble salts and their accumulation on the surface is very active, the soil contains little organic matter.

After the temporary surface runoff has accumulated naturally, it can be redistributed, stored and rationally used as a result of the application of simple technical methods. This causes an increase in the number of additional sources for water supply in the desert region.

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