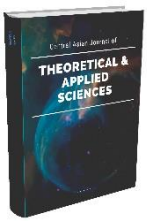

CENTRAL ASIAN JOURNAL OF THEORETICAL AND APPLIED SCIENCES

Volume: 04 Issue: 03 | Mar 2023 ISSN: 2660-5317
https://cajotas.centralasianstudies.org

Analysis of Artificially Irrigated Places in the Republic of Uzbekistan

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Received 24th Apr 2023, Accepted 13th May 2023, Online 12th Jun 2023

Abstract: *This article presents the distribution of artificially irrigated areas in our Republic, as well as the distribution and map of artificially irrigated lands in the region.*

Key words: *road base, artificially irrigated area, climate, ground, uplift, project, hydrogeology, saline areas, slope.*

Enter. In our country, a certain part of the highways pass through artificially irrigated areas. The design and construction of roads in artificially irrigated areas requires special efforts. In addition, it is necessary to take into account the characteristics of artificially irrigated areas when determining the height of the road surface of the highways.

Development of advanced technologies using the achievements of science and technology in the design and construction of roads passing through artificially irrigated areas and newly designed ones we must pay attention.

The main part: The total land area within the administrative borders of the Republic of Uzbekistan is 44892.4 thousand hectares, of which the irrigated land area is 4331.7 thousand hectares or 9.6% of the total land area. The land fund has its own characteristics according to the purpose and procedure of land use, and they are divided into categories according to the Land Code of the Republic of Uzbekistan. The distribution of the land fund by category is presented in Table 1.

Distribution of the land fund of the Republic of Uzbekistan by category

Table 1 (in thousand ha.)

T/p	Land fund categories	Total area		This includes irrigated lands	
		In total	% in the account	In total	% in the account
1	Land intended for agriculture	24057,1	53,59	4214,3	9,39

2	The lands of the settlements	223,5	0,50	51,8	0,12
3	Lands intended for industry, transport, communication, defense and other purposes	876,3	1,95	12,6	0,03
4	Lands intended for nature protection, health and recreation	728,4	1,62	0,6	0,001
5	Places of historical and cultural significance	14,7	0,03		
6	Forest fund lands	12021,4	26,78	45,4	0,10
7	Lands of the water fund	827	1,84	4,7	0,01
8	Reserved land	6144	13,69	2,3	0,005
	Total Land:	**44892,4**	**100**	**4331,7**	**9,65**

3693.8 thousand hectares of the territory of the Republic of Uzbekistan are irrigated. The distribution of irrigated land areas by the Republic of Karakalpakstan, regions and the city of Tashkent is given below [1].

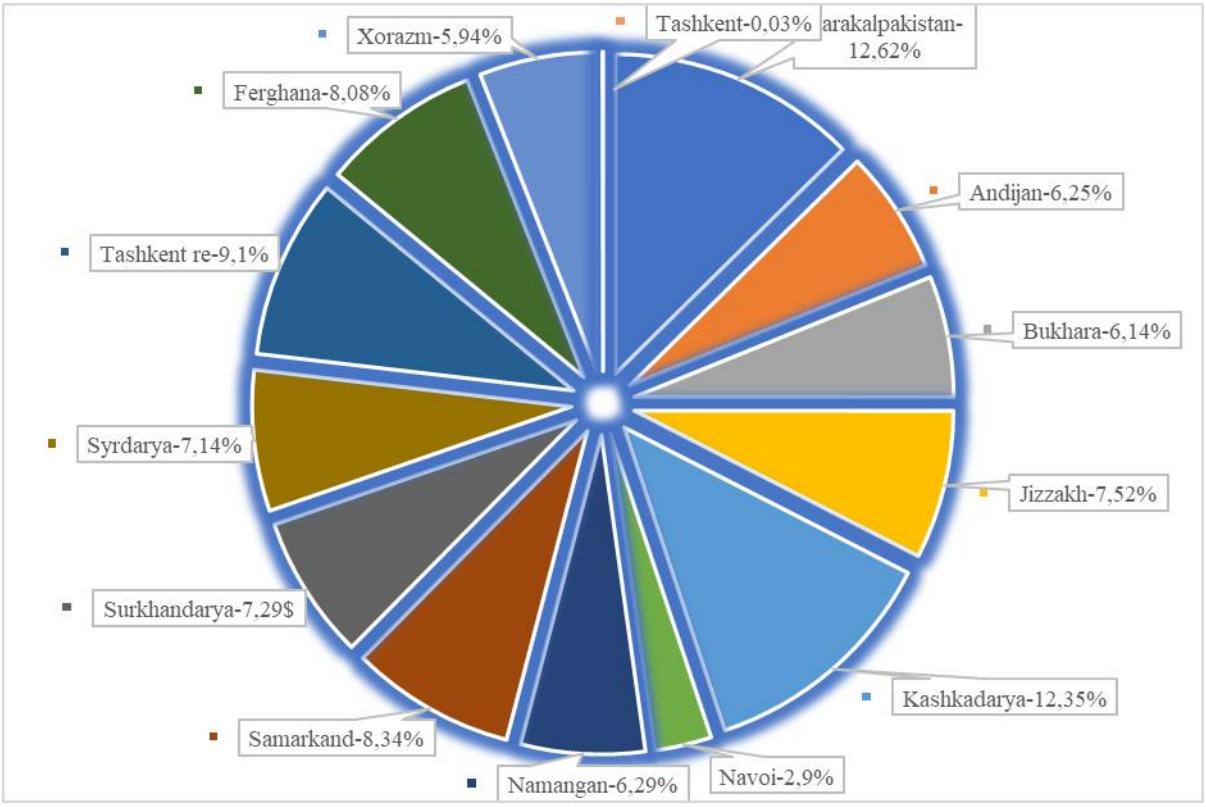

Figure 1. Distribution of irrigated land types in the Republic of Karakalpakstan, regions and Tashkent city %

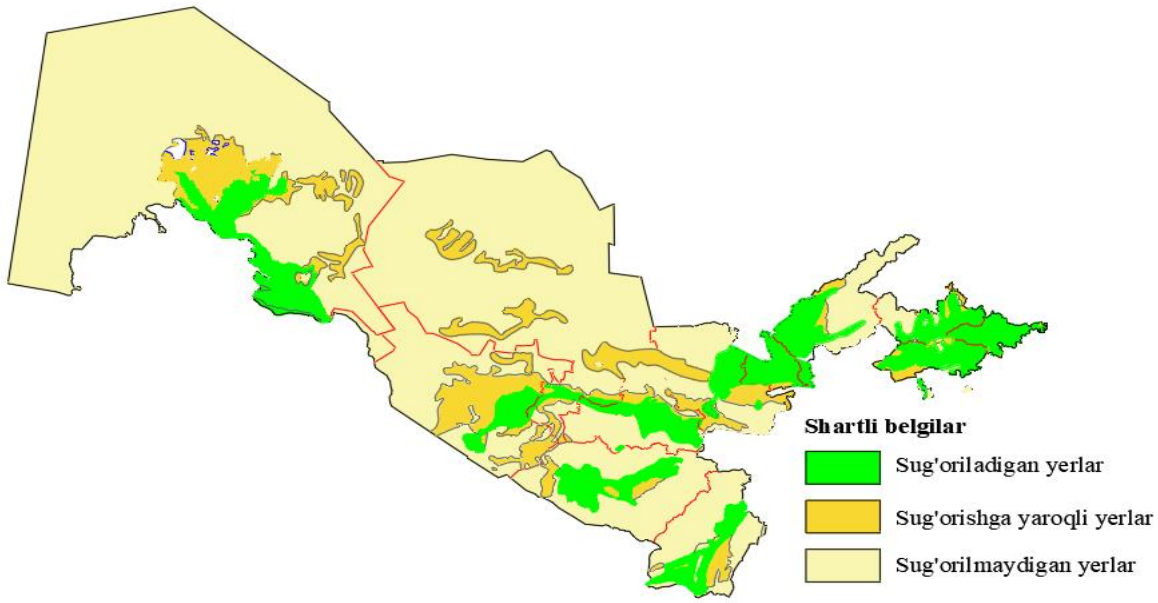

Figure 2. Map of the irrigated regions of Uzbekistan

R.M. Khudaykulov, A.D. Kayumov, S.I. Komilov and others carried out research work on the strengthening and height determination of highways by the scientists of our country. In particular, based on the results of physical and mechanical properties of saline soils, soil compaction processes, laboratory and field conditions, our scientists have proposed a computational design solution diagram of the working layer moistened with capillary water in order to pre-predict the calculated parameters of road elevations with saline soil [2].

In the technical instructions for the design and construction of highways in artificially irrigated areas with a dry climate, the climate in the irrigated areas of Uzbekistan is rapidly changing and arid, in the artificially irrigated areas and recommendations and instructions on the implementation of design and construction of roadbeds in places where water-soluble salts are washed from them [3].

Conclusion: It is clear that 9.6% of the total land fund of Uzbekistan is artificially irrigated land. This, in turn, places special demands on artificial structures being designed and built in these areas. In particular, it requires improvement of operational indicators of highways passing through irrigated areas.

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