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NATURAL GEOGRAPHICAL FEATURES OF JAMBOY DISTRICT

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ABOUT ARTICLE

Key words: Physical factors, flooding,	Abstract: Jamboy district is located in
erosion, salinization, desertification,	Samarkand region, the natural geographical
swamping, soil erosion, fluvial processes,	location, geological structure, climate and
landslide, river basin.	internal waters of the district are unique. It is
	important to study their natural conditions
Received: 12.12.22	within the framework of our republic on a large
Accepted: 14.12.22	scale, that is, within the districts. Because it is
Published: 16.12.22	very important to take into account the natural
	conditions in the implementation of many
	reforms in the industrial, agricultural and
	social spheres that are being carried out today.

JOMBOY TUMANINING TABIIY GEOGRAFIK XUSUSIYATLARI

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MAQOLA HAQIDA

Kalit soʻzlar: Fizik omillar, suv toshqini,	Annotatsiya: Jomboy tumani Samarqand
eroziya, sho'rlanish, cho'llanish, botqoqlanish,	viloyatida joylashgan boʻlib, tumanning tabiiy
tuproq eroziyasi, oqim jarayonlari, ko'chki,	geografik oʻrni, geologik tuzilishi, iqlimi va
daryolar havzasi.	ichki suvlari oʻziga xosdir. Ularning tabiiy
	sharoitlarini respublikamiz doirasida, ya'ni
	tumanlar doirasida keng miqyosda oʻrganish
	muhim ahamiyatga ega. Chunki bugungi
	kunda sanoat, qishloq xoʻjaligi, ijtimoiy
	sohalarda amalga oshirilayotgan koʻplab
	islohotlarni amalga oshirishda tabiiy
	sharoitlarni hisobga olish juda muhim.

ПРИРОДНО-ГЕОГРАФИЧЕСКИЕ ОСОБЕННОСТИ ДЖАМБОЙСКОГО РАЙОНА

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О СТАТЬЕ	
Ключевые слова: Физические	Аннотация: Джамбойский район
факторы, затопление, эрозия, засоление,	расположен в Самаркандской области,
опустынивание, заболачивание, эрозия	природно-географическое положение,
почв, речные процессы, оползень, бассейн	геологическое строение, климат и
реки.	внутренние воды района уникальны. Важно
	изучить их природные условия в рамках
	нашей республики в больших масштабах, т.
	е. в пределах районов. Потому что очень
	важно учитывать природные условия при
	реализации многих реформ в
	промышленной, сельскохозяйственной и
	социальной сферах, которые проводятся
	сегодня.

INTRODUCTION

Geographical location. Jamboy district is the northeastern district of Samarkand region, located in the central part of Uzbekistan. The area of the district is 0.56 thousand square kilometers, the district was established on December 7, 1970. The district borders Bulungur to the east, Tayloq and Samarkand to the south and southwest, Payariq to the northwest, Aqdarya districts to the west, and Jizzakh region to the north through the Gobdin mountains. The center is the city of Jamboy, in addition to 5 towns, there are 41 community assemblies, the number of rural settlements is more than 130. The distance from the center of the district to the city of Samarkand is 13 km. The length of its borders is 144 km.

THE MAIN RESULTS AND FINDINGS

Geological and geomorphological structure. The geological structure of the district is complex, including river valleys, foothills, hills and mountainous areas. A complex of magmatic, metamorphic and sedimentary rocks formed in the Paleozoic and Cenozoic eras can be found in the territory of the district. In the territory of the district, intrusive rocks are exposed on the surface of the Gobdin Mountains, the main rocks are effusive rocks, which have a clear crystal structure in some areas, and a hidden crystal structure in some areas. The layers of sedimentary rocks are regular and cross each other. They are mainly considered to be river deposits, and according to the nature of climatic formation, they are considered to be continental deposits. Because they were mainly laid by the Zarafshan river. Alluvial sedimentary rocks cover the Holocene deposits in the river valley. They consist of conglomerates, breccias, large and medium-sized river sands and are covered with thin loess rocks. Alluvial-proluvial deposits are distributed in the conical expanses of streams in mountain and sub-mountain plains and consist of conglomerates, gravels and loess rocks.

In the northern part of the district, the foothills of the Gobdin Mountains and the hilly parts contain rocks belonging to the upper part of the Neopleistocene. In the southern foothills of Gobdin Mountain, there is a flat or weak undulating orogenic zone of high sloping and subhorizontal plains of Upper Pleistocene-Holocene age. The territory of the Gobdin Mountains is occupied by dome-shaped mountain ridges with a relief of the upper Pliocene-Quaternary age, and the deeply fragmented leveled tectonic surfaces of the low mountain massif at a depth of 100-500 m. The Paleozoic rocks are folded, and they protrude to the surface in the Gobdin Mountains. In the mountainous part, the layers of these rocks have undergone plicative dislocation. The main part of the territory of the district is located on the terraces of the Zarafshan River. The rest of the territory corresponds to the Gobdun mountains and its foothills.

The Syrdaryo cycle (Q4), i.e., deposits of the present period, cover the river bed and the first and second terraces above the bed. They consist of sand, gravelly gravel, and loess rocks, and their thickness does not exceed 50-55 meters. These terraces occupy large areas in the region, they have an absolute height of 400-500 m. The Mirzachol cycle (Q3), i.e. Upper Quaternary deposits cover the third terrace of the Zarafshan river. They consist of loess rocks and conglomerates, are 45-50 m thick, and are distributed in the region at an absolute height of 500-700 m. The Tashkent cycle (Q2), that is, the Middle Quaternary deposits correspond to the fourth and fifth terraces of the Zarafshan river. They are covered with deposits of the age of the Karnob suite, with a total thickness of 230-250 m. These terraces adjoin the Gobdun foothills.

Climate. The climate of the district is continental. Winter is mild compared to other regions of the region. Summer is cooler. The following factors influenced the climate of the district to have the above characteristics: the geographical location of the district and the solar radiation falling on it, the structure of the earth's surface, atmospheric circulation and anthropogenic factors.

The territory of Jamboy District includes the southern exposure of Gobdin Mountain, and these areas receive more solar radiation than the northern exposure of the mountain. Also, depending on exposure, erosion processes occur more often in this area. An important role is played in the formation of the district's climate by its location in the intermediate valley of Zarafshan Mountain. The average temperature of January is 0,+1 °C, and the average temperature of July is +27,+28 °C. The lowest temperature is around -25°C in January-February, and rises to +42°C in the hot season. Annual precipitation is 300-400 mm. 400-500 mm in the foothills of Mount Gobdin and in mountainous areas. 70-75% of precipitation falls in winter and spring. During the year, the most precipitation occurs in March and April, and the least precipitation occurs in July, August, and September. Precipitation falls mainly in the form of rain. Only in December, January and February, most of the precipitation falls in the form of snow. The snow

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cover does not form a stable cover in the flat part of the district, in most cases the snow melts after a few days, but in the years when the winter is cold, the snow can lie for 30-40 days without melting in the plain parts. Air humidity is related to the natural geographical conditions of the place. The continental tropical hot air formed over Central Asia in the summer months causes a decrease in relative humidity. The absolute humidity of the air decreases as it moves away from the Zarafshan river and towards the Gobdun mountain (to the north of the district).

Relative humidity in winter months is higher than in summer months. It can also be observed that the relative humidity at night is higher than during the day. In the morning, before sunrise, the average relative humidity varies from 55% to 70%. Average relative humidity during daytime in winter months is 60-70%. During the hot summer months, the relative humidity is very low during the day. At noon in July, its amount drops to 18-20%.

Hydrography. The main sources of running water in the district are the Zarafshan River and the Bulung'ur, Mirzaariq, Abalang, Polvon, Ortaboz canals that receive water from it, and small streams that flow during temporary rains starting from Gobdin Mountain. The Zarafshan river flows through the southern part of the district. Almost half of the territory of the district is irrigated by the Zarafshan river and canals originating from it. In the northern part of the district, the areas between the Bulung'ur and Abalang canals are suitable for irrigation. The rest of the land is not suitable for irrigation. All agricultural land in Jomboy district is 45.8 thousand hectares. Of these, 29.6 thousand hectares are irrigated lands. The Bulungur canal begins at the same place as the Mirza canal. This channel flows relatively north. Its length is 55.7 km, of which 19.9 km long part corresponds to the territory of the district, the average water consumption is 60 m3/s.

The Abaling canal flows through the district at a distance of 14.3 km. This canal was dug from 750-800 m absolute heights in the Gobdun foothills. Crop fields irrigated with water from this canal are oriented from north to south along the slope of the terrain. The flow volume and water consumption of the canal is much smaller than the Mirza and Bulungur canals. Alluvial soils with hydromorphic properties have been formed due to the proximity of floodwaters to the surface of the Zarafshan River and terrace I. Hydromorphic soils include a number of groups of soils that drain from below and are formed by groundwater near the surface. According to the level of moisture, these soils are divided into two types: meadow alluvial and meadow-gray soils. Alluvial soils are mainly distributed in the floodplain of the river, and these areas are permanently or seasonally flooded. They contain a lot of organic and mineral substances, the amount of humus is 1.5-2.5%. The parts occupying the first terrace of Kair have been developed and turned into cultural soils.

Grassy gray soils were formed in the upper parts of the upper terrace I and upper terrace II of the Zarafshan river. In the mechanical structure of these soils, loess-like rocks are found together

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with alluvial rocks. These soils have been fully developed and turned into cultivated soils. These soils are replaced by ordinary and typical gray soils that are irrigated towards the north. These types of soil are especially widespread in the lands between the Mirza and Bulung'ur canals, and have been completely exploited under the influence of human labor. The amount of humus in these soils is 0.5-2.5%, and they are mainly distributed at altitudes of 500-700 m. In the pre-mountain zone, simple gray soils are developed on loess rocks, and rocky simple gray soils are developed on proluvial deposits at the foot of streams.

CONCLUSION

At the foot of the Gobdin Mountains, dry, dark gray soils are scattered. The content of humus in dark gray soils is from 1.5% to 3.5. Above 700-800 m absolute altitude, dark gray soils scattered in the hilly zone of Gobdun mountains are used in dry farming. On the southern slopes of the Gobdun mountains, from the height of 1000-1100 meters, dark gray soils alternate with mountain brown soils. Brown soils, in turn, are divided into three types: light brown, ordinary brown, and dark brown. The amount of humus in them reaches 6-7%.

Land reclamation changes depending on soil types. 20.3% of them are heavy sand and silt, 63.6% medium sand, 15% sand-sand and 1.1% light sand. 40.6% of district soils are not saline, 53.7% are weakly saline, 5.5% are moderately saline and 0.2% are strongly saline.

REFERENCES

1. Sharipov Sh.M. "Nature protection and geoecology" -Tashkent: LESSON PRESS, 2016.-146 p.

2. Rafikov A.A., Sharipov Sh.M. Geoecology.-Tashkent: Adib, 2014.-98 p.

3. Zakirov Sh.S. Anthropogenic and applied landscape science.-Tashkent: University, 1998.-45 p

4. Sharipov Sh.M., Allaberdiyev R.Kh. and others. Geoecology. -Tashkent: University, 2017-55 p.

5. Fretwell M., Kelly D., Nanson J. Geography for Cambridge International AS&A Level.-Oxford: University press, 2016-345 p.

6. Academy.uz

7. Geography online.com