© IJARW | ISSN (O) - 2582-1008
October 2019 | Vol. 1 Issue. 4
www.ijarw.com

ANALYSIS OF NATURAL AND GEOGRAPHICAL CONDITIONS OF THE NORTHERN-EASTERN SLOPE OF THE LESSER CAUCASUS

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ABSTRACT

One of the regions of Azerbaijan known with its various minerals is the Lesser Caucasus. The Lesser Caucasus Mountains are remarkable for their charming nature. The rivers of the northern-eastern part of the area are important for irrigation and used in agriculture. Climate diversity allows to distinguish agroclimatic regions within the territory. The variety of relief, mountain and plains attract tourists.

Keyword: Lesser Caucasus, rivers, irrigation, agriculture, agroclimatic, relief

1. INTRODUCTION

The Lesser Caucasus Mountains are located in the western part of Azerbaijan. The northern-eastern slope of the Lesser Caucasus covers 5 administrative districts. These include Dashkesan and Gadabay regions as a whole, and the mountainous areas of the Tovuz, Shamkir and Goygol regions, which are located along the northern-eastern slope. The orographic structure of the area is also very diverse. Thus, the territory is surrounded by the Shahdag and Murovdag ranges from the south. The territory is bordered by the Tovuz, Shamkir and Goygol districts in the north, Kalbajar region in the south, Goranboy region in the east and Armenia in the west. The terrain relief is mainly composed of mountains and plains [2]. Due to historic tectonic movements, deep ravines, swollen tops, sharp fragmented mountain slopes have become widespread in the area. The northern-eastern slope of the Lesser Caucasus takes its origin from the Shahdag and Murovdag ranges. Between these ridges and the Ganja-Gazakh Plain there is a wide middle and low mountainous area (30-40 km and 40-50 km). The main reason for the north of the low and middle-mountainous zones of the Shahdag and Murovdag ranges is the extensive deep river valleys. There are also ancient glacier relief forms. On the northern-eastern slope of the Lesser Caucasus, the soil and vegetation are distributed in accordance with the vertical zone law. The role of Sh.A.Azizbeyov and others in the study of the relief of the area was significant. The climate of the northern-eastern slope of the Lesser Caucasus is very diverse. The climate of the area is formed by the interaction of various factors. These factors include the geographical location of the area, relief, atmospheric circulation etc. Madatzadeh A.A, Shikhlinsky E.M, Ayyubov A.D and others played a great role in the study of the region's climate. The northern-eastern slope of the Lesser Caucasus has complex geomorphological structures, and the climatic features of the area are diverse. Shikhlinsky E.M has distinguished 4 climate types in the northern-eastern slope of the Lesser Caucasus [3];

1. Semi-desert and dry desert climate with dry winter;
2. A mild climate with warm and dry winters;
3. Cold climate with dry winters;
4. Tundra climate type of high-mountainous belt.

Temperatures are not very high in the northern-eastern slopes of the Lesser Caucasus. Because the regions are mountainous. At the same time, strong frosts occur during the winter months in Gadabay and Dashkesen areas. However, in spite of all this, the territorial districs are distinguished by their unique agroclimatic resources. According to his research, Ayyubov A.J distungished the following agroclimatic areas on the northern-eastern slope of the Lesser Caucasus;

1. Gazakh-Goygol;
2. Hajikend-Chingildag;
3. Dashkesan-Gadabay;
4. Shahdag-Kapaz.

The northern-eastern slope of the Lesser Caucasus has a relative humidity of 75% and

ranges between 67-82% per year. The amount of rainfall is 600-900 mm, mainly in the summer months. Mainly northern-eastern and western winds is dominate in the area. The average annual speed of wind is 2.2 m/c. The number of days covered with snow is 40-160 days. Total active temperatures above 100C in the area are only 200-22000C.

The river network is distributed unevenly across the area. The river network is mostly developed in the mountainous areas at the altitudes of 1000-2500 m (1.2-1.5 km/km2). The hydrographic network above and below this zone is poorly developed. Goshgarchay (76 km), Shamkirchay (95 km) and Ganjachay (98 km) are the largest rivers in the region, taking their origins from the northern-eastern slopes of the Lesser Caucasus. The average annual flow in these rivers is 1.5-3 times higher than the rivers that take their source from the mid-mountainous slopes. Ganjachay (98 km), which flows through the area and is the region's largest river, flows through the northern slope of the Murovdag Range of the Lesser Caucasus, reaching its source at an altitude of 2800-2850 m. The river consists of 9 branches and five of them belong to the right and four to the left. Ganjachay is bordered by Tartarchay along the Murovdag range, Goshgarchay basin in the west and Kurakchay basin in the east. The average river inclination is 27.7% and the density of the river network is 0.64 km/km2. In the nutrition of the Ganjachay River, 32% prevails in the snow, 44% in the groundwater and 24% in the rain. Shamkirchay (95 km), one of the largest rivers in the area, flows into the Kura River, taking its source at an altitude of 2920 m. Shamkirchay has 14 branches. This river is fed by 38% of snow, 17% of rain and 45% of other sources. Goshgarchay (76 km), flowing from the northern-eastern of the Lesser Caucasus runs between Ganjachay and Shamkirchay. This river originates from the confluence of the Hamamchay and Khoshbulag, which flow from the northern slope of the Goshgar Mount (3368 m) [1]. The area of the Goshgarchay basin is 798 km2 and consists of 10 branches. Four of the branches are to the right and six to the left. The water of Goshgarchay is widely used in agriculture and industry. That is why it is the most polluted river in the region. Because the rivers in the area we study are suitable for agriculture, plain land is widely used for irrigation. In the northern-eastern slope of the Lesser Caucasus, groundwater is widespread. They can be found everywhere. These are most commonly found in river cones and alluvial sediments of rivers.

2.CONCLUSION

1. The northern-eastern slope of the Lesser Caucasus is one of the areas favorable for cultivation of agricultural crops.
2. The area rivers are important for agriculture.
3. The northern-eastern slope of the Lesser Caucasus is remarkable for its charming beauty.

REFERENCES

[1] Əliyev F.Ş., Azərbaycan Respublikasının yeraltı suları, ehtiyatlarından istifadə və geoekoloji problemləri, Bakı 2000, 325 s.

[2] Müseyibov M.A., Azərbaycan fiziki coğrafiyası, Bakı 1998, 397 s.

[3] Şabandayeva A.D. Kiçik Qafqazın şimal və şimal-şərq hissəsində eroziya prosesinin ekoloji duruma, ekosistemlərə təsiri və ona qarşı kompleks mübarizə tədbirlərinin tətbiqinin zərurəti, Bakı-2011, 144 s.