Calculation of mountain small river runoff on the example of the river Enguri basin Giorgi Taktakishvili

e-mail: giorgi.taktakishvili551@ens.tsu.edu.ge

Department of Geography, Faculty of Exact and Natural Sciences Ivane Javakhishvili Tbilisi State University, 3, Chavchavadze Ave., 0179 Tbilisi, Georgia

Georgia is a country rich in water resources and holds the "advanced positions" in the world in terms of freshwater. Freshwater resources in Georgia compose of river runoff, groundwaters, and waters of glaciers, lakes, swamps, and reservoirs. At the same time, water consumption is increasing every year, as the population grows over time, standard of living improves, sanitary and living conditions increase. In addition, the industry is expanding, which despite the perfection of technical processes and the implementation of energy-saving technologies, is still the largest consumer of water. No fewer demands are imposed on the water by agriculture, which consumes it both for drinking, as well as for livestock breeding development and irrigation.

Regardless of the number of water resources, they are disproportionately distributed throughout the country, therefore their consumption is disproportionate as well. The use of water resources is of different types, the main direction of consumption in eastern Georgia is agriculture, and in western Georgia - power engineering.

The energy engineering potential of the country guarantees the future strength and stability of the economy. The huge power engineering potential is hidden in the small mountain rivers; accordingly, their study and assessment of runoff are important for the future perspective.

The following paper discusses the first-row tributaries of the upper Enguri River, which mainly join the Enguri River at an altitude of 1000 meters above sea level and are mountain rivers. The morphometric characteristics of these river basins are calculated and the average, maximum and minimum expense rates of the rivers, which are important for their future use, are evaluated.