

Evaluation of the modern regime of the river Tana watershed for water use purposes

Tornike Khokhonishvili

e-mail: tornike.xoxonishvili2013@ens.tsu.edu.ge

Department of Geography, Faculty of Exact and natural science, Iv. Javakhishvili Tbilisi State University,
I. Chavchavadze Avenue. #3, 0179, Tbilisi.

Georgia is a rich country with its water resources, but its resources are unevenly distributed and the current trends of usage suggest that quantity, quality and availability of water will be an important component for sustainable development in the nearest future. Furthermore, there is no water resources governance system for basins in Georgia and existing problems are multidiscipline involving number of sectors and stakeholders.

Within the framework of the association agreement between Georgia and the European Union, Georgia is obliged to approximate its legislation to the European legislation, including environmental sphere; as for the water framework directive, the most important part is the strategic planning of the use of water resources in river basins.

For the effective governance of water resources, we have evaluated the river Tana's hydrological regime. Specifically, the average annual discharge, distribution within the year, the maximum and minimum flow, the solid sediment and etc. Also the impact of the natural and anthropogenic factors on the quantitative characteristics of the water flow. Water resources are estimated for individual sub-basins and quantitative characteristics of water for various sectors of water users (population, irrigation, energy) are identified. Such an approach will be the attempt to evaluate water resources and to optimize the resource distribution between the stakeholders in case of basin water governance.