

Climate change impact assessment on hydrological regime

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For the last decades the increase of average annual temperature of atmosphere and global ocean has been observed, which according to Intergovernmental Organization of Climate Change (IPCC) “has been caused due to anthropogenic greenhouse gas concentrations”.

Climate change has a significant impact on the hydrosphere including the hydrological regime of the rivers; in particular, increase of extreme (maximum and minimum discharge) values and frequency, quantitative characteristics of water resources and etc. are also changing. The territory of Georgia is no exception, that is why it is important to assess and utilize water resources properly, to avoid the negative effects of global climate change, for example: Increasing of non-irrigated areas, shortage of drinking water, reduced energy resources and etc.

Along with climate change, both at the international and national level, various measures are being taken to mitigate and minimize the effects of climate change. This is reflected in the numerous agreements and treaties between governmental and non-governmental organizations.

The seminar paper elaborates the research of various international organizations on hydrological regime considering climate change, both internationally and regionally.