

Conclusion

Results of calculation based on "transition" scenarios show that there will not be significant river flow changes in the nearest future though some its reduction (2-6%) can be expected due to global temperature rise. Due to climate aridization snow melt share will reduce by 5-10% (change of seasonal snow border, 2-4 weeks lag in snow cover melting). Precipitation can increase by 7-10% that also negatively impacts snow stock. With precipitation increase soil erosion, mudflow and turbidity increase are probable.

In many countries of the world, particularly in Asia and Africa, there is water scarcity problem. Expected climate changes can strengthen this deficit. Developing countries and countries under transition located in dry and semi-dry regions are vulnerable to climate change impact.

To mitigate negative consequences it is necessary to establish reliable hydrometeorological monitoring, wide use of radiolocation and satellite information for snow cover and glaciers assessment

Long-term economic activity planning needs to take into consideration surface water vulnerability because even their small decrease is a serious problem.

Strategy of water sector reforming should be aimed at existing water resources effective use and water conservation in all economic branches.

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