

# **Ensuring Worldwide Long-Term Prosperity Thanks Dams and Reservoirs as Vital Water Infrastructures The Important Role of ICOLD**

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## **Abstract**

History shows that the economic prosperity of a society and its cultural wealth was always closely related to the level of the development of the water infrastructures, including dams and reservoirs. In view of climate change, dams and reservoirs will and have to play an even more important role as mitigation and adaptation infrastructures in order to satisfy the vital needs in water, renewable energy and food in the different continents worldwide. It is also a worldwide political will to improve water, energy and food security on a global level through the so-called NEXUS approach that integrates management and governance across sectors and scales. Nevertheless, these political intentions have to be necessarily followed by a concrete translation into the urgently needed enhancement of the worldwide water infrastructure including reservoirs and dams. To gain wide acceptance and to obtain a win-win situation between all stakeholders, such large water infrastructures projects have to be designed as multi-purpose projects by multidisciplinary teams with a complex system approach. This needs excellence in engineering sciences and management. Through the excellent work of his technical committees, the International Commission on Large Dams (ICOLD) is contributing to the worldwide vision “better dams for a better world”.

**Keywords: Dams, Reservoirs, Water, Food, Energy, Sustainable Development, Climate Change.**