

## **General Presentation**

The International Commission on Large Dams (ICOLD) was founded in 1928 to provide a forum for discussion and for the exchange of knowledge and experience in dam engineering for engineers and others concerned with the development of water resources. Its objectives are to encourage improvements in dam engineering in all its aspects, and in all phases of the planning, design, construction and operation of dams and associated works.

With a present total of 97 member countries, ICOLD leads the profession in ensuring that dams are built and operated safely, efficiently, economically, and with a minimum environmental impact. For more than 30 years, ICOLD has been particularly concerned to enhance the profession's awareness of the social and environmental aspects of dams and reservoirs, and to broadening its perspective in such a way that these aspects receive the same attention and conscientious treatment as the technical aspects.

To reflect the growing concern for the environment, a Committee on the Environment was formed in 1972 and has been renewed four times since. In June 1980, ICOLD published a comprehensive matrix in Bulletin No. 35 as a guideline for the identification and evaluation of all conceivable effects of individual dams on the specific parts of their environment. In 1999, ICOLD published a position paper on Dams and Environment, which is available on its website (<http://www.icold-cigb.org>).

ICOLD maintain and intensifies activities to harmonize the development of water resources with the conservation of the environment and with regard for the people affected by a project. It increases our understanding of environmental interactions and progress in the methods available to control them by the collection, analysis, evaluation and publication of actual experience, including the elaboration of guidelines based on such experience. It encourages the application of environment conscious criteria and objectives, as well as the establishment of an adequate legal and institutional framework tailored to every country's specific conditions and needs. It provides its members with up-to-date information on the current norms of environmental care and the state-of-the-art in dealing with environmental issues.

ICOLD has published in 2012 a World Declaration on Water Storage for Sustainable Development, jointly signed by ICID and IWRA.

ICOLD is working through 27 Technical Committees that gather experts from different countries in order to reach a set of recommendations on a particular subject.

Here follows recent ICOLD actions that are relevant to Global Compact Initiative

### **Environment**

- 1) ICOLD was very active in the 7th World Water Forum organized in 2015 by the World Water Council and was the leader of the theme 1.4 : infrastructures for water. ICOLD

continues to work on the matter after the Forum because ICOLD is among the 16 “champions” responsible for the Daegu-Gyeongbuk Implementation Commitment, that represents the follow-up of the 7<sup>th</sup> Forum. ICOLD will participate in the 8<sup>th</sup> World Water Forum as well.

- 2) ICOLD has created a Technical Committee specifically dedicated to climate, whose mission is to collect and review the guidance and policies currently used in planning for the impacts of global climate change on dams, reservoir, and the associated water resources. The Committee will also assess the role of dams and reservoirs in adapting to the effects of global climate change, and determine the threat posed by global climate change to existing dams and reservoirs. It will recommend measures designed to mitigate against or adapt to the effects of global change on water storage facilities. Finally, it will publish an ICOLD position paper and guidelines for 'climate change and dams, reservoirs and the associated water resources'. These documents would be used by the ICOLD membership, governments, the United Nations, the World Bank and other organizations in need of guidance with respect to water resource protection and development.
- 3) The Technical Committee on Environment is currently working on :
  - a. (1) taking into account environmental aspects in strategic planning related to dams, (2) improved methods in environmental assessment for dams, and (3) mitigation of negative impacts of dams and water management.
  - b. Environmental aspects of hydroelectric power production: run of river, peaking production, pumped storage.
  - c. Socio-economic benefits achieved from dams. Some case-histories.

## **Development**

- 4) Initially founded by Western countries, ICOLD has since the 60s worked for the sustainable development of mankind, even if the concept did not exist yet. ICOLD has always been particularly sensitive to the problematics of development and in particular the development of the poorest African countries. In 2008, ICOLD has thus launched a World Declaration on Dams and Hydropower for African Sustainable Development, cosigned with the African Union (AU), the Union of Producers, Transporters and Distributors of Electric Power in Africa (UPDEA), the World Energy Council (WEC), the International Commission on Irrigation and Drainage (ICID) and the International Hydropower Association (IHA). This Declaration has been a landmark and has set a reference for financing institutions throughout the continent. The ensuing development of dam projects resulted in many African countries joining ICOLD and led to the organization of the first ICOLD conference specifically dedicated to Africa in 2013, which took place in Addis Ababa, in the headquarters of the African Union. ICOLD is now actively preparing for the second one in 2017 in Marrakech, Morocco.

- 5) ICOLD has welcomed new member countries in the last years, mostly coming from developing economies. ICOLD is deploying everything to help those countries to access to the best dam technology available, so they can use it to trigger sustainable development in their country. ICOLD has in particular developed a Capacity Building program, which produced several training sessions for engineers coming from these countries.

## **Gender**

- 6) ICOLD has created a Young Engineers Forum in 2011, which grew very fast : 150 young engineers joined the last ICOLD annual meeting. ICOLD is proud to say that the second and the third persons elected president of this YEF are women, which is a performance in a dam engineering profession still predominantly male. ICOLD also had a female Vice President for the first time in 2010.