

TASK FORCE ON DROUGHT RISK MANAGEMENT (TF-DRM)

Introduction

Drought and water scarcity are becoming increasingly frequent and widespread phenomena in many Countries of the European Union. While Europe has always been considered as having adequate water resources, the long-term imbalance resulting from water demand exceeding available water resources is no longer infrequent.

It was estimated that by 2007 at least 11 % of Europe's population and 17 % of its territory would have been affected by water scarcity, raising the cost of droughts in Europe over the past thirty years at EUR 100 billion. The EU Commission expects further deterioration of the water situation in Europe if temperatures keep rising as a result of climate change. Water is no longer the problem of a few regions, but now concerns just about all of the 500 million Europeans.

Relevance for ICID

One of the main goals of ICID Mission to be achieved within the Agenda 2030 is to enable higher productivity with less water and energy, under the constraint and uncertainty of climate change. Thus, mandate and objectives of this Task Force can greatly contribute to reach this goal, enhancing on the one hand role and visibility of ICID in a broader international context and, on the other, offering a substantial contribute to solve the problem.

Mandate and Objectives

Following the increasing droughts occurred in the past few years, several Countries have moved from crisis management to Drought Risk Management. The associated measures often result in comprehensive drought risk management plans with water stress area mapping, alert levels, warning systems, etc. The TF-DMD should have all the necessary flexibility to develop specific drought management plans in relevant river basins and, of course, in different area of the World also.

The Task Force on *Drought Management Framework* will offer a contribute to

Improve Drought Risk Management

- (a) Set up of specific *Drought Risk Management Plans* to supplement WFD (*Water Framework Directive*) river basin management plans, where needed, in accordance with WFD provisions, in Europe and other areas of the World.
- (b) Conceive operational prototypes and set up of implementing procedures for an Early Warning System and, by the end of 2022, develop recommendations at National Governments level. This system will integrate relevant data and research results on drought monitoring, detection and forecasting on different spatial scales, thus making possible to evaluate future events.
- (c) Foster exchange of information and best practices on drought risk management, besides identify methodologies for drought thresholds and drought mapping.

Considering Additional Water Supply Infrastructures

- (a) Planning of additional water supply infrastructure such as storage of surface and/or ground waters in order to mitigate the impacts of severe drought events, taking into due account the cost-benefit ratio.
- (b) Analyze the possibility of realization of plants for use of alternative sources (brackish waters, desalinized or waste water). Any definitive position on these options will have to be based on further work on risk and impact assessment, taking into account the specific bio-geographical circumstances of Member States and regions.

Promote Water Efficient Technologies and Practices

Efficiency of water use in agriculture can still be considerably improved across the EU. In some regions, up to 30% of the volume of water consumed in agriculture could be saved, whereas leakages in agricultural water supply and irrigation networks can exceed 50%. In addition to improving technologies, the upgrading of irrigation management practices is a necessary instrument in all sectors where huge quantities of water are used

- (a) Develop techniques for rainfall harvesting
- (b) Promote the use of low water quantities in paddy fields - (rice dry cultivation
- (c) Investigate the possible and different adaptation of agriculture to climate change.

Work Plan – 3 Years

- (a) Disseminate and facilitate the exploitation of the results of research on water scarcity and drought issues.
- (b) Establish working relationships and disseminate most relevant Drought Risk Management Action Plans in the ICID Community and in the broader International Network.
- (c) Create a water scarcity and drought information system throughout Europe
- (d) Provide Drought Risk Management training and capacity building for Government Officers

Potential Partners

All of the NCs that are willing to participate in the program will be joining together to present the lessons learnt.

