

Towards integrated drought management in the Danube Region

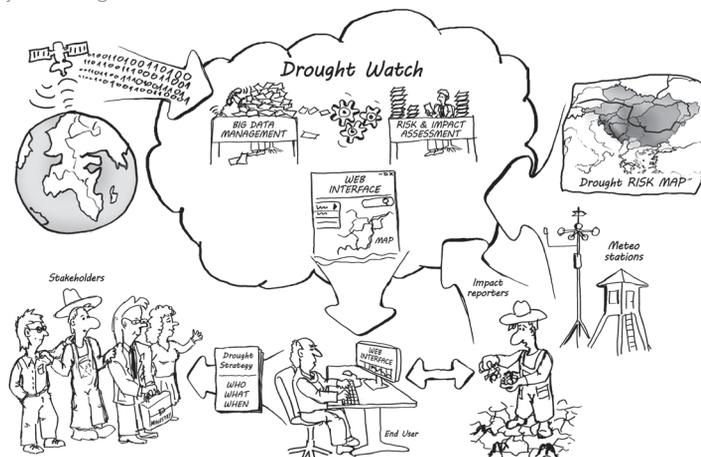
Outcomes of the Danube Drought Conference, 7-8 May, 2019

1. Drought Watch is an innovative and interactive tool developed within DriDanube project which enables more accurate and efficient drought monitoring and early warning for the entire Danube region.

Drought Watch will serve the need to understand the stages of drought and will help to improve the daily operational work of wide range of end users in all phases of drought. It includes a set of Earth Observation data from a range of operational remote sensing satellites, data from meteorological stations and drought impact reports processed into ready-to-use drought information available to general public at: www.droughtwatch.eu

"We need a product that will cover the situation happening on the field in current time for us and for the farmer who is suffering today. Drought Watch is a great tool that enable us to be informed about actual drought situation in near real time. For future better insurance, insurance companies need the daily satellite data which are high-resolution, measured instead of extrapolated and that the tool to access data is user-friendly." Johann Fank, Die Osterreichische Hagelversicherung

Drought Watch allows countries to further expand the database with their national data. Please contact us if your institution is interested to join Drought Watch.



2. It is important to complement and integrate satellite and modelled drought monitoring data with the current status of drought impacts on the ground.

Linking drought monitoring (indices) to drought impacts on the ground is essential for timely responses and introducing drought mitigation measures in time. DriDanube project started with the creation of National Reporting Networks (farmers, fruit-growers, winegrowers or foresters) within the Danube region who are providing regular feedback on drought impacts from the field. Data collection is also a learning process for farmers who witness how their input is used in further processes of preparation of early

warning, forecasts, etc. Agriculture drought impact inventory is valuable additional information that complements the satellite and modelled monitoring data available on Drought Watch.

"Building national reporting networks is a long term and demanding process but it pays off as we get to a unique type of information from the most affected and concerned people. Such network then has a strong voice." Monika Bláhová, CzechGlobe

More than 1000 reporters (farmers, agriculture and forestry experts) across 10 Danube countries engaged in reporting observed drought impacts on a weekly basis through DriDanube project. If you want to join, please visit: questionnaire.intersucho.cz



3. Each sector has different drought impacts and gaps in preparing for drought risk. But managing drought in an integrated way requires collaboration between different sectors.

Droughts in the Danube region have been increasing in frequency and severity and their impacts on all water-dependent sectors is more intense, affecting both economies and societies. Understanding and awareness about these different impacts is the first step for fruitful coordination and achieving potential synergies.

"If we are talking about drought impacts and water supply we need to talk about solving the problem with water losses in the systems for which long strategic plan needs to be in place." Walter Kling, IAWD

"More and more intense droughts will restructure the distribution of the species, and also collapses of local systems can happen." Peter Kajner, WWF Hungary

4. Risk assessment and mapping of the drought risk are key parts of a successful drought risk management process.

Droughts and their impacts are occurring with increasing frequency and magnitude across the Danube region. Their costs are underestimated, particularly in the countries where assessment capacities and drought management systems are the weakest. DriDanube project helped to harmonize the drought risk calculation for the agricultural sector and obtain insights into crop yield loss risk across the whole region through the same eyes.

5. Good practices in drought management exist inside and outside of the Danube region however better communication and efficient sharing of experiences is needed.

From the experiences presented at the conference we heard that drought events (such as droughts in the past in 2015, 2017 and 2018) and political will are the key success factors that triggered the change in policy and awareness. The Slovak National Drought Action Plan is an excellent example of recent efforts within the Integrated Drought Management Programme in CEE and DriDanube project. Both programmes/projects provided a platform for a dialogue and played a catalytic role for the discussion on the steps and actions to establish a proactive drought management framework on a national level.

6. Better communication within and between different key stakeholders, sectors and levels can help to change the way we manage drought.

Everyone involved in the drought management process needs to understand what their role and the role of the others in the process is. Drought management plans and policies can help to organize the work of institutions and existing legislation in an optimal way of cooperating and reacting during the different stages of drought development (before, during, after). It is necessary that all "actors" have the same understanding and knowledge of how to manage drought.

We also should not forget about the importance of youth's innovative thinking, their contribution and involvement in the drought management process and research.

7. Drought Management starts already before drought occurs.

Drought management already starts when there is sufficient water availability and no drought crisis. However, this period will eventually come to an end, therefore this is the time when we need to raise awareness about drought management issues.

Mitigating drought is achievable through proactive problem solving, strong community involvement and co-operation at all levels.

8. The current status of drought management in the Danube River Basin shows a need for investing into measures that will improve the water balance in the basin to face the expected upcoming water quantity challenge.

A new report on Significant Water Management Issues (SWMI) in the Danube Region is currently being prepared. It is a great momentum for all the time and efforts that partners (DMCSEE, IDMP CEE, DriDanube) have invested in the last couple of years in the region to put the increasing resilience to drought on the political agenda. We all need to make sure that drought receives more attention and is supported by political will to be included into national planning documents (e.g RBMPs).

"Until now water scarcity and drought were not identified by the Danube countries as a significant water management issue on Danube basin wide level. DriDanube project is doing great job by influencing policy level feeding into a discussion whether drought should become a cross-cutting and inter-sectoral SWMI for the future." Edith Hoedl, ICPDR

9. We need to further advocate for an integrated, proactive approach to drought planning, adaptation and management.

Drought is not just a matter of the Ministries of Agriculture. Cross-sectoral actions supported with new research programmes that will help to fill the gaps in knowledge and management are needed. It is time that we break the "cycle" and become more pro-active in our aim towards better management of drought in the Danube Region.

"Inter-ministerial cooperation on national level and willingness of the effected people and sectors to cooperate and implement drought mitigation measures are key challenges for developing drought policy on national level." Aniko Juhasz, Ministry of Agriculture, Hungary

10. All the efforts need to be directed towards the sustainability of the developed tools and further strengthening of the international cooperation and financing to tackle drought.

Now that momentum for "drought" has been created, we need to continue building on existing platforms such as [Integrated Drought Management HelpDesk](#), [Drought management Centre for Southeastern Europe](#), [European Drought Observatory](#), etc. and making sure that DriDanube results are integrated into drought policies.

"Integrated Drought Management mitigates drought risk and builds drought resilience by addressing multiple components of drought management, including disaster risk reduction, climate adaptation strategies and national water policies. The Integrated Drought Management Programme (IDMP) provides advice and guidelines to communities, countries and regions affected by drought through the Integrated Drought Management HelpDesk." Frederik Pischke, GWP and Robert Stefanski, WMO

