



# **DROUGHTS AND CLIMATE CHANGE:** AN INCREASING THREAT, IS THE **DANUBE REGION PREPARED?**

Water scarcity and droughts are amongst the most tangible and devastating consequences of the climate crisis. It is crucial that societies adapt, and that governments and water-dependent sectors scale up their response and preparedness for water scarcity and droughts. In September 2021, stakeholders from the Danube region gathered for a two-day virtual workshop to discuss the impacts of droughts in the Danube region and possible pathways, policies and regulatory approaches to improve resilience. A summary of the main outcomes and lessons learned from additional specific case studies in the region was the focus of this session.

Moderator Kathia Massaro Havens, World Bank Program Analyst, invited Senior Programme Manager GWP Central and Eastern Europe Sabina Bokal to give a compressed overview of the outcomes of the September workshop. Reviewing past droughts and the outlook for the near future, the existing regional action frameworks and activities and also the challenges met in implementing viable drought strategies and policies, the workshop came up with three takeaway lessons.

### One workshop – three lessons

Firstly, that drought is a very relevant issue in the Danube region, that this issue is gaining traction, but that not all necessary frameworks and protocols are in place. Secondly, that water scarcity and droughts are not yet recognized and addressed at the required level, and that therefore policy development needs to advance, and thirdly that there are significant variations among countries in the region that need to be addressed in follow-up workshops.

# Towards a green, resilient transformation

Next, World Bank Irrigation and Drainage Specialist Ranu Sinha gave in-depth insights into solution strategies with focus on agriculture, presenting the Irrigation & Drainage (Eco)System Approach. Starting with a look at the projected climate change in the Balkans, Ms. Sinha treated the factors driving transformation of irrigation and drainage in the region, the dominant types of farming and irrigation and the existing constraints for drought management by irrigation. She highlighted the perspectives for a green, climate resilient, decarbonized, sustainable and inclusive agricultural transformation, and the options for implementing an (Eco)System Approach.



## **Surprising results**

The task of boiling things down from global and regional perspectives to the local level fell to World Bank Senior Water Supply and Sanitation Specialist Stjepan Gabric who presented the surprising results of an in-depth study of the drought situation in the Adriatic costal region of Croatia.

The region is a powerhouse of the Croatian economy, contributing a fifth of the nation's GDP mostly through its booming tourism sector. Accounting for roughly 90% of Croatian tourism, the coast experiences a fivefold increase in water consumption during the already very dry summer months. The projected further growth in demand and the ongoing climate change threaten to overwhelm the basically solid water infrastructure, but the study showed a surprisingly simple way forward, indicating that more than 50% of the available water in the region winds up as non-revenue water. A reduction of these losses to a level of 30% could be achieved by reasonable physical measures without presenting undue financial risks for the service providers, and would be sufficient to cover the expected growth in demand. This would still call for investments of 465 million Euros, but this seems more than feasible, considering the annual 9.5 billion foreign exchange revenue generated in the region.

#### It's now or never

Mr. Gabric said:

"We didn't expect this result. Non-revenue water turned out to be a huge reservoir."

He reminds the audience of the importance of in-depth analysis, risk assessment and long-termplanning: "Do it now", he says. "We are already late. Climate change is here to stay, it will only get worse, and your infrastructure will have to meet the challenge." And Ranu Sinha seconded in her closing statement:

> "We need to wake up overall as a sector. It is high time to start acting. If we fail, people will suffer for years and decades."