

Concept Note

of the **international workshop** organized within the
EU Strategy for the Danube Region (EUSDR), Priority Area 4 “Water Quality”

Climate Change: Challenges in Agriculture and Water Sectors

as a platform for knowledge and best practice sharing

Rationale

The **EU Strategy for the Danube Region (EUSDR)** is a macro-regional strategy adopted in 2011 for the purpose of sustainable development of the Danube Region. It is comprised of 12 Priority Areas covering the needs of the whole Danube Region, e.g. mobility, energy, tourism, water, environment, knowledge, building capacities. EUSDR has four pillars. Priority Area 4 (Water Quality) is grouped together with PA 5 (Environmental Risks) and PA 6 (Biodiversity) in Pillar 2 (Protecting the Environment). The revised EUSDR Action Plan (SWD(2020)59) was adopted on April 6, 2020.

One of the thematic areas of EUSDR **Priority Area 4 “Water Quality”** is to address impacts of climate change on water quality and water using sectors. Climate change is tangibly manifested in water and agriculture sectors. Rising temperatures, shifting precipitation patterns, and the increasing frequency of extreme weather events are altering the conditions of water bodies and influence the conditions under which crops are grown and cattle reared. While agriculture is an important part of the national economy and has an indispensable role in ensuring a sufficient quantity and quality of food, feed and technical crops, on the other hand it represents a source of pressures on waters, due to the possible nutrient and chemical pollution, water abstraction and physical changes in habitats, including through water storage and land drainage.

Both sectors – agriculture and water management are a victim and a driver of climate change. There is the need for comprehensive strategies that promote sustainable agricultural practices while protecting water dependent ecosystems and enhancing resilience to climate impacts. Adaptation measures, such as the use of drought-resistant crop varieties, improved irrigation systems, and climate-smart farming techniques, are essential to mitigate the adverse effects of climate change on agriculture. Simultaneously, efforts to reduce pollution of surface water and groundwater and better land-use management are crucial to achieving environmental goals. Addressing the complex relationship among agriculture, water and climate change requires coordinated action at local, national, and international levels.

The **European Union has developed a strategic framework** to align agriculture with climate action. Key elements include:

- A Vision for Agriculture and Food: shaping together an attractive farming and agri-food sector for future generations (by 2040).
- Reformed Common Agricultural Policy (CAP) 2023–2027: Introduces eco-schemes and incentives for sustainable farming, e.g. agro-environmental measures.
- Farm to Fork Strategy: Part of the Green Deal, it targets healthier, greener food systems by reducing use and risk of chemical pesticides (–50%), use of the most hazard pesticides (–50%), fertilizers (–20%), and expanding organic farming to 25% by 2030.
- EU Biodiversity Strategy for 2030: Aims to protect 30% of land and sea, restore ecosystems, and promote biodiversity-friendly farming taking into account targets of EU Farm to Fork Strategy.

Investments in research, technology transfer, capacity building, Agricultural Knowledge and Innovation Systems (AKIS) and projects are vital to supporting farmers and ensuring that agricultural systems can withstand the challenges of a changing climate while contributing to a more sustainable future.

In water sector, the EU Water Resilience Strategy was published in June 2025 with aim to restore and protect the water cycle, build a water smart economy and ensure access to clean and affordable water for all.

Purpose

Sharing experience, knowledge and best practices on sustainable agricultural practices while enhancing resilience to water and climate change impacts, e.g. use of drought-resistant crop varieties; improved irrigation systems; climate-smart farming techniques; reducing diffuse pollution, nutrient retention and emissions; and better land-use management.

Organizer

EUSDR SK Priority Area 4 "Water Quality" Coordination team – the Water Research Institute, Slovakia together with the Water Directorate of the Ministry of Environment of the Slovak Republic and in cooperation with the Ministry of Agriculture and Rural Development of the Slovak Republic.

Target Groups

Agriculture practitioners, water providers, academic and research sector, policy makers, international water related bodies and stakeholders involved in water management and agriculture of the Danube Region countries.

Date and place: December 4, 2025, Bratislava

Workshop language: English/Slovak