



*with  
funding  
from*



 Austrian  
Development Cooperation

## **Project: Climate Change and Security in the Dniester River Basin**

### **Background**

Climate change could, potentially, lead to increased competition for scarce resources, decreased food production and decreased economic growth. The transboundary nature of the Dniester basin entails that risks and challenges are shared and that solutions need to be coordinated.

The Dniester River is expected to be heavily affected by climate change leading to warmer and wetter winters and hot, dry summers. Flooding is a major transboundary problem in the basin; the heavy floods in 2008 led to several dozens of casualties. In addition, recently the lower Dniester has been significantly affected by drought. Droughts have been especially frequent in the last decade (every 2-3 years) with increasing, sometimes catastrophic losses caused. The combination of flooding and drought can be attributed to extremely uneven rainfall during the year.

Such impacts on water resources have a cascading effect on the population and other sectors such as agriculture (decreased availability of water for irrigation, coupled with increased demand), energy (reduced hydropower potential), recreation (water-linked tourism), fisheries and biodiversity.

The problem analysis has been carried out within another ENVSEC project “Reducing vulnerability to extreme floods and climate change in Dniester Basin” (Dniester III floods and climate) which has been implemented since 2010 under the ENVSEC initiative by UNEP, UNECE and OSCE. The aim of this project has been to expand and further strengthen cooperative management in the Dniester River basin to address cross-border management of floods, taking into account both current climate variability and long-term impacts of climate change on flood risks. The project has, among others, resulted in a basin-wide impact and vulnerability assessment as well as detailed flood risk modelling in two selected sites.

## **Aims**

The project, funded by Austria and the European Commission, will increase adaptive capacity of the riparian countries sharing the Dniester river basin, through improved transboundary cooperation. This will make communities living across the Dniester river basin more resilient to negative impacts of climate change and extreme weather events. Main results will include the development of a basin-wide transboundary climate change adaptation strategy together with an implementation and resource mobilization plan and the support for the implementation of a few priority measures in the Basin. This will help the countries implement obligations of international Conventions such as the United Nations Framework Convention on Climate Change, the UNECE Water Convention and also prepare them for the future implementation of the EU Water Framework Directive.

The project is an integral part of and will support the implementation of a larger scale ENVSEC project jointly implemented with the European Commission Instrument for Stability (EC/IFS) entitled “Climate Change and Security in Eastern Europe, Central Asia and the Southern Caucasus”

## **Modalities of implementation**

While UNECE will lead the project coordination at the international level, the local project implementation will be assumed by the OSCE field operations in Ukraine and Moldova. Local experts from both Ukraine and the Republic of Moldova will be involved for specific tasks depending on their competences. This component will be steered through a permanent working group on flood management and climate change adaptation which was already established by the preceding project “Reducing vulnerability to extreme floods and climate change” and is composed of representatives of ministries, agencies, hydro meteorological services, scientific institutes, non-governmental organizations and thus ensures the link to the authorities.

## **Activities**

The transboundary adaptation strategy will be developed based on the results of the preceding project in particular the basin-wide vulnerability assessment which will help to prioritize measures and their location as well as the action plan and recommendations for adaptation. The strategy will be discussed with numerous stakeholders including from other water-using sectors such as agriculture and hydropower. Subsequently, an implementation plan and resource mobilization strategy will be developed in close cooperation with national representatives which will include prioritization of measures and geographical areas for intervention through consultations, cost-benefit assessment and multi-criteria decision analysis as well as other decision-support tools. Potential funding sources from international donors and national budgets will be identified. Based on the outcomes of the implementation plan some selected priority adaptation measures will be implemented, such as construction of monitoring stations, restoration of ecosystems, flood risk mapping and communication.