V. Climate change adaptation and risk prevention

This topic contributes to SO 3.1 "To improve integrated environmental management capacities for the protection and sustainable use of natural heritage and resources".

THEMATIC FOCUS

The thematic focus in SO 3.1 addresses the topic of **climate change adaptation and risk prevention**. In particular, vulnerability to climate change is considered as one of the most pressing environmental challenges and issues in central Europe. This is due to more frequently occurring heavy rains that cause environmental damages and floods, and hotter summers and heat waves that lead to increased water scarcity but also erosion of soils, loss and degradation of biodiversity, the economy and human health.

As a starting point for exploitation of results, four Interreg CE projects are listed at the end of this document. These show a direct contribution to the targeted topic by addressing the challenges linked to climate change adaptation and risk prevention, such as e.g.:

- Reduction of environmental risks caused by heavy rains,
- Flood prevention and mitigation of drought impacts on water resources through sustainable land-use management,
- Adaptation of forest ecosystems to climate change effects and building small water retention measures for the climate-proof management of water resources.

CHALLENGES

Central Europe has a rich natural heritage including important eco-systems and abundant biodiversity. This heritage and related natural resources are highly valuable and need to be preserved, protected and if necessary ecologically restored. At the same time natural heritage is an important location factor and the use of its assets can serve as a driver for economic development. As a consequence, natural heritage and resources (including water, soil, fauna and flora) are subject to numerous pressures and usage conflicts, e.g. between environmental protection and industry, agriculture, transport, urbanisation or tourism. Further pressure arises from the increasing risk of natural hazards linked to the effects of climate change. The loss of biodiversity, the vulnerability of natural heritage and landscapes as well as the effects of climate change have a strong impact at territorial level (cf. Territorial Agenda 2020).

The complexity of these challenges requires integrated approaches based on sustainable long-term strategic visions linking different policies, sectors and administrative levels. Integrated environmental management thereby means a comprehensive approach to natural resource planning and management that encompasses ecological, social, and economic objectives (such as river basin management plans, air quality etc.). It considers interrelations among different elements and incorporates concepts of carrying capacity, resilience and sustainability. The capacities for such integrated environmental approaches are, however, not yet sufficiently established in the public sector and in related entities dealing with the protection and sustainable use of natural resources. This is notably shown by the large number of usage conflicts and pressures on natural heritage and resources in many central European regions.

POLICY FRAMEWORK

The topic of climate change adaptation and risk prevention shows a clear link to the EU Strategy on Adaptation to Climate Change [14] and the Territorial Agenda of the European Union 2020 aimed at counterbalancing the negative impacts of climate change and prevention of environmental risks and making the EU more climate-resilient. Moreover, efforts to reduce disaster risks and at the same time adapt to a changing climate are not only an EU but also a global priority, since they are among the main goals of the UN 2030 Agenda for Sustainable Development.

EXPECTED RESULTS

Transnational cooperation will help to improve the capacities of relevant actors by supporting the development and implementation of integrated environmental strategies and tools as well as through the joint testing of pilot solutions. This will facilitate a larger uptake of integrated environmental concepts into the public and private sectors including the application of innovative technologies and the introduction of resource efficient solutions.

The main result envisaged can be summarised as: *"Improved integrated environmental management capacities of the public sector and related entities for the protection and sustainable use of natural heritage and resources in central Europe achieved through transnational cooperation"*.

[14] The EU Strategy on adaptation to climate change available at https://ec.europa.eu/clima/sites/clima/files/docs/eu_strategy_en.pdf