

Adaptation to Climate Change through Transboundary Flood Risk Management in the Western Balkans

The challenge

The Drin River Basin in the Western Balkans is home to 1.6 million people who depend on the river's resources for agriculture, fishing, drinking water, electricity generation and recreational activities. Increasing flood risk poses an ever-greater threat to the livelihoods, the economy and health of the population in the river basin. High flood risk areas are located in all four riparian countries, with the highest risks posed to the lowland border areas of Albania and Montenegro. Especially the region around Lake Shkoder/Skadar is vulnerable to floods. Severe flood events in 2010, 2013, 2015, 2016 and 2018 caused massive damages of tens of millions of Euro, in all four partner countries. According to climate projections, hydrometeorological risks, including floods and droughts, will increase even more in the future as a result of changing patterns of precipitation and temperature.

Objective

The project aims to strengthen capacities for transboundary Flood Risk Management with regard to climate change in the Western Balkans.

The main goals are to develop capacities for:

- the further implementation of the EU Floods Directive
- providing meaningful and timely end-to-end early warning
- preparedness and response in flood risk areas.

Project name	Adaptation to Climate Change through Transboundary Flood Risk Management in the Western Balkans
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Albania, Kosovo, Montenegro, North Macedonia
Lead executing agencies	National and local institutions of Water Resources Management, National Hydro-meteorological Services, Civil Emergency Directorates, Local Governments
Duration	2018-2022 (Overall 2012-2022)

Our Approach

The project started in 2012, with a focus on the Drin River Basin. It supports institutions in Albania, Kosovo, Montenegro and North Macedonia. The project uses a bottom-up and multi-level approach. It improves actors' capacities on the national level and in selected pilot areas in all four countries in the practical management of flood risk, by providing technical advice and promoting transboundary exchange. In a shared river basin, transboundary cooperation on flood risk management is a necessity: Water and floods do not stop at borders, and the actions of each riparian state have an influence on the other countries.

Two Technical Working Groups on Flood Forecasting and on the implementation of EU Flood Directive at transboundary level have been supported to strengthen the regional cooperation. Furthermore, the project gives assistance to partner institutions at local and national level, in strengthening their capacities to improve flood risk management.



L. to r.: Flooding in Shkodra, Albania, March 2018; Flooding in Shkodra, Albania, Dec. 2010.



L. to r.: Drainage channel clearing Shkodra, Albania, Oct. 2018; Water level gauge in Dajç, Albania; Drin Cascade, Albania

Project Results

Since 2012, the following main results have been achieved:

■ Flood Forecasting

- Transboundary Technical Working Group of national Hydro-meteorological Services of the four partner countries, meeting 3-4 times per year.
- Development of a Flood Forecasting System for the whole Drin River Basin and continuous capacity building to the Hydro-meteorological Services of the four partner countries.
- Installation and rehabilitation of a total of 34 online hydrometric and meteorological stations, vital for providing real-time data for the Flood Forecasting System.
- Provision of IT support for the Hydro-meteorological Services.
- Agreement on hydro-meteorological data exchange between the Drin riparian countries.
- Development of Strategic plan for developing the National Hydrometeorological Service of Kosovo up to 2030.

■ Transboundary Cooperation

- Establishment of a transboundary, interdisciplinary **Technical Working Group** as a platform for cooperation and exchange on better flood risk management and the harmonized implementation of the EU Flood Directive, meeting 3-4 times per year.
- Implementation of the EU Floods Directive – Preliminary Flood Risk Assessment at transboundary level for the Drin River Basin. 46 Areas of

Potential Significant Flood Risk were identified throughout the Drin River Basin.

- Flood Hazard and Risk Maps for pilot areas in all 4 countries.
- **Preparedness and response**
 - Increased public awareness of flood risk and appropriate behavior through outreach activities among local population and authorities.
 - Participatory development of 8 communal Flood Risk Management Plans in Albania and 13 Local Protection and Rescue Plans for Flood in Montenegro
 - Collection of GIS data for National Plan for Protection and Rescue from Floods in Montenegro
 - “Cash for Work” approach: Promoting adaptation to climate risks by creating employment opportunities for around 1000 disadvantaged persons:
 - Cleaning of drainage channels in Albania, Montenegro, Kosovo and North Macedonia, reducing flood impact.
 - Afforestation in national protected areas in Albania and Montenegro, to reduce erosion and flood risk.
- **Climate policy**
 - Development of Adaptation Plans for Tirana, Podgorica and Belgrade Municipalities, integrating climate change adaptation in urban planning and city development.
 - Development of a National Adaptation Plan (NAP) for Albania, strengthening capacities of Interministerial Working Group members.
 - Development of the Albanian Climate Change Strategy, Adaptation Pillar.

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