

Climate Change Adaptation in Western Balkan

Project Partner:	Albania: Ministry of Environment, Forestry
	and Water Administration; Macedonia: Min-
	istry of Environment and Physical Planning;
	Montenegro: Ministry of Sustainable Devel-
	opment and Tourism; Kosovo: Ministry of
	Environment and Spatial Planning; Serbia:
	Ministry of Energy, Development and Envi-
	ronmental Protection
Project Region:	Albania, Kosovo, Macedonia, Montenegro, Serbia
Project lerm:	January 2012 to December 2018
Project Budget:	EUR 3.5 million

Context

The project on 'Climate Change Adaptation in Western Balkan' is a joint cooperation between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and relevant government ministries in Albania, Kosovo, Macedonia, Montenegro, and Serbia. On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the GIZ advises the governments of the involved countries in the development and implementation of adaptation strategies in regards to climate change. Specifically, the project aims to reduce the risks of flood and drought as well as to strengthen regional cooperation in the field of integrated water resources management. A focus area of one of the project components is the Drin basin. The lower Drin forms in Albania at the confluence of the Black Drin, originating in Macedonia, and the White Drin, the longer headstream stemming from Kosovo. With a total length of 500 km and an average water flow of 680 m³/s, the hydrographic basin of the Drin provides livelihood for approximately 1.6 million people who use the waters for various purposes such as hydropower generation, irrigation, fisheries, transport and recreational activities.

Climate change is forecasted to increase both the frequency and intensity of flooding and droughts in the region. Neighbours like Macedonia expect decreases in precipitation of 5% off the annual averages. Albania expects a temperature increase of up to 5.6 °C by the end of this century. Considering the fact that temperatures in cities can climb up to 10°C higher than in the surrounding green belts, Tirana could face heat waves of over 45 °C. Similar situations are expected in other large cities including Belgrade, Podgorica and Skopje. Shifting weather patterns will likely result in warmer and wetter winter seasons that could result in increased flood risks in the lower Drin river. The summer season is likely to change as well, with generally hotter temperatures as well as extended periods of hot and dry days. These outcomes of climate change, in turn, affect human health particularly that of infants, the elderly and ill people fauna, flora and even the economy. In summer, demand for air conditioning will rise sharply while, at the same time, hydropower stations will face a shortage of water. Life in dense city centres may become unbearable and extremely costly.

Although an overall decrease in total precipitation is expected, a higher frequency of extreme weather conditions, such as severe thunderstorms, is expected, causing floods and the pollution of waters on account of soil erosion. The area around Lake Shkoder is particularly prone to flood risks. The flood of December 2010 – during which 15,000 people were forced to flee – inundated a quarter of the city of Shkoder.

Project

The project supports the five countries of Albania, Macedonia, Montenegro, Kosovo and Serbia in five distinct areas by means of capacity development, advisory services

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and the procurement of equipment. These include:

- establishment of a flood early warning system
 drafting of national climate change adaptation
- strategies
- formulation and implementation of flood or drought management plans on the communal level
- regional cooperation in integrated water resources management (IWRM)
- integrating climate change adaptation strategies in urban planning

In order to establish a flood early warning system with a geographical focus on the lower Drin, all four impacted countries (Albania, Kosovo, Macedonia and Montenegro) must engage in close cooperation. Hydro-meteorological institutes and national authorities in charge of emergencies act as the main players and close collaboration among the management of the three dams in the Drin cascade serve as a critical factor for success. In the creation of the early warning system itself, a Europe-wide programme coordinated by the EU Joint Research Centre would be of great additional benefit.

Drafting national adaptation strategies is a very complex task, requiring analysis, forecasting and detailed planning across various sectors. Due to the absence of sufficient and reliable weather and hydro-meteorological data from the past, adaptation strategies must demonstrate the ability to account for uncertainty. Rather than guiding the nations and the region with specific plans targeted at small geographical units, these strategies must serve as road maps that comprise the entire process of data generation, modelling and recommendation. Despite the needed requirements, it is not necessary to postpone the implementation of action plans, as the latter could focus on typical "no harm" activities from the start.

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Dag-Hammarskjöld-Weg 1-5 65760 Eschborn/Germany T +49 6196 79 - 0 F +49 6196 79 - 80 11 15 E info@giz.de I www.giz.de

Status: January 2013

Contact: Jakob Doetsch E jakob.doetsch@giz.de

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Through support in the formulation and implementation of flood or drought risk management plans, some 40 small towns and communes stand to gain from the project. In accordance with EU Water Framework Directive (WFD), river basins are obliged to create management plans based on IWRM principles. Riparian countries in the Drin river basin signed a Memorandum of Understanding in 2011, creating a way forward for establishing an international basin organisation. The project will, furthermore, support international dialogue and assist with the formulation and implementation of joint transboundary projects. In particular, the project supports activities at the nexus of forestry and water resources management.

Climate Change will have a marked impact on larger cities in the project area in the future. Therefore, the project aims to cooperate with at least 3 larger cities in the development of strategies related to climate change adaptation and its integration into city planning.

Impact

The project seeks to mitigate negative social, economic and environmental effects by way of improved flood and drought risk management. Along with national and international cooperation partners, GIZ is committed to supporting the formulation of adaptation strategies and the implementation of feasible activities at the regional, national and local levels. In addition to the top priority of ensuring safe, sustainable and viable living conditions for inhabitants, ensuing impacts on flora, fauna and the environment must be audited in advanced as well, so that consequences may be avoided or mitigated. Moreover, there are very ambitious and critical standards regarding the quest for EU accession of these countries. The 'Climate Change Adaptation in Western Balkan' project is dedicated to supporting its partners in their accession efforts.

Partner:

Ministry of Environment, Forest and Water Administration of Albania I www.moe.gov.al

Montenegro Ministry of Sustainable Development and Tourism I www.mrt.gov.me/en/ministry

Ministry of Environment and Physical Planning of Republic of Macedonia I www.moepp.gov.mk/default-en.asp

Ministry of Environment and Spatial Planning of Kosovo I mmph.rks-gov.net

Ministry of Energy, Development and Environmental Protection of Serbia I www.merz.gov.rs/en