Targeted Project

FLOOD PROTECTION 2

Interreg Co-funded by the European Union

Greece – Bulgaria

Overview

Project Title / Acronym	Cross Border Planning and Infrastructure Measures for Flood Protection / FLOOD PROTECTION 2
Priority Axis	1 - A More Resilient and Greener Greece-Bulgaria Cross-Border Territory
Specific Objective	058. Adaptation to climate change measures and prevention and management of climate related risks: floods and landslides (including awareness raising, civil protection and disaster management systems, infrastructures and ecosystem based approaches)
Total Project Budget	5,461,812.35€
Project duration	36 months
Lead Beneficiary	Region of Central Macedonia (GR)
Project Beneficiaries	Region of Eastern Macedonia & Thrace (GR); District Administration of Blagoevgrad (BG); District Administration of Haskovo (BG); District Administration of Kardzhali (BG); District Administration of Smolyan (BG)

Brief Description

Aim

The project aims to strengthen flood protection in the cross-border region of Greece -Bulgaria, focusing on high-risk areas along the Struma/ Strymon, Arda/Ardas and Maritsa/Evros river basins. These rivers are vital for both the environment and local economies but face increasing threats from climate change and human activity.

Objectives

The project will implement a combination of measures, in compliance with each PB competence, to improve the level of flood protection in the cb region of GR and BG, particularly in areas identified as being at risk of flooding (Struma/Strymon, Arda/Ardas and Maritsa/Evros rivers).

Outcome

- Improvement of water flow in riverbeds and of the protective infrastructure along the rivers, reducing the risk of flooding
- Reduction of negative economic and social implications caused by floods
- Increase of the awareness and readiness of the population for prompt reaction in case of floods
- Enhancement of the PBs capacity for better preparedness in risk response actions and prompt reaction during unexpected floods, using special equipment

Project outline

Planned Activities

- **Structural and Nature-Based Interventions**
  - Enhancement of anti-flood infrastructure in Orestiada (GR) to improve flood resilience and hydraulic performance
  - Construction of protective flood facilities in Simitli, Sandanski and Strumeshnitsa (BG) along the Struma River,
  - Construction of a retaining wall along the Cherna River in Smolyan (BG) to mitigate erosion and prevent overflow
  - Strengthening of the riverbank of the Varbitsa River (BG) to reduce flood risks
  - Strategic planning for Nature-Based Solutions and green infrastructure in the Strymonas River catchment area on GR territory, targeting flood and erosion risk reduction through sustainable land and water management practices
- **Technological and Monitoring Tools**
  - Installation of a computer vision system powered by artificial intelligence (AI) using real-time camera monitoring to control and analyze stream flows in urban and semi-urban areas on GR territory, supporting early flood warning and proactive response (GR).
  - Deployment of an intelligent video-based alerting system to prevent vehicle access to flooded segments of the road network on GR territory, enhancing public safety during flood events (GR).
  - Supply and installation of telemetric stations for continuous monitoring of hydrological and meteorological parameters on the GR territory, enabling accurate data collection and predictive modelling (GR).
  - Equipment for regional administrations acting as responsible and chief coordination during a disaster (BG).
  - Procurement of off-road vehicles to facilitate rapid emergency response during extreme weather conditions (BG).
- **Awareness, Communication and Dissemination**

Main Outputs

- Enhancement of anti-flood infrastructure in Orestiada.
- Strategic Planning for the establishment of Nature-Based-Solutions and green infrastructure at the Strymonas River catchment area on the GR territory for flood and erosion risk mitigation
- Supply of a computer vision system with artificial intelligence (AI) using cameras by LB to control the flow of streams for early flood warning in urban and semi-urban areas on GR territory
- Supply of an Intelligent Alerting System Using Video for the Prevention of Crossing Flooded Parts of the Road Network on GR territory
- Supply and installation of telemetric stations on Greek territory measuring level, speed-water supply and meteorological data in GR
- Supply of equipment for district operational centers in BG
- Supply of off-road vehicles for the District Administrations of Haskovo and Kardzhali
- Strengthening of the bank of Varbitsa river (Kardzahli)
- Construction of protective facilities against floods in the areas of Simitli, Sadanski, Strumeshnitsa (Struma river)
- Construction of retaining wall along Cherna river in Smolyan

Main Results

- Improvement of protective infrastructure along the rivers flow in the areas with risk of flooding
- Decrease of obstructions in narrow sections of the river basin, improving water flow
- Improvement of water flow in riverbeds, reducing the risk of frequent flooding in the nearby riverbed facilities, land and property
- Reduced land area prone to floods and increased flood protection for project areas
- Reduction of negative economic and social implications caused by floods
- Increase of the awareness and readiness of the population in the cb area for reacting promptly in case of flooding
- Enhancement of PBs capacity and local population for better preparedness in risk response actions
- Enhancement of PBs ability to react promptly during unexpected floods using special equipment
- Increase of safety feeling for the residents in areas near the river basins

Target Groups

The 6 Project Beneficiaries will be benefited from the project actions, including the population living in the nearby areas where the planned interventions will take place.

Location of Activities

The project activities cover three international rivers (Struma/Strymon, Arda/Ardas & Maritsa/Evros/Arda). Struma/Strymon river runs through the district of Blagoevgrad & the Region of Central Macedonia (415km length). The other 2 target areas are the rivers of Arda/Ardas and Maritsa/Evros. The latter leaves Bulgaria and flows into Greece and Turkey with a total length of 528km. The area is regularly at a high risk of floods, and therefore a significant part of the project's interventions are focused on the riverbed of the Varbitsa River (Kardzahli), Cherna river in Smolyan and the Municipality of Orestiada (GR).