CITY OF LAKTAŠI

Urban adaptation and resilience on climate risks (pluvial floods)

FRAMEWORK

- The city administration of Laktaši manages a total of 832 kilometers of watercourses of different categories that run through the area of the City of Laktaši, together with the Public institution of Vode Srpske, which is the umbrella organization for the management of watercourses and waters in the territory of the Republic of Srpska.
- UNDP is a great contributor to our strives for better flood risk management, and solely in 2018, UNDP invested more then half million of BAM in watercourses reconstruction and cleaning.

FLOODS IN MAY 2014

- In the area of the City of Laktaši, parts of 10 of local municipalities were flooded due to the overflow of the rivers Vrbas, Turjanica, Crkvena and Stupčevica, and traffic was closed on the bridge in Trn. Traffic has been suspended on the main road on the sections in Trn and Slatina towards City of Prnjavor. High water levels and floods caused damage to households, farmers and many commercial buildings. On May 16, 2014, a state of emergency was declared in the municipality of Laktasi due to floods. All available civil protection teams were on the ground and tried to evacuate and deliver food and water to the most vulnerable residents.
- In total 1.175 residental units suffered damage, with estimated value of 9.635.295,11 BAM.
- Total damage to personal property of citizens was estimated at 13,941,055.68 BAM.
- Business subject, 202 in total, suffered 9,326.410,00 BAM of damage.
- The damage to the communal infrastructure was estimated at 523,959.36 BAM, and damage to coastal fortifications was 192,020.40 BAM
- In total, damage and damage sanation costs reached 24.124.158,59 KM.

RISKS MITIGATION

- Since 2014 City of Laktaši is actively reinforcing its flood resilience capacities, thorugh investing in maintanance of watercourses and increasing of its flow and drainage capacity.

- In this year we are expecting begining of a capital project of building bank revetments for the Turjanica river, in length od 8,5 kilometers (which represents approximately half of the rivers total length).
- In spring we are also beggining erection of bank revetments on Vrbas river, in the Trn area, in total length of 500 meters (dark blue line in photo).

Photo taken during construction of bank revetments on Vrbas river in previous years, area of Veliko Blasko.

Examples of smaller watercourses reconstructions:


CAT
320B
CAT

Disaster Risk Analysis System - DRAS

- The Disaster Risk Analysis System (DRAS) is a product of the United Nations Development Program (UNDP). DRAS enables publicly available information on floods and landslides to increase risk awareness, as well as spatial risk assessments combining information on hazards, land use and data on vulnerable population categories.
- Such risk assessments are critical to disaster risk reduction and sustainable development, as they enable decision makers to use spatial risk assessments in their daily work.
- DRAS consists of three modules, the first of which is available to the public, and modules two and three are intended for the respective services in local authorities, in accordance with user rights.
- Module one uses hazard maps and projects them onto publicly available "Google Maps" and is linked to data on precipitation and water levels that are publicly available from hydrometeorological institutes and water agencies.
- Module two allows local authorities to view information on vulnerable population categories on spatial maps and overlay this data with hazard data, facilitating better inclusion of vulnerable categories for prevention and response planning.
- Module three enables rapid computational analysis and creation of spatial risk assessments for local authorities, through a combination of scientific data on hazards and data on land use and sensitivity, in accordance with the methodology of the EU Flood Directive.
- The city administration of Laktaš has made DRAS available to all citizens who visit the main page of the city's official webpage.

FEMRED PROJECT – 2016 – 2017 - **F**lood **E**mergency **M**anagement and Risk **RED**uction in Derventa region

- The project was implemented on the territory of the municipalities of Derventa, Laktaši, Srbac and Novi Grad. The objective of the project is to alleviate the consequences of previous floods and prevent future negative flood effects through pilot actions aimed at revitalization of flooded areas, **establishing of emergency situation management** and reducing flood risks.
- The project was implemented by the project partners LIR Evolution and LAG Savus, and supported by the Municipalities of Derventa, Laktaši, Srbac and Novi Grad. As a result of pilot actions, a total of **5077 meters** of waterways were reconstructed or cleansed in the area of these cities and municipalities, and the capacity of one pumping station was significantly increased

FEMRED PROJECT

- In the framework of the project a number of activities have been implemented, such as:

- **6 trainings** on organization of actions for mitigation and prevention of floods, development of monitoring and action plans,
- development of a strategy of joint cooperation in emergency situations;
- **4 simulations** involving emergency headquarters teams in a discussion to strengthen the capacity and readiness of responsible staff to react in the event of an emergency;
- **2 field exercises** involving simulation of rescue in water, familiarization with the basic principles of rescuing in water, approaching and providing assistance to the injured, and demonstration of the use of diving equipment;
- developed **smartphone application with meteorological data**, level of rivers and civil protection advices to support communication in an emergency flood situation;
- implemented **7 pilot actions** for revitalization of the flooded area that had positive effects on about 108 000 of flooded area citizens in BiH.