

# FLOOD PREVENTION PROJECT FOR RIONI RIVER BASIN 2012 - 2016



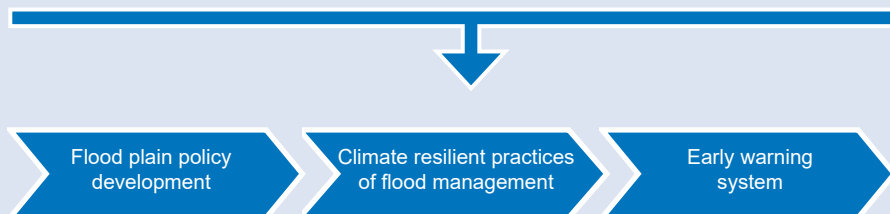
Empowered lives.  
Resilient nations.

## TARGET POPULATION, AREA



## CO-FINANCING

Adaptation Fund  
UNDP 5,060,000 USD Duration 4 Years



### TARGET MUNICIPALITIES:

- Lentekhi
- Oni
- Ambrolauri
- Tskaltubo
- Samtredia
- Tsageri

### MAIN PARTNERS OF THE PROJECT

Ministry of Environment and Natural Resources Protection through its National Environmental Agency (NEA)

Ministry of Regional Development and Infrastructure (MRDI)

Ministry of Internal Affairs through its Emergency Management Agency (EMA)

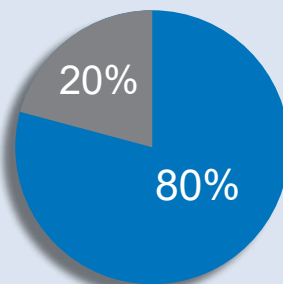
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- GDP of Georgia
- 20% Annual economic loss from natural disasters

In case of 1 in 100 year flood event - 4 Million GEL of damages is expected in 6 municipalities of Rioni river.



## RIONI RIVER FLOODING ZONES



38,857 properties  
200,000 people

## STABILISATION AND RESTORATION OF RIVERBANKS AND SHORES ACCORDING TO THE BEST INTERNATIONAL PRACTICES

### BIO-ENGINEERING OPTIONS

- Planting native greenery on about 10 ha. of selected territories, to protect the slopes and shores of the rivers;
- About 1150 local people living in Samtredia and Tskaltubo municipalities will be protected.



### HARD STRUCTURES

- Construction of flood defense structures (rip-rap boulders, gabion walls etc.) on the 9 most vulnerable places, which will protect about 4 000 people from flood/flashflood.



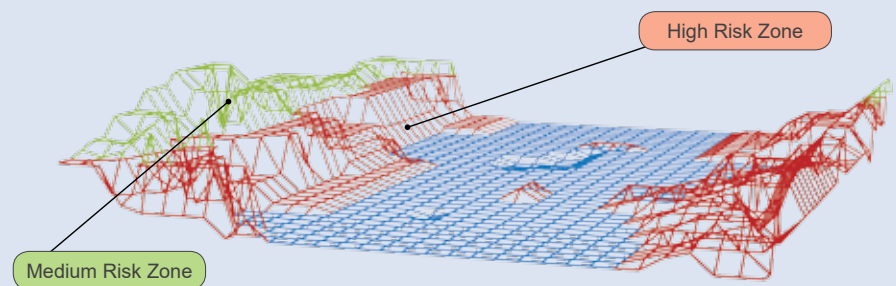
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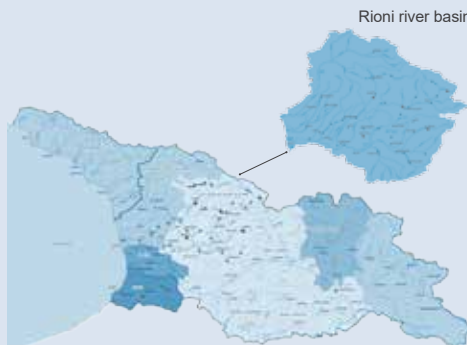
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## FLOODPLAIN ZONING

The project introduced floodplain zoning policy which is intended to integrate flood risk management into the land use planning process in Georgia. Floodplain Zoning Policy helps to guide future development in the Rioni basin away from the highest flood risk zones.



The project digitalized and visualized Rioni river basin in the centralized computer system which was purchased and donated to the National Environmental Agency.



## FLOOD INSURANCE

For raising resilience of the population and the economics against flooding the project elaborated flood insurance scheme. It provides concrete calculations for the flooding of various magnitudes in different flood zones.



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## FLOOD FORECASTING AND EARLY WARNING SYSTEM

Economic impact from the disasters can be significantly reduced by effectively functioning forecasting and early warning system. For these reasons the project rehabilitated hydrometric monitoring network on the existing stations and creation of new stations as well.

EQUIPMENT	No
Meteorological stations	5
Meteorological posts	20
Hydrological posts	10

### IN TOTAL 35 STATIONS/POSTS WERE ADDED IN THE BASIN

The equipment is fully automated and is already functioning. IT means that monitoring data to be transmitted will be much more accurate and timely for further analysis on the condition in the region.

Modern flood forecasting and early warning system will be introduced for Rioni river basin



DEVELOPING CLIMATE RESILIENT FLOOD AND FLASH FLOOD MANAGEMENT  
PRACTICES TO PROTECT VULNERABLE COMMUNITIES OF GEORGIA

Check UNDP Georgia website for additional information:

[WWW.GE.UNDP.ORG](http://WWW.GE.UNDP.ORG)