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Mission to Bosnia and Herzegovina

Bosnia and Herzegovina 2014 Floods

SUMMARY OF THE

Case Study – Maglaj May 2014 Floods

May 2014 floods in Bosnia and Herzegovina

As a result of extremely heavy rainfall leading up to 14 May 2014, when a quarter of the average annual rainfall fell in a period of 4 days (approx. 300 l/m2), the river Bosna and its tributaries in the vicinity of its spring flooded the surrounding areas in the Sarajevo Canton. The ensuing flood wave affected areas downstream, all the way to the confluence of river Bosna with the river Sava on the border with the Republic of Croatia. Within only two days the flood devastated a large number of cities and municipalities along the course of the river Bosna and its tributaries, with the Maglaj Municipality being one of the hardest hit.

The preliminary emergency phase, whose main objective was to save lives of flood victims, was essentially completed 10 days after the occurrence of critical flooding, subsequent to which the disaster recovery and consequence-mitigation phase commenced.

There is general agreement among experts that the response to the floods was organized reasonably quickly, especially taking into account the lack of preparedness, inadequate early warning systems and poor structural prevention measures.

According to official data from competent institutions of BiH entities and Brčko District the 2014 floods ***killed 22 people, while two (2) persons were registered as missing***.

Damage in Bosnia and Herzegovina has been estimated to stand at **more than EUR 2 billion**.

Breakdown of the damage and destruction caused by the 2014 floods

Bosnia and Herzegovina (data provided by the Ministry of Security of BiH)	**Municipality of Maglaj** (Municipal report on the 2014 floods
• 73 municipalities (50%) in BiH affected by the floods • 100,000 homes damaged or destroyed • 230 schools and hospitals damaged or destroyed • 66,080 persons evacuated • 7,176 landslides activated • Total damage estimated at 2 billion EUR	• 1,686 households affected (5,396 individuals) • 296 small and medium enterprises damaged or destroyed • 70 landslides activated • 49 houses entirely destroyed due to the landslides • Total damage estimated at 85 million EUR

OSCE's response

In the aftermath of the floods, the OSCE Mission to BiH established Temporary Premises in Bijeljina, Maglaj, Orašje, Prijedor and Šamac municipalities. The objective of Temporary Premises has been to monitor political, economic and social developments in flood-affected areas and provide logistical and technical assistance to local authorities and recovery/relief organizations/agencies. As of 1 September, only the Temporary Premises in Maglaj remains open to further support the local authorities in many ongoing flood recovery efforts.

The Case Study

Recognizing the OSCE as a valuable and reliable partner in the field, the Municipality of Maglaj approached the OSCE Mission to Bosnia and Herzegovina following the emergency and first recovery phase with a request that the Mission provides assistance to local authorities in conducting a case study with the aim of ensuring an objective assessment of the situation and Municipal response to the May 2014 floods.

After the Mission responded positively to the Municipality's request, the local authorities appointed a working group consisting of local experts to support the work of the OSCE-contracted consultant in his technical assessment and facilitate adequate consultation with all relevant stakeholders.

The consultant used the Risk Vulnerability Assessment (RVA) methodology.

Objectives of the Study

The main objectives of the Study are:

- To document the various aspects of the the Maglaj May 2014 floods, with a view to increasing disaster management capacities and flood resilience of Maglaj Municipality;
- To improve the overall disaster preparedness of Maglaj Municipality through identification of weaknesses and proposal of necessary measures and actions;
- To identify lessons learnt by analysing the chronology of events and preparedness of all municipal structures before, during and after the disaster;
- To translate the proposed measures into projects to be implemented by local, national and international institutions and organizations.

The target group

The target group of this study is the Municipality of Maglaj with its relevant municipal departments and institutions, decision-makers at the municipal level, services and institutions of critical infrastructure, commercial and public sector, residents of the Maglaj Municipality, national and international institutions and organizations.

Findings

In addition to the visible consequences of the floods and resulting landslides on people, critical infrastructure, property and the environment, the Study found that the Municipality of Maglaj is faced with multiple hazards and vulnerability factors i.e. frequent floods, landslides, drought, forest fires, unexploded ordnances, etc.

The Study also found that similar natural disasters have never occurred in the Maglaj Municipality before and that preparedness and mitigation capacities of municipal departments, the mechanism for protection and rescue, as well as the critical infrastructure, was inadequate, owing in large part to the overall lack of an integrated risk management structure in BiH. Local floods hazard planning, watershed management, land use management and deforestation have been identified as areas where improvements are needed for enhanced flood resilience.

Based on the analysis, the system of protection and rescue at all levels in BiH, particularly in Maglaj Municipality, needs to be improved in order for it to provide better protection and rescue services in case of emergencies. Moreover, a more effective and timelier response is necessary in order to minimize the negative effects on people, property infrastructure and the environment.

Conclusions and recommendations

In order to adequately prepare for dealing with natural disasters, the protection and rescue services at the municipal level should apply the concept of the Integrated Approach to the Planning of Preparedness (IAPP). IAPP primarily aims to help in preparation of preventive and operational response in case of disaster, which cannot be addressed by common resources and routines, and with rapid post-disaster recovery.

It is recommended that the platform of the IAPP concept is to be applied by all actors involved in preparedness planning, from local, private and state companies, agencies and institutions, municipalities, to sectorial, ministerial, entity, regional and state levels. In line with the IAPP concept, preparedness planning can be divided into seven general areas: (1) Management (administration), (2) Basics for planning, (3) Prevention, (4) Training and Education, (5) Exercises, (6) Evaluation, (7) Preparedness Plans.

Seeing that:

- Bosnia and Herzegovina is exposed to a very high risk of flooding;
- Floods in many areas are likely to cause significant material damage, major damage to infrastructure facilities and the environment, harm to human health, including loss of human life;
- Absolute protection from floods, especially if one takes into account the effects of climate change, is simply not possible;
- In order to minimize damage to property and to the environment, as well as to prevent loss of human life, further improvement and development of systems for protection and rescue of people and property from natural catastrophes is required;

The Study puts forth the following recommendations:

- Use the lessons learnt from the May 2014 flooding of the Maglaj Municipality to prevent and adequately respond to future disasters;
- Start developing an effective flood preparedness and mitigation system by enhancing co-operation, co-ordination and information sharing between institutions, citizens and authorities at all levels;
- Improve the understanding of local policymakers of the relevance of managing risk in connection to land-use management, economic and housing development in flood-prone areas, and deforestation to increasing the Municipality's flood resilience;
- Strengthen the Municipality's emergency response capacity to manage natural disaster risks - providing adequate facilities, equipment and training for the functioning of civil protection services;
- Develop an effective flood alert, forecast and warning system in the Municipality to better detect the risk of a flood-triggering situation;
- Conduct a targeted public campaign to raise awareness among citizens on the role of the municipal civil protection unit in emergency situations.

Initial outcomes

After intensive consultations with the local stakeholders, the Study was adopted by Maglaj Municipal Assembly as an official Municipal Document.

The Maglaj municipal authorities are now to facilitate the implementation of the Study's recommendations in close co-operation with civil society actors.

The Study is accessible to the public on the Municipality of Maglaj website, and will be presented at wider regional forums to support the improvement of the general country-wide civil protection systems.