

CODE VDIC – NEWSLETTER # 1

August 2020.



What is CODE VDIC?

Issues addressed

CODE VDIC stands for “**Common Development of Volunteer Intervention Capability**” (Project ID: HUSKROUA/1702/8.1/0035).

Each CODE VDIC participating territory has a unique geographical position which determines the types of their disaster risks; a few common risks have already been identified **such as floods, fires and extreme weather conditions**. During the project, common cross-border risks and hazards are further assessed and mapped, with state-of-the-art tools and methods.

Another problem that the project addresses is that although national capacities are constantly strengthened, **cross-border or international joint forces are not well-established**, due to language barriers and different rules and regulations. The project intends to **create a favourable condition to reduce these problems**.

Thus, the project tackles the following needs and challenges:

- low level cross-border cooperation regarding disaster management issues
- need to strengthen and equalize capacities of local disaster management organizations to join their forces
- lack of awareness of the inhabitants on emergency situations.



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DEVELOPING RESILIENCE

By establishing a common cross-border volunteer network, the main aim of the project partner organizations is **to prevent natural and man-made disasters and to develop resilience in the programme area.**

The project supports opportunities for reducing the increasing disaster incidents and the degree of harm they do to the community, both **by increasing the resilience of vulnerable communities and by developing the human and equipment aspects of intervening volunteer organizations.**

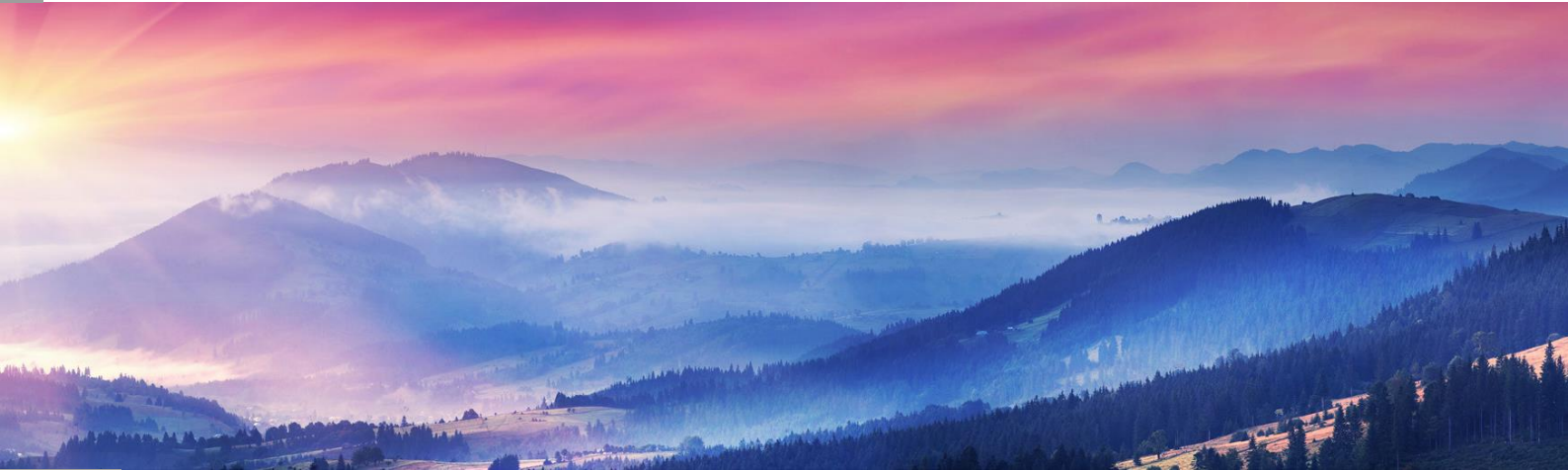


EXPECTED RESULTS

Thanks to the international cooperation, the following results are expected:

- **Established “Carpathian Region Disaster Response and Mitigation Network”** (with 18 members by the end of the project);
- **Trained Cross-border Volunteer Network** (thanks to the 3-step training program, cross-border volunteer network capacity will be built, strengthened and preparedness will be increased);
- **Increased awareness of the inhabitants** (thanks to the common inhabitant’s campaign, awareness will be raised among the NGOs and population towards the importance of joint actions in case of disaster preventions and interventions).





CODE VDIC PARTNERS

The partnership is composed by **6 organizations** (2 local municipalities, 1 research institute and 3 NGOs) **from 4 countries**; an ideal size for such cross-border cooperation, covering all relevant countries of the HUSKROUA programme target area. They all deal with similar types of disaster management issues and their strong intention is **to provide higher quality volunteer support and to reduce intervention time on the targeted cross-border area.**

The project partners are the following:

- Zemplén Region Civil Protection and Disaster Management Association (Lead Beneficiary, HU)



- Volunteer Firefighter Association Pálháza (HU)



- Municipality of Kráľovský Chlmec (SK)



- Town of Seini (RO)



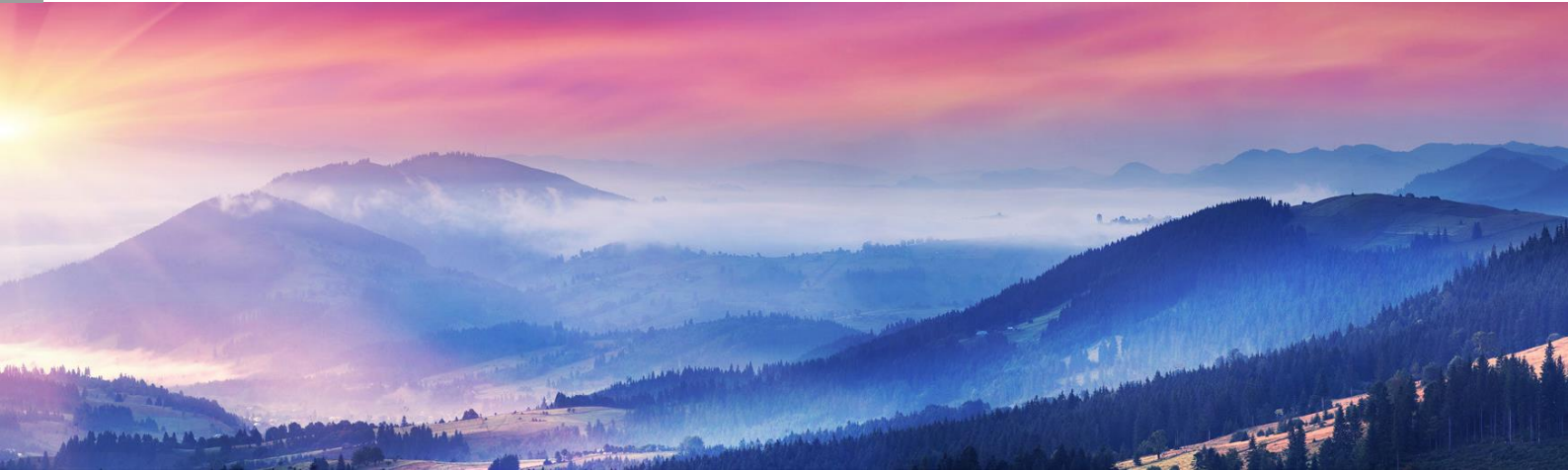
- Babeş-Bolyai University (RO)



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- Transcarpathian Reformed Church (UA)





1st YEAR ACHIEVEMENTS – PARTNERS' PAGES

The project has completed its first year that was unfortunately rather filled with catastrophic events. However, during this time, quite significant achievements were reached already at each partner organization as well as on the consortium level. Besides some key information about the partner organizations themselves, on the following pages the reader can find more details about their local activities also.

❖ Zemplén Region Civil Protection and Disaster Management Association (Lead Beneficiary, HU)

The **Zemplén Region Civil Protection and Disaster Management Association** is based inside the building of the City Hall, in Sátoraljaújhely, Hungary. **Sátoraljaújhely** is a town located in Borsod-Abaúj-Zemplén County in northern Hungary along the Slovak border. It is 82 kilometres (51 miles) east from the county capital Miskolc. The Association is **responsible for the overall coordination and implementation of the CODE VDIC project**. It was established in 2004 and its main objectives are the preparation of the population of the region for civil protection, disaster relief and other humanitarian protection tasks. Being a regional organisation, they closely cooperate with various other organisations, such as protection committees, local governments, humanitarian and charitable organizations. One of its key priorities is to pay special attention to develop the younger generation's knowledge on civil protection and disaster management.

It regularly organizes and conducts youth civil protection competitions and preserves civil defense, national defense and firefighting traditions. It also actively participates in the elaboration and implementation of civil protection and disaster management tasks on its territory.



Thanks to the CODE VDIC project, 2 vehicles were purchased for the Association in order to more rapidly and effectively intervene in the cross-border area in cases of emergency.

❖ Volunteer Firefighter Association Pálháza (HU)

Pálháza is a town in Borsod-Abaúj-Zemplén County, Hungary, 87 km east from county capital Miskolc.

The Association was established in 1913 in Pálháza. By the 1960s, they had 80-90 members and coordinated the fire fighter units of the surrounding settlements as well.

Within the project, **the partner is responsible for the coordination of volunteer capacity building, such as the elaboration and collection of the training materials, the organization of the Training of Trainers and providing guidance for the local trainings and staff exchanges.**



So far the organization **successfully elaborated the training concept, with the active involvement of partners, implemented the Training of Trainers** (due to COVID 19 in the form of a web lecture), **and prepared the partners for the organization of the local trainings and staff exchanges.** It also purchased vehicles (Toyota Hilux Pic-up) and part of the equipment (DJI Mavic 2 industrial drone with special training for 1 person; trailer; pumps, aggregators, chainsaws, hoses), which will complement the technical equipment background of the cross-border volunteer network.

❖ **Municipality of Kráľovský Chlmec (SK)**

Kráľovský Chlmec is a town in the Trebišov District in the Košice Region of south-eastern Slovakia. It has a population of around 8,000.

The Slovak **partner is responsible for coordinating the cross-border volunteer network development and – with the strong support of the LB senior coordinator - equips the network members with the necessary guidelines, strategies and work plan.** One of the greatest achievements of the first year was the signature of the **Memorandum of Understanding**, which has officially created the **Carpathian Region Disaster Response and Mitigation Network.**

For now, the members of the Network are the project partner organizations, but until the end of the project, they plan to attract and engage as many new members as possible.



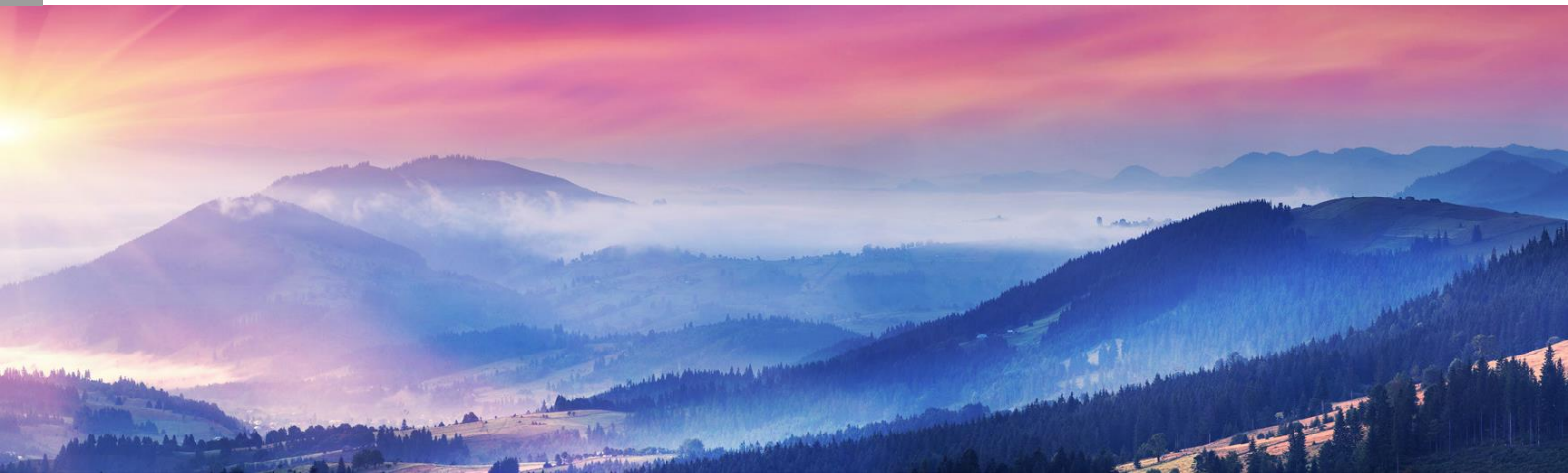
Concerning the equipment purchases, supported by the project, the partner has successfully carried out the necessary public procurement processes and as a result, they improved their technical background as well (vehicle, IT equipment, tools and special clothing).

❖ **Town of Seini (RO)**

Seini is a town in Maramureş County, Romania. It administers two villages, Săbişa and Viile Apei. The partner is responsible for the **coordination of a work package, which establishes the technical background for the network and includes also deals with NGO operation possibilities on disaster prevention measures.**

Given the fact that recently a significant increase of global and national level risks has been registered, the town of Seini joined as Partner to the project consortium, with the intention of **improving the local community's resilience to natural and man-made disasters, as well as establishing when cross-border intervention is needed and how it should be implemented by each**





member of the newly created cross-border network.

These objectives can only be reached by improving the technical base of SVSU Seini by increasing the level of involvement and improving the skills of local volunteers for emergency situations, but also by providing the local community with the information they need in order to better prepare and respond to such events.

The joint situation analysis revealed that the most vulnerable aspect in Seini with regards to protection against fires and flood.

This is why, it was decided and agreed upon with the regional authority – Inspectorate for Emergency Situations of the Maramures County – **to purchase a newer and better equipped fire engine** (the current one is 32 years old), together with several other equipment which are absolutely indispensable in such interventions (moto pumps, chainsaws, generator, special hoses for the fire engine and complete fire protection equipment for volunteers).

Moreover, SVSU Seini plans to provide the members of the local task force **with specialized training, both at international and levels, which will allow them to safely use the newly acquired equipment and instruments.**



“Given the fact that Seini’s Voluntary Service for Emergency Situations does not belong to the category of professional institutions, which intervene in emergency situations, being in fact a service based on the principle of voluntarism, we consider that implementing this project in partnership with similar services from other countries, is extremely favorable, and has the aim of aligning the competencies of the members of our local service and the technical base of our organisation with the ones established by European standards in the field of disaster intervention”.

Calin Istrate, Head of SVSU Seini

❖ **Babeş-Bolyai University (RO)**

The Babeş-Bolyai University (commonly known by its abbreviation UBB), is a public university in Cluj-Napoca, Romania. It has the longest academic tradition among the Romanian universities. It is the largest Romanian university (cca. 45 000 students in 2020 and an academic community of almost 50 000 people) AND occupies the first position among the Romanian universities in the University Metaranking initiated by the Romanian Ministry of Education and Research in 2016.

The Babeş-Bolyai University offers study programmes in Romanian, Hungarian, German, English, and French (and some programs in Italian, Chinese, Japanese, etc.).





It is one of the five members of the Universitaria Consortium (the group of elite Romanian universities).

Within the project, the partner is mainly **responsible for providing the consortium with state-of-the-art research methods, related to situation analyses**. They carried out a hazard and risk analysis to set a solid base for the strategy making for the cross-border volunteer network, which has pointed out **two major risk factors in the cross-border area: flood and forest fires** (in the Annex section of the Newsletter #1, the reader can find a short summary about their research work and its results).

❖ Transcarpathian Reformed Church (UA)

The Reformed Church in Transcarpathia is a historic Reformed church in Ukraine. It is the oldest Protestant church in the country, founded in the 16th century. The church has cca. 120 000 - 140 000 members, in almost 100 parishes. A significant part of ethnic Hungarians in Transcarpathia belong to this church. The Reformed Church in Transcarpathia has 3 Presbyteries, namely in Bereg, Máramaros-Ugocsa and Ung.

Although the Ukrainian partner does not coordinate any major work packages, but they play a key role in all the tasks and activities planned.

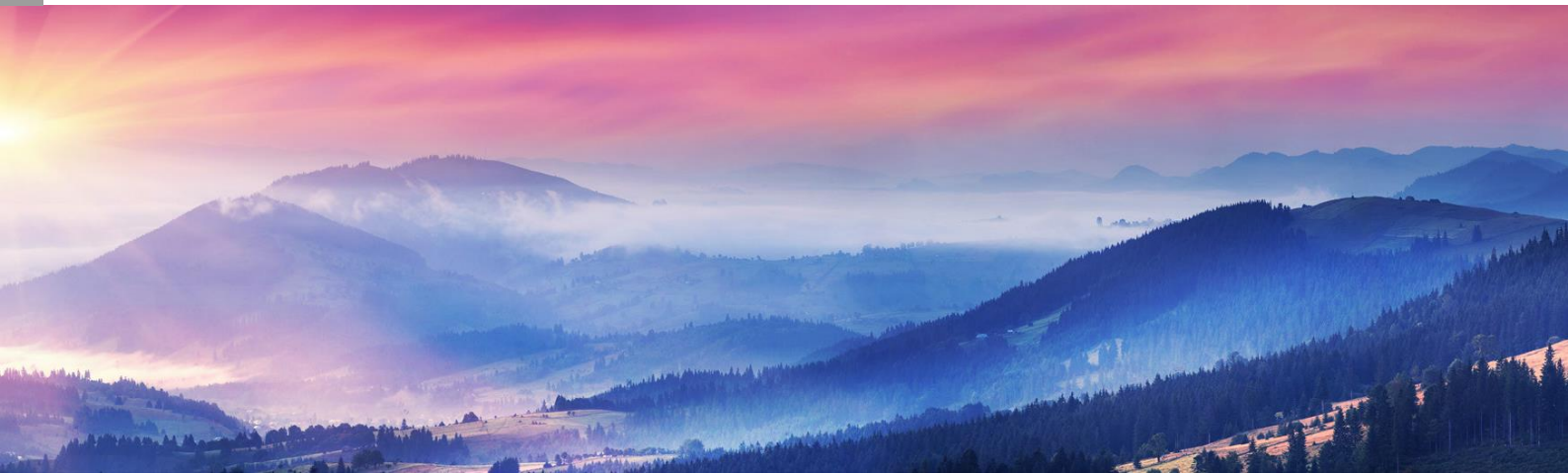
In the frame of the project, the Reformed Church of Transcarpathia plans to deploy a disaster and natural disaster relief unit in each of the three dioceses, which contains the necessary equipment and supplies in case of an emergency.



Thus, in addition to being one of the founding members of the cross-border volunteer network, procurement could also start in the first year of the project. In August 2020, the 3 000-liter water tanks have arrived, which are part of the relief units.

Part of the project is to create a mobile supply unit as well that can be used directly in the emergency area in the event of an emergency situation.

The purpose of the mobile supply unit is **to quickly set up and provide assistance in the emergency area**. The unit provides first aid, an area with beds to place people, meals, toiletries and restrooms directly in the area of need. A mobile tent as part of the supply unit was also procured. In the first half of the project, the Transcarpathian Reformed Church studied the disaster laws, regulations, prevention and intervention regulations in force in the country and within the region. They also visited local organizations and they discussed the project idea and further cooperation possibilities.



ANNEX - HAZARD AND RISK ANALYSIS

Disasters can cause a lot of damage, depending on their nature and characteristics, their magnitude, their impact speed and their origin. There are certain types of disasters, but each event is unique considering the vulnerability aspects of communities and their exposure to hazard.

In the area of the project implementation - because of the different nature of the flood and forest fire hazards, they were treated separately. Flood hazard is always determined considering the catchment of a river, not the administrative boundaries so in this respect the target river basins needed to be identified. However, forest fire can be analysed based on administrative boundaries, so in this case UBB was able to use data available at county level.

Country reports, country hazard and risk maps were also used to identify all possible natural and man-made hazards in the project area. A multi-hazard and multi-risk analysis is conducted for each country's project area.

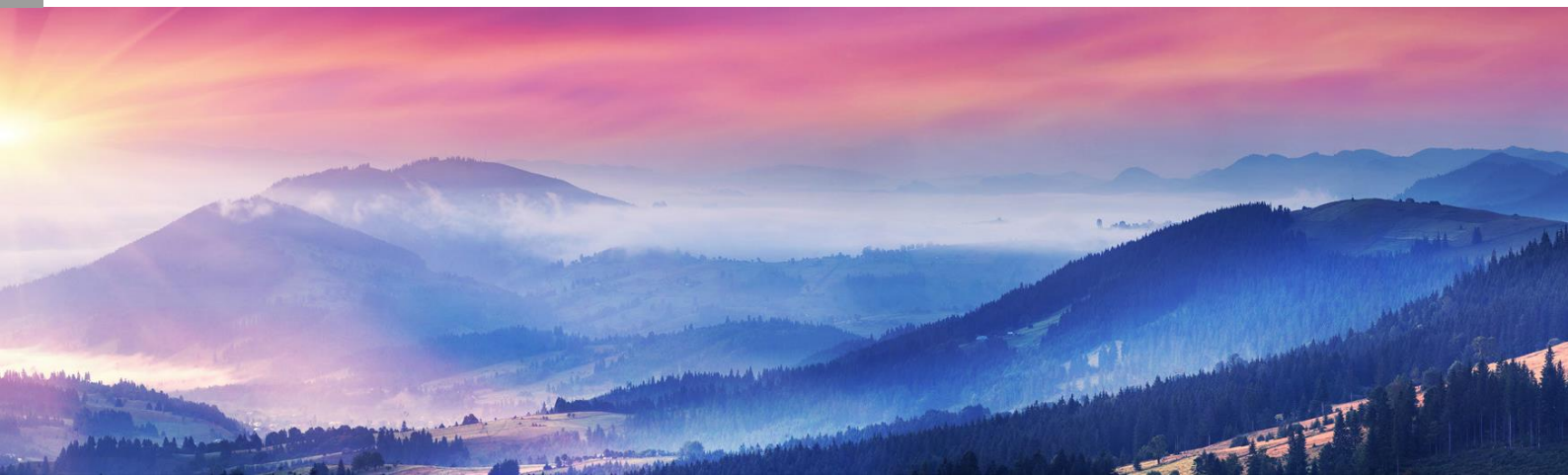
Unfortunately, there is no unitary methodological approach addressing the mapping of Areas with Significant Potentially Flood Risk (APsFR) between the countries involved in the CODE VDIC project. For this reason, a unitary approach is difficult to be applied. The process was not seamless one; several problems had been identified during the database build up. **A major one was the lack of data for Ukraine.** Hungary, Slovakia and Romania being EU Member States, there was data available in direct usable form (vector and raster data). However, different coordinate systems were used and data needed to be processed, projected and topological errors needed to be checked and corrected.

UBB considers that the database developed for this analysis is reliable and can be further used for different analysis in order to strengthen the relationship between the partner countries.

Results:

FLOOD HAZARD AND RISK ANALYSIS

The study area, in the CODE VDIC project covers six counties from Romania (Satu-Mare and Maramureş), Hungary (Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg), Ukraine (Zakarpattia) and Slovakia (Košice). Unfortunately the Countries area doesn't perfectly overlap the study Tisza basin. Therefore, based on the above remarks, the study area of the Tisza basin, in this project (49,441 km²) is extended at the junction of the Slovak (15,849 km²), Hungarian (10,803 km²), Romanian (9,742 km²) and Ukrainian (13,047 km²) borders, upstream the confluence with Sajó tributary (including Sajó basin).



Flood hazard maps created using GIS technique

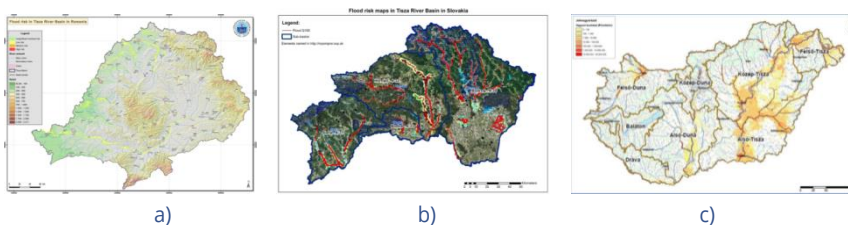
The flood maps are based on the catchment and river data. First water catchments that needed to be analyzed were identified.

From Romania UBB included the Somes, Tur and Crasna rivers, from Ukraine the Tisza river with its tributaries, from Slovakia the Torysa, Ondava and Slana. In Hungary all the above-mentioned rivers flow into Tisza.

The only arbitrary limit was chosen in Romania, where including the entire Somes catchment would have been unfeasible because of its size. As a result the analysis is done including the Somes catchment after the confluence with Lapus (included).

The flood hazard maps are presented in the following figures.

Flood risk maps



Flood risk map in Tisza River Basin
(a) Romania b) Slovakia c) Hungary

Analysing level of exposure to floods in the study region the highest values are specific to the flats areas overlapping the plains. **Hungary proves to be the most exposed country (about 2.5 million people and one-third of the arable lands, 18 000 km²).**

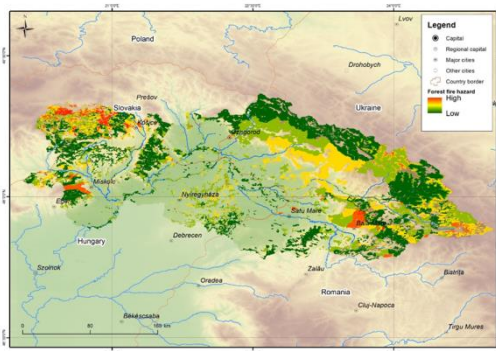
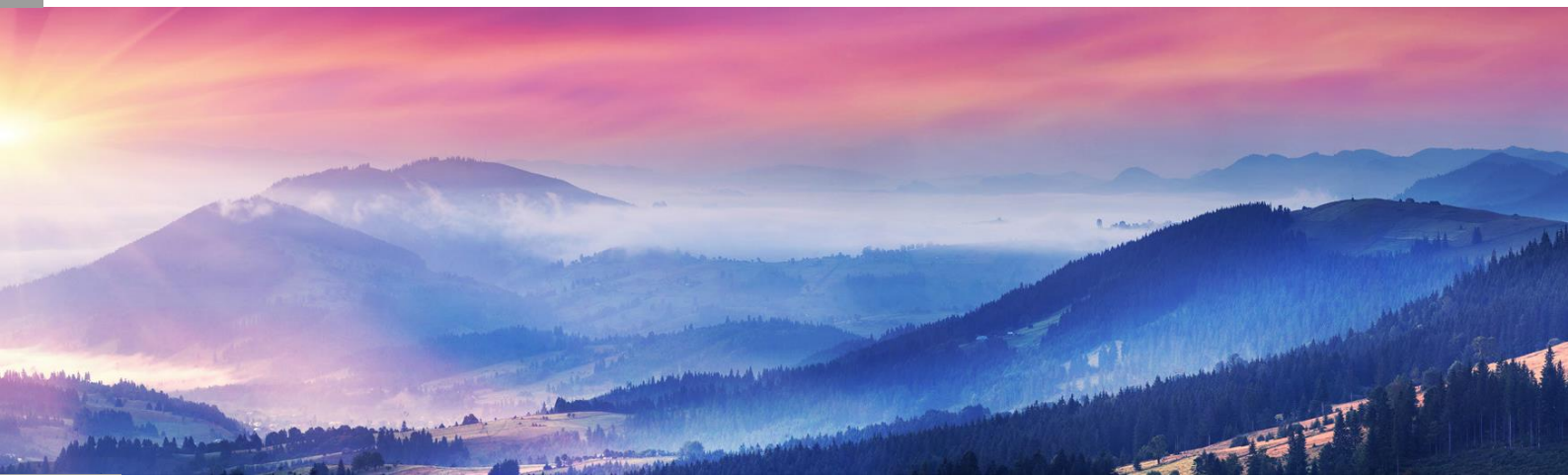
FOREST FIRES HAZARD

Forest fires have multiplied in the last few decades. The reasons can be found in climate change effects, such as less precipitation, the increase of mean annual temperature and a series of winters without snowfall.

Due to the warming, the dangerous period of wildfires has extended, which may result in the increased number of such fires and consequent damages.

As opposed to flood, for the forest fire maps UBB used the administrative borders, in order to define the target area. Data availability allowed this type of delineation because population and land use data is usually available at LAU level.





Fire hazard in the study area

The target areas include: Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg counties in Hungary; Košický County from Slovakia; Zakarpattia region from Ukraine; Satu-Mare and Maramures counties from Romania.

The forest fire hazard was assessed by using population and land use data, especially forest types of data. Also, other sources were verified in order to evaluate the historical forest fire record and frequency.

Analysing the level of exposure to fires in countries from the project Ukraine prove to be the most exposed country followed by Hungary, Slovakia and Romania. Unfortunately, in most countries the cases of forest fires are mainly because of the negligence of local population.

Due to the fact that fires and floods do not respect the borders, the cooperation at regional and international level nowadays is becoming more and more important.

CONTACT INFORMATION

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