

Built Heritage Risk Assessment and Preparedness Strategies

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VULNERABILITY IN CH CONTEXT



Destruction due to man-made disasters;
Industrial accidents and similar



Destruction due to lack
of maintenance



Destruction due to natural
catastrophes

HOW TO ASSIST THE REGION IN NEED?
POST-CRISIS?
IN TRANSITIONAL CONTEXT?



GEOGRAPHICAL SCOPE



IN WESTERN BALKANS

1995 – Bosnia and Herzegovina

2001 – Kosovo

2005 – incl Macedonia,
Montenegro and Serbia

2009 – Albania

CHWB'S TOOLBOX



Inclusive conservation



Civic engagement



Interpretation and
education



Cross-border professional
learning and exchange

QUESTIONS AHEAD

HOW TO ADVANCE RISK PREPAREDNESS PLANNING IN IN
CULTURAL HERITAGE CONTEXT?

CHwB APPROACH THROUGH EXAMPLES

1. ASSESSING RISK FOR BUILT HERITAGE

- Heritage risk assessment, World Heritage Site of Gjirokastra, Albania

2. RISK PREPAREDNESS FOR BUILT HERITAGE

- Water Cisterns, World Heritage Site of Gjirokastra, Albania

3. VOLUNTEER NETWORKS

- B+CARE

1. ASSESSING RISK FOR BUILT HERITAGE



1. ASSESSING RISK FOR BUILT HERITAGE



Haderi, monument of 1st category



1. ASSESSING RISK FOR BUILT HERITAGE

1200 historical buildings

650 listed monuments of culture

9 Historical neighborhoods deteriorating daily

Causes: Multiple private ownership;
moving population; lack of maintenance

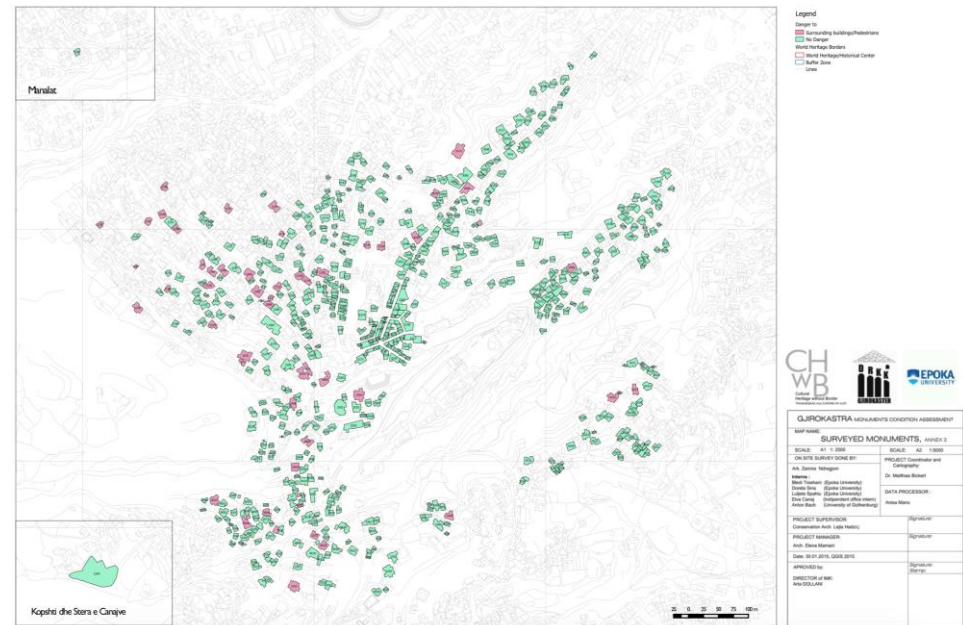


1. ASSESSING RISK FOR BUILT HERITAGE

In cooperation with :


- Regional Directorate of National Culture in Gjirokastra (Ministry of Culture)
- EPOKA University

Surveying teams of young architects/volunteers were deployed and worked for 4 months on the field



1. ASSESSING RISK FOR BUILT HERITAGE

650 forms collected
and analyzed

	GJIROKASTRA CONDITION ASSESSMENT FORM	Survey No.:
		Date: / 12 / 2014

1. BASIC DETAILS

Monument reference/registration number:
 Land registration number:
 Building name:
 Street:
 Research Area/Neighborhood:

Level of protection: ☐ First category ☐ Second category

2. OWNER TYPE

- ☐ Private
☐ Private, multiple owners
☐ Religious organization
☐ State authority
☐ Other

Contact Details (if known):

Surname, Name:
 Address:
 Street Neighborhood City Country

3. OCCUPANCY

- ☐ Vacant or not in use
☐ Part occupied or part in use
☐ Occupied or in use

4. USAGE (more than one option possible)

- ☐ Private use ☐ Public use

5. BUILDING CONDITION

Condition of structural elements

- | Good | Fair | Poor | Very bad | No | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Roof |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Walls |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Floors / Ceilings |

Overall Condition

- Good ☐ Fair ☐ Poor ☐ Very bad ☐

Calculation of Overall Condition:

Lowest common denominator of all three structural elements. If one or more elements are "No", then do not take them into consideration.

6. RISK CATEGORY

Very high risk ☐ At risk ☐ Vulnerable ☐ Low risk / No risk ☐

7. DANGER TO

- ☐ Surrounding buildings / Pedestrians ☐ No danger

8. HISTORICAL VALUES

Year of construction:

Historical content

Yes No

- ☐ ☐ Roof
☐ ☐ Outer walls
☐ ☐ Wall finish
☐ ☐ Doors
☐ ☐ Windows
☐ ☐ Gate

- ☐ ☐ Floors / Ceilings
☐ ☐ Inner walls
☐ ☐ Inner artwork / woodencrafts
☐ ☐ Inner artwork / paintings

1st category only

⇒ Total level of historical content

- ☐ <25% (low)
☐ 25-50% (medium)
☐ 51-75% (high)
☐ > 75% (very high)

Calculation of historical content:

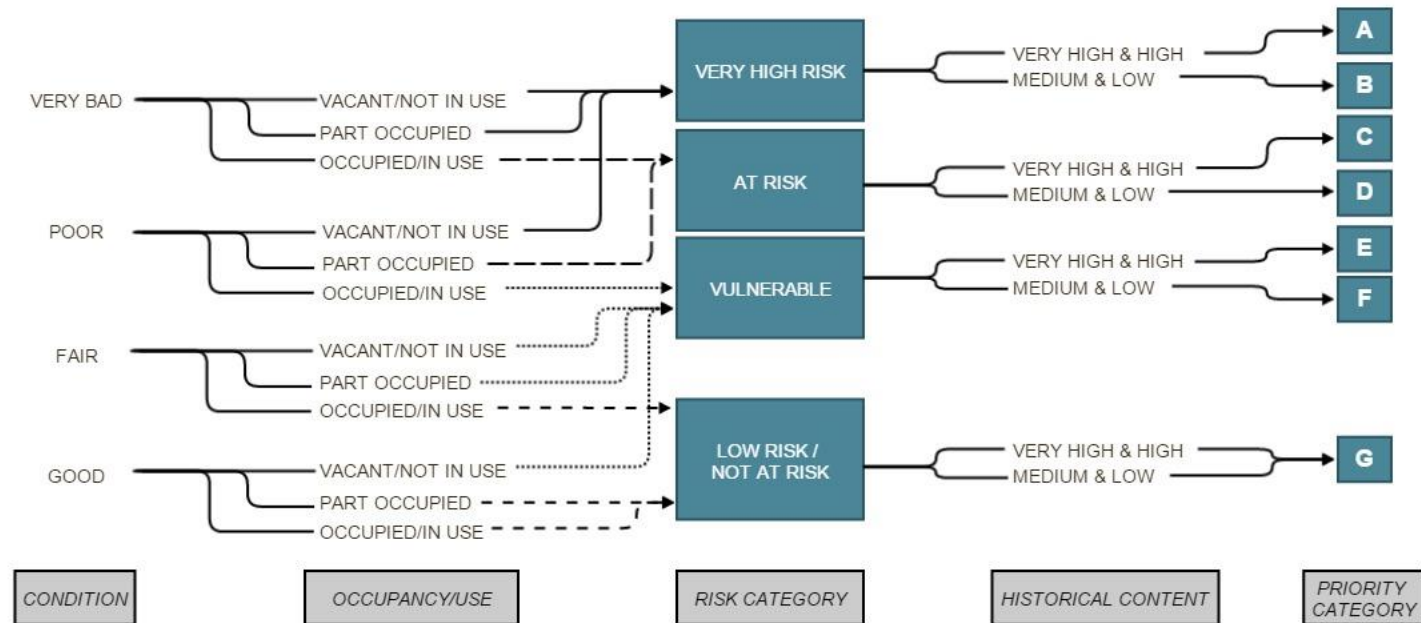
2nd category: $100/6 \times x$

1st category: $100/10 \times x$

x = Number of "Yes" entries

1. ASSESSING RISK FOR BUILT HERITAGE

Analytical matrix



1. ASSESSING RISK FOR BUILT HERITAGE

4.1 Building condition

25% of monuments have resulted to be in **poor** and **very bad** overall condition. (See Annex 4 – list of monuments with defined building condition, 1st and 2nd category and Annex 5 – map of monuments with defined building condition, 1st and 2nd category,)

Good	Fair	Poor	Very bad
316	175	84	83

4.2 Occupancy/use

4.2.1 Occupancy

16% of monuments resulted to be **vacant** and **not in use**

Vacant or not in use	Part occupied or part in use	Occupied or in use	Unknown
107	112	435	4

87% of monuments in Gjirokastra are **privately owned**

Private use	Public use	Unknown
572	92	8

44,15 % of monuments which are privately owned **have multiple owners**.

Private	Private, Multiple Owners	Religious Organizations	State Authority	Other	Unknown
344	272	11	13	8	10

1. ASSESSING RISK FOR BUILT HERITAGE

- A** – Immediate risk, high historical content
- B** – Immediate risk, lower historical content
- C** – Slow decay, high historical content
- D** – Slow decay, lower historical content
- E** – Under threat/vulnerable building, high historical content
- F** – Under threat/vulnerable building, lower historical content
- G** – building in good or fair condition, high or low historical content

Priority Category	A	B	C	D	E	F	G
Total	46	32	26	9	63	61	420

22,8 % of monuments of 1st category are classified to A and B categories of immediate risk

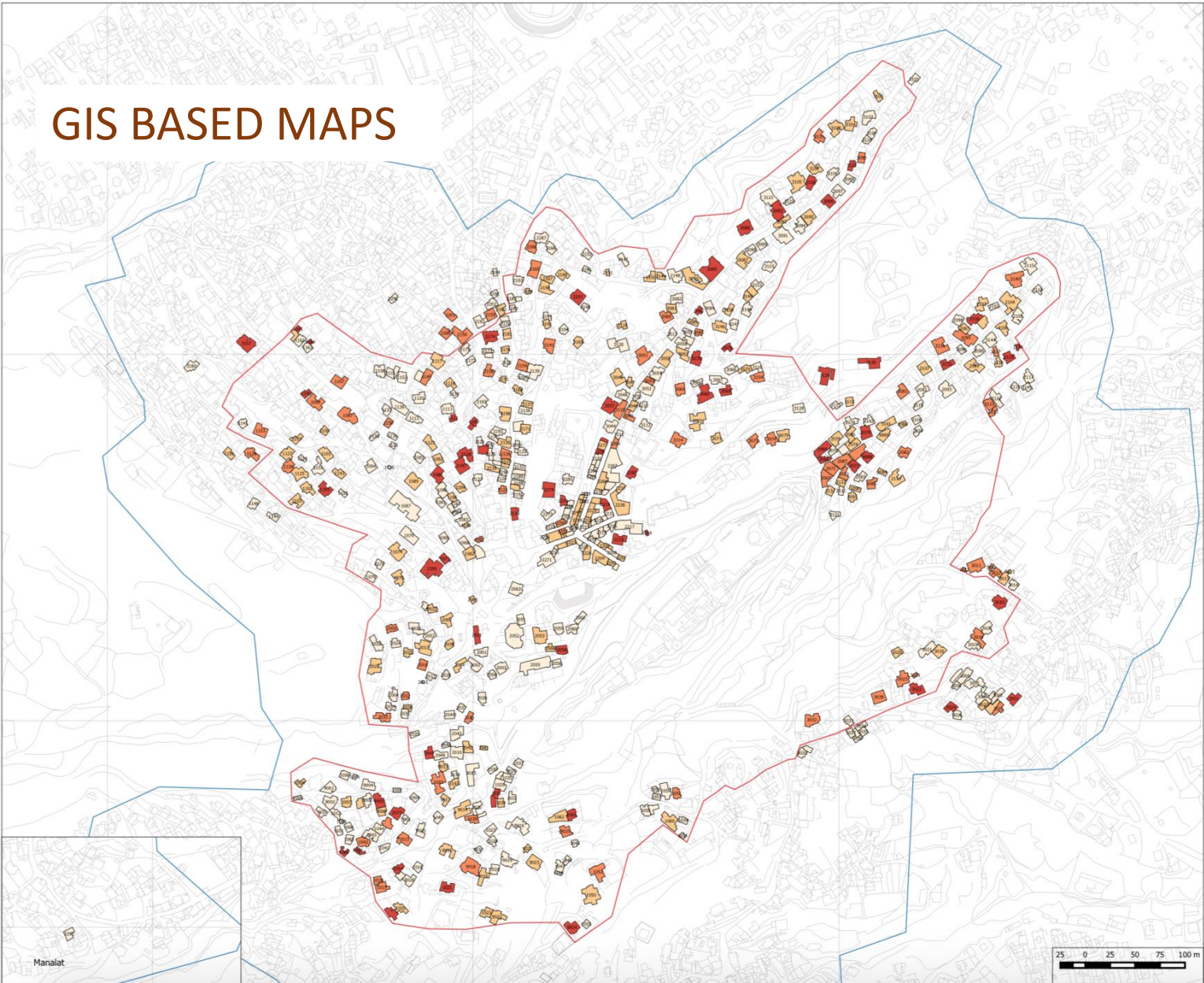
Priority Category	A	B	C	D	E	F	G
Total	11	2	2	0	11	2	29

11,1 % of monuments of 2nd category are classified to A and B categories of immediate risk

Priority Category	A	B	C	D	E	F	G
Total	35	31	24	8	52	59	383

Gjirokastra Monuments Condition Assessment - Overall Condition - 2nd Category Monuments

GIS BASED MAPS



Legend

Houses_Survey_2 copy

- Good
- Fair
- Poor
- Very bad

2014_Risk_Evaluation_Dataset

World Heritage Borders

- World Heritage/Historical Center
- Buffer Zone
- Lines

GUIROKASTRA MONUMENTS CONDITION ASSESSMENT			
MAP NAME: OVERALL CONDITION 2nd CATEGORY MONUMENTS, ANNEX 5			
SCALE: A1 1:2500	SCALE: A2 1:5000		
ON SITE SURVEY DONE BY:	PROJECT Coordinator and Cartography:		
Ark. Zamira Ndrejoni	Dr. Matthias Bickert		
Interns :	DATA PROCESSOR :		
Bledi Trashani (Epoka University)	Anisa Mano		
Dorela Sina (Epoka University)			
Luljeta Spahiu (Epoka University)			
Elva Canaj (Independent office intern)			
Anton Bach (University of Gothenburg)			
PROJECT SUPERVISOR:	Conservation Arch. Lejla Hadziç		Signature:
PROJECT MANAGER:	Arch. Elena Mamani		Signature:
Date:	30.01.2015, QGIS 2.15		
APPROVED by:			Signature:
DIRECTOR of IMK:	Arta DOLLANI		Stamp:

1. ASSESSING RISK FOR BUILT HERITAGE

Category for intervention	Type of intervention	priority category A		priority category B		priority category C		priority category D		priority category E		priority category F		priority category G		total
		1st category	2nd category	1st category	2nd category	1st category	2nd category	1st category	2nd category	1st category	2nd category	1st category	2nd category	1st category	2nd category	
RUINS	1	4	7	1	21				1							
total		4	7	1	21				1							34
PRIOR TO COLLAPSE	2 vacant	2	3	1	2											
	2.1 occupied	4	2		1											
total		6	5	1	3											15
VERY BAD/ILLEGALLY MODIFIED	3 vacant		19	1	5								1			
	3.1 occupied		4		2	2	6									
total			23	1	7	2	6						1			40
POOR/ILLEGALLY MODIFIED	4 vacant	1					18		2	2	6		6			
	4.1 occupied									1	12		3			
total							18		2	3	18		9			51
FAIR/ILLEGALLY MODIFIED	5 vacant									1	5		5			
	5.1 occupied								4	7	29		21			
total									4	8	34		26			72
GOOD/ILLEGALLY MODIFIED	6											2	23			
total												2	23			25
VERY GOOD/ILLEGALLY MODIFIED	7													13	122	
	7.1														170	
total														13	292	305
NO IMMEDIATE INTERVENTION	8													17	88	
total														17	88	105

1. ASSESSING RISK FOR BUILT HERITAGE

6. RECOMMENDATIONS / ACTION PLAN

Category for intervention	Type of action/intervention	Level of urgency	Time frame/financial
PHASE 1			
	Financial scheme	Establish a financial scheme Develop individual affiche for monuments Contact Government agencies and Donors	2015 – 2016
	Integrated conservation plan	Develop an integrated conservation plan for the Historic Core of Gjirokastra The plan needs to be geared to identify the development direction of the Historic city as well as planning interventions on historic modifications	2015 – 2016
	Community actions/information	Develop monthly community meetings with monument owners on the importance of safeguarding monuments of culture in their ownership	2015 - continuous
	Establish yearly monitoring	Program the strategy to a computer program for easier documentation Establish yearly monitoring scheme for all 650 monuments	2015 - continuous
TYPE 1	Type 1 See Annex 15 – categorization of interventions	(MOST URGENT)	2015 – 2016 Project cost: average 5000EUR/monument Implementation cost: 25.000EUR/monument (average amount per monument) Total: 990.000,00EUR
RUINS	Tab Ruins	Emergency stabilization process implemented in next 12 months for 33 monuments. 1 out of 34 ruins is lost Full conservation projects to be developed in next 24 months (where applicable)	2015 – 2017

1. ASSESSING RISK FOR BUILT HERITAGE

Complete studies were delivered to:

- Municipality of Gjirokastra
- Ministry of Culture
- Institute of Monuments of Culture

Findings informed and affected

- Conservation strategies by Institute of Monuments of Culture
- Integrated Urban and Tourism Development project financed by World Bank

Lolomani 2014



Lolomani 2017



Gjirokastra: Where the Change Begins

2014-07-29 Uncategorized awareness-raising, Emergency interventions



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Abandoned monuments lost heritage: A new approach

The story of the Hadëri and Gurgai tower houses is sadly the story of many houses in Gjirokastra. Both these houses located in the historical centre were once monuments of great importance. Through the course of history many changes occurred, resulting in the last inhabitants abandoning the monuments in recent years.

NEXT STEPS - Continuous monitoring in place

- Latest findings from 2017 show case a further deterioration
- Number of ruins grew from 35 to 47;
- Overall condition worsened, from 25% monuments being in bad/very bad condition, today % grew to close to 40

Continuous fund raising for structural consolidation and improvements



Quick Facts of the project

Duration:

July 2014 - present

In partnership with:

Regional Directorate for National Culture –
Gjirokastra

Donor:

Prince Claus Fund

Total funding:

€ 52.850

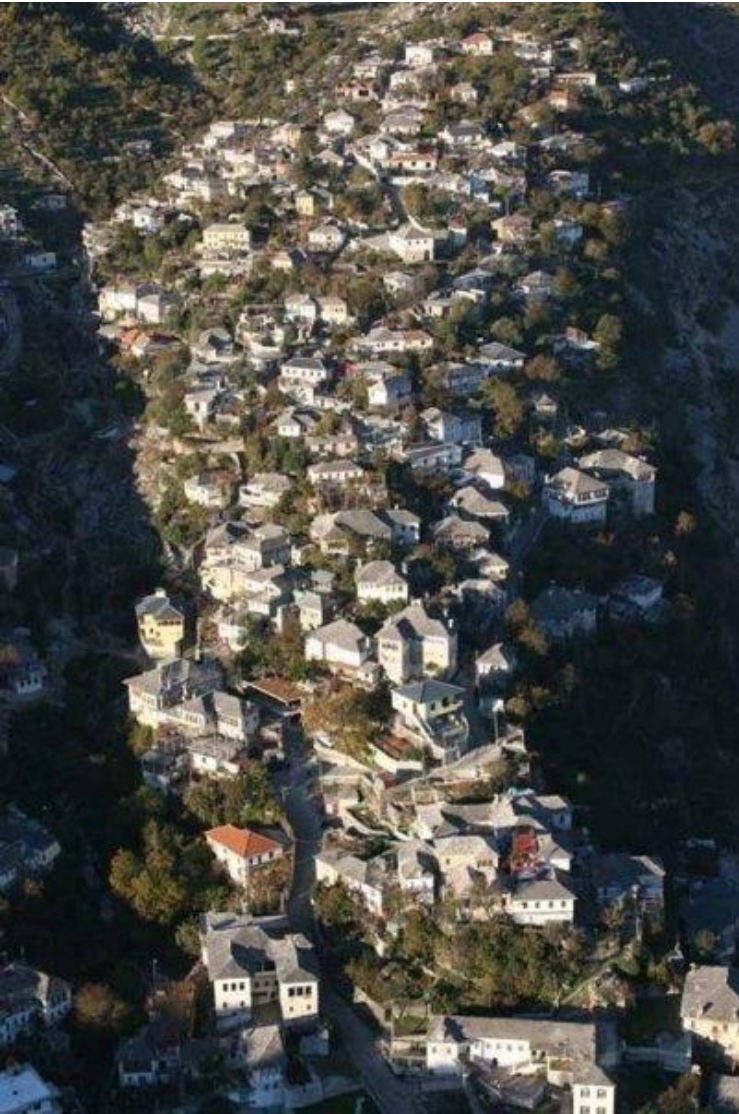
2. RISK PREPAREDNESS FOR BUILT HERITAGE



Only in last 3 years, 4 1st category monuments were lost due to fire



2. RISK PREPAREDNESS FOR BUILT HERITAGE

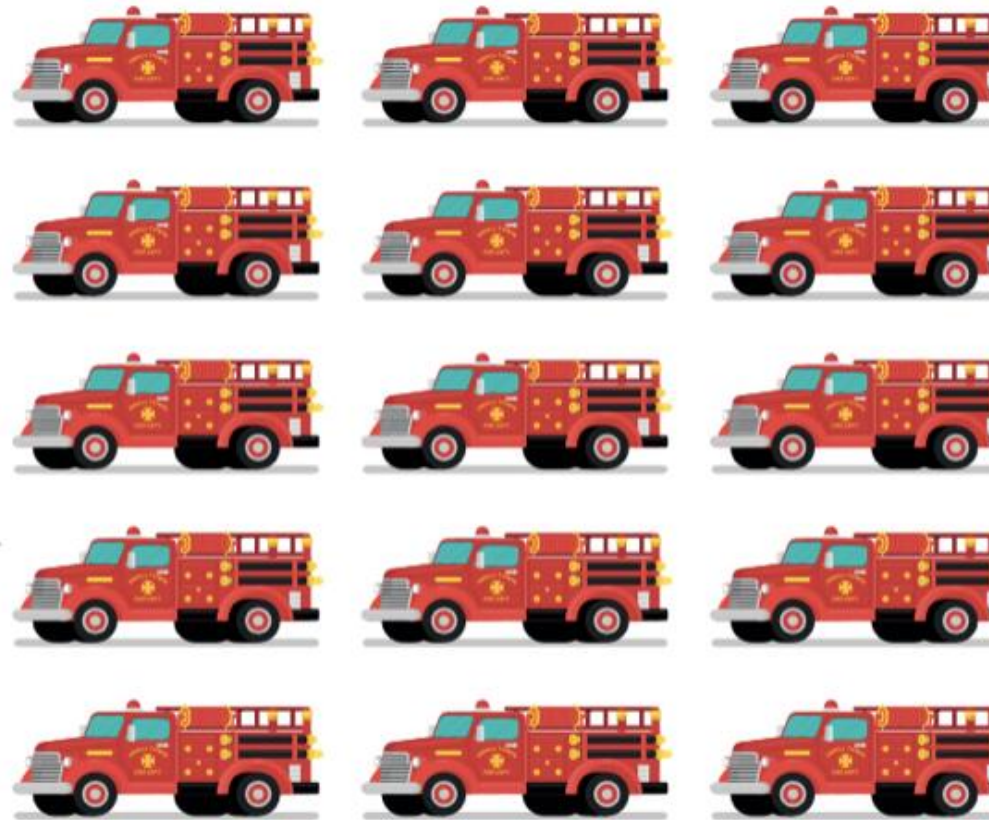
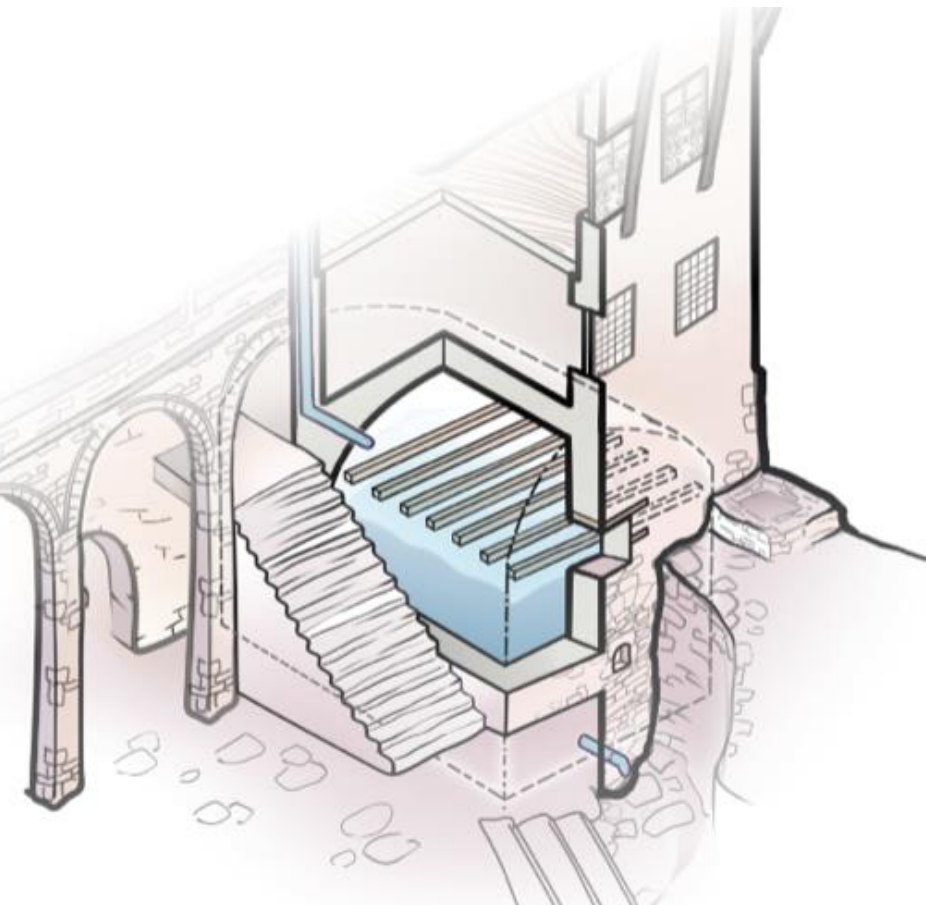


Narrow streets in neighborhoods make it impossible for fire trucks to enter

We found a solution hidden in buildings



2. RISK PREPAREDNESS FOR BUILT HERITAGE



1 historical cistern can cater to 20 monuments around
1 historical cistern stores up to 120m³ water; fire truck stores 3-5m³

2. RISK PREPAREDNESS FOR BUILT HERITAGE

In cooperation with :

- Regional Directorate of National Culture in Gjirokastra (Ministry of Culture)
- Regional civil emergency response unit
- Local monument owners

We selected a 1st pilot cistern to try out the envisaged solution in converting a cistern to a water storage to be used in case of fire



2. RISK PREPAREDNESS FOR BUILT HERITAGE

NEXT STEPS - In cooperation with Civil Emergency unit

- Trainings for using hydrants were done with local residents
- Further pilots for c/a 60 historical cisterns in Gjirokastra are reviewed

3. VOLUNTEER NETWORKS



Understand the risks to heritage in the Balkans and formulate strategies to address those risks

Train and deploy a network of volunteers that can conduct 'first aid' for cultural heritage across the Balkans

Coordinate with and among national disaster response institutions and cultural institutions on effective strategies for cultural emergency response.

3. VOLUNTEER NETWORKS



National training in DRM, Gjirokastra 2016

Regional training in DRM, Gjirokastra, Sarajevo, Prizren 2017



NEXT STEPS - Ongoing – risk map for heritage in Balkans
Developing more acute relationship in between heritage professionals/volunteers and civil emergency units in the region.



4. Acknowledgments

Thank you....



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Search Rescue