

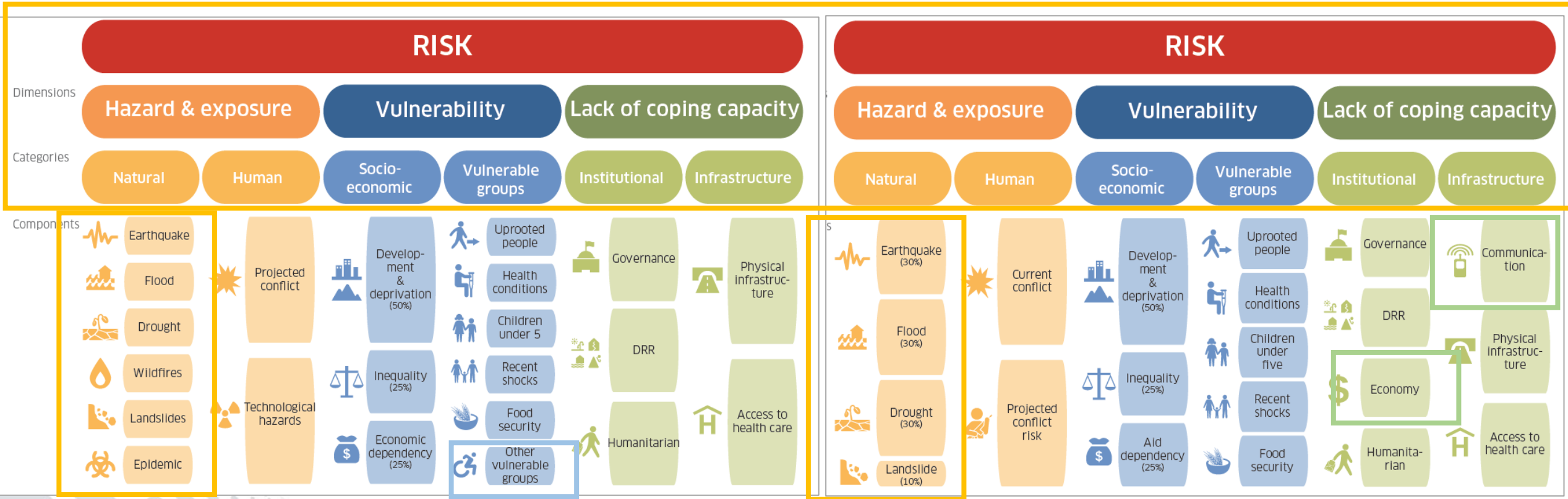


29 March 2022



# INFORM Structure CCA $\neq$ SEE

INFORMRISK



68 indicators, measured 0-10

62 indicators, measured 0-10

# Timeline: SEE 2021

Phases	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1:Preparation	■								
2: Structure & Sources		■							
3: Data collection		■	■	■	■				
4: First model Prototype						■			
5: Delivery & Review							■	■	
6: Handover									■

Table 1. Timeline of the subnational INFORM development

# LESSONS LEARNED

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- Partnership and collaboration is key.
- National/subnational support.
- Data availability.
- Continuous engagement and capacity building in using the methodology.
- Repository of use cases.

# INFORM SEE&CCA subnational: use cases

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- Risk knowledge base
- Will support to target cities for MCR implementation
- INFORM indicators will support local level assessments through the resilience scorecard (preliminary, detailed, health and cultural addendums)

# INFORM CCA subnational: use cases

## ARMENIA: INFORM SUBNATIONAL 2021 RISK PROFILE



### INTRODUCTION

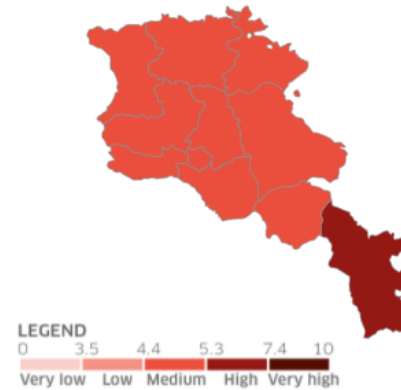
The INFORM Subnational risk index for the Caucasus and Central Asia measures the disaster risk based on **62 indicators** across 83 administrative units in 8 countries.

Armenia is represented with **11 administrative units** (10 marzes and Yerevan). All marzes face Moderate risk, except Syunik marz facing High overall risk.

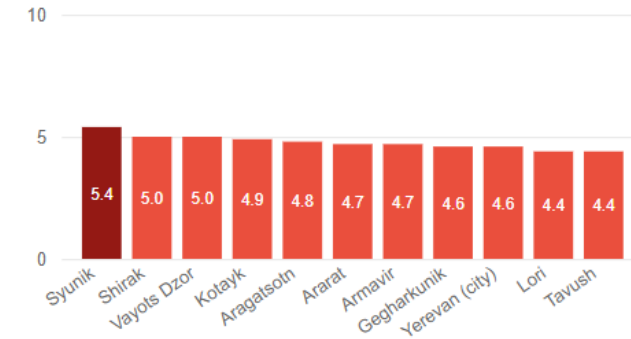
Observed by dimensions, **Hazard and Exposure** dimension high risk is equally distributed across regions, except for the marzes of Vayots Dzor and Syunik, that are facing very high risk due to high exposure to natural risk, compared with country average.

The country faces a low risk in the **Vulnerability** dimension, while the vulnerability at marz level is characterized with average national value. Exception are Syunik and Shirak

### INFORM RISK INDEX

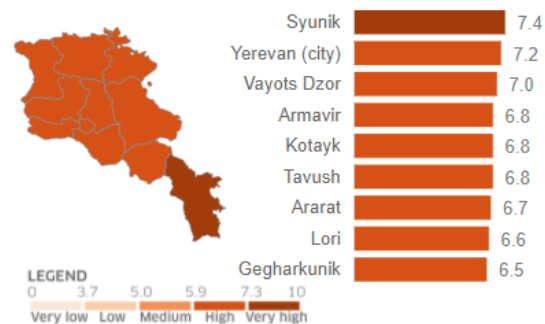


RISK CLASS ● High ● Medium

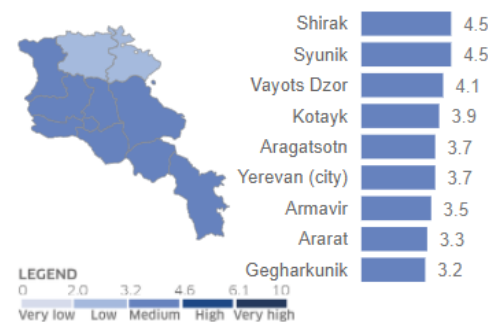


### INFORM RISK INDEX DIMENSIONS (BY ADMIN UNIT 1)

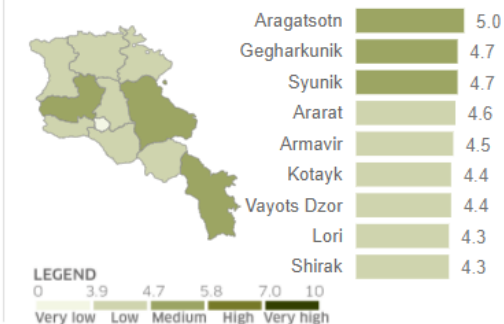
#### hazard and exposure



#### vulnerability



#### lack of coping capacity



# INFORM CCA subnational: use cases

## Regional DRR risk profile

*Adopted for information by the Decision of the Regional Forum – Meeting of the Heads of Emergency Authorities of Central Asian countries, Protocol, 5 November 2021, Tashkent (Uzbekistan)*

### THE REGIONAL DISASTER RISK PROFILE OF CENTRAL ASIAN COUNTRIES

#### PART 1: BACKGROUND

Central Asian region is the Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan, Republic of Uzbekistan. The area occupied by the region is about 4 million square kilometers, and the total population is more than 75 million people. The population density in the region is only 18 people per square kilometer.

From a geographic point of view, Central Asia is an extremely vast sub-region, including powerful mountain systems such as the Tien Shan, and large deserts and steppe regions. The largest rivers in this region are Amu Darya and Syrdarya. The largest reservoirs include the Caspian Sea, the Aral Sea and Lake Balkhash, which are part of the West Central Asian indoor basin.

The landlocked position of Central Asia within the Euro-Asian continent defines its sharply continental climate with a small amount of unevenly distributed rainfall. The region is characterized by a large amplitude of daytime and seasonal temperatures, with high solar radiation and relatively low humidity.

Large differences in geographic location and altitude from 0 to 7,500 m above sea level explain the diversity of the microclimate.

The mountains are located in the east and southeast and are the center of the formation of water resources and their flow. Although the area often suffers from wet winds, most of the moisture is absorbed by the mountains and little rainfall remains for the rest of the basin.

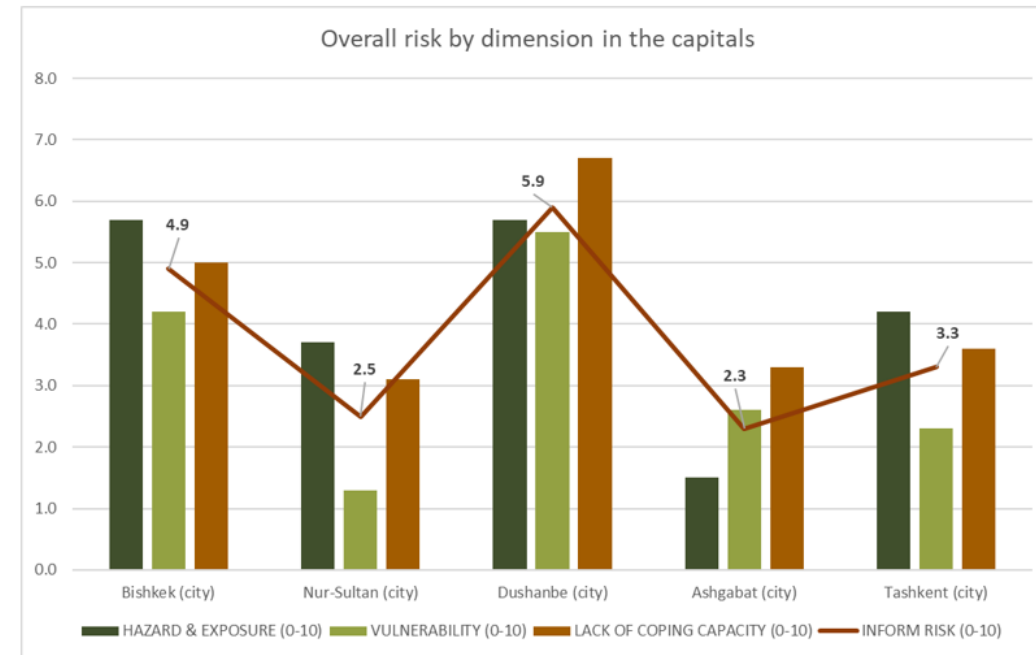
The screenshot displays the website interface for the Center for Emergency Situations and Disaster Risk Reduction (CESDRR) in Central Asia. The header includes the center's name in English and Russian, along with its logo. The navigation menu features links for 'THE REPUBLIC OF KAZAKHSTAN Founding State', 'THE KYRGYZ REPUBLIC Founding State', 'REPUBLIC OF KAZAKHSTAN AND KYRGYZ REPUBLIC EMERGENCY OPERATIONS BRIEFINGS', and 'UPDATE INFORMATION ABOUT THE SPREAD OF COVID-19 IN CENTRAL ASIA'. The main content area contains several news items, including 'Happy International Women's Day', 'The Center has conducted trainings on Sentinel monitoring for Natural Hazards in the Points of Central Asia', 'The Department for Emergency Situations of Alma-Ata CESDRR's Staff is dedicated to World Day of the Girl Child', 'March 1 - World Day of the Girl Child', and 'The Center started the implementation of the FAO project "Institutionalization of damage and loss assessment methodology for the agricultural sector in Kyrgyzstan"'. Each news item includes a small image and a brief description.

# INFORM CCA subnational: use cases

## Local level resilience strategy for capital cities of CA (Kazakhstan & Kyrgyzstan)

	2021					2017				
	HAZARD & EXPOSURE (0-10)	VULNERABILITY (0-10)	LACK OF COPING CAPACITY (0-10)	INFORM RISK (0-10)	RISK CLASS (V.Low-V.High)	HAZARD & EXPOSURE (0-10)	VULNERABILITY (0-10)	LACK OF COPING CAPACITY (0-10)	INFORM RISK (0-10)	RISK CLASS (V.Low-V.High)
Bishkek	5.7	4.2	5.0	4.9	Medium	5.9	4.2	6.5	5.4	High
Nur-Sultan	3.7	1.3	3.1	2.5	Very Low	2.8	1.1	3.5	2.2	Very Low
Dushanbe	5.7	5.5	6.7	5.9	High	6.6	5.9	7.5	6.6	High
Ashgabat	1.5	2.6	3.3	2.3	Very Low	3.4	3.9	5.0	4.0	Low
Tashkent	4.2	2.3	3.6	3.3	Very Low	5.3	2.5	4.2	3.8	Low

Table 1. Overview of the INFORM Subnational Risk Index 2021, and comparison with the 2017 values



# INFORM SEE: thematic analysis

INFORM subnational risk Index SEE 2021: Health Analysis – Albania [2]

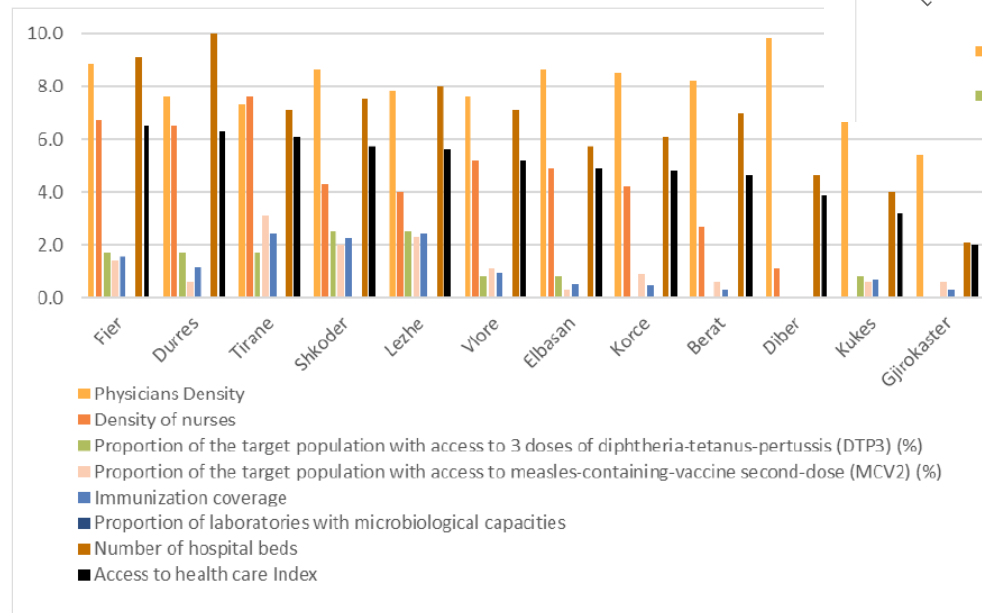
## KEY FIGURES



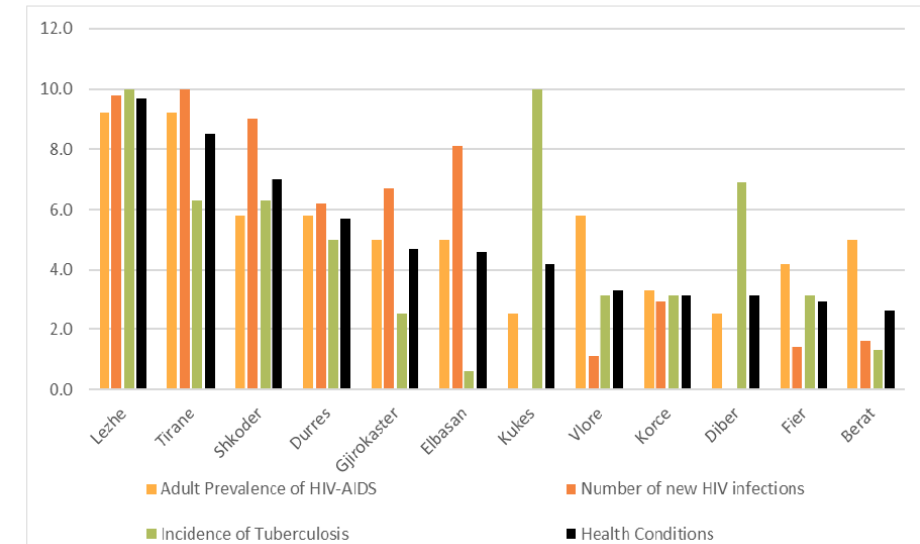
Map of Albania counties  
(INSTAT 2021)

Population: 2,8 million people (World Bank, 2020)  
 Population growth rate: -0.6% (World Bank, 2020)  
 Urban population (% of total pop): 62% (World Bank, 2020)  
 Rural population (% of total pop): 38% (World Bank, 2020)  
 Life expectancy at birth: Male 77/Female 80 (World Bank, 2019)  
 GDP per capita: 5,246.30 (World Bank, 2020)  
 Unemployment rate: 11.7% (World Bank, 2020)  
 Gini Index: 33.2 (World Bank, 2017)  
 Human Development Index: 0.795 (UNDP, 2019)  
 Gender Inequality Index: 0.181 (UNDP, 2019)  
 People using at least basic sanitation services (% of population): 99% (World Bank, WHO, UNICEF, 2020)  
 People using at least basic drinking water services (% of population): 95% (World Bank, WHO, UNICEF, 2020)  
 Land area: 28,750 km<sup>2</sup> (World Bank, 2020)  
 Global INFORM risk index: 2.8 – low risk class (INFORM, 2021)  
 WB Income Group: upper middle income (World Bank, 2021)

## Analysis of health indicators in LACK OF COPING CAPACITY dimension



## Analysis of health indicators in VULNERABILITY dimension



## ALBANIA: HEALTH ANALYSIS

based on INFORM subnational SEE 2021 results  
(drafted 11 January 2022)

- Territorial distribution of hospitals dictates the risk of lack of good coverage of physicians/nurses, and hospital beds. Based on the INFORM results from Albania, all of the country's regions are faced with chronic lack of doctors, on average 1.2 doctors per 1,000 people. All of the regions

# INFORM can be used as:

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- **Stand alone risk analysis & management tool**, can be integrated into national risk assessment plan; hum/dev, preparedness & response planning;
- **Credible shared analysis** (inter-agency process ‘brand neutral’, data exchange & joint action; unites gov, civil society, aid actors and academia)
- **Support other tools** (quantitative foundations for national risk & development planning)
- **Trend analysis**

# MORE INFORMATION & CONTACTS

## Caucasus and Central Asia: Subnational INFORM risk 2021

### Overview

The subnational Index for Risk Management (INFORM) is a way to understand and measure the risk of disasters. It helps identify where and why humanitarian crises are likely to occur, and shows how risks differ within each country across its subnational units and between subnational units of different countries.

### Data on 83 first admin levels

The first administrative level is the largest subdivision of a country. There are 85 such subdivisions in the Caucasus and Central Asia, and commonly include oblasts, regions and capital cities. The subnational INFORM includes data on 83 of these first administrative levels.

### 62 indicators

The model builds up a picture of risk by bringing together 62 different indicators that measure three dimensions of risk: hazard and exposure, vulnerability, and lack of coping capacity. Each dimension is made up from a number of risk categories, e.g. natural hazards, vulnerable groups, or infrastructure capacity. Categories comprise a number of components. Components are carefully chosen sets of indicators that capture a specific topic, e.g. earthquake, children under five, or physical infrastructure. Indicators are the individual datasets that make up INFORM, e.g. the physical exposure to earthquakes of a certain magnitude, child mortality rate, or road density.

### RISK MAP



### Data reliability

The model includes a **reliability index**, which considers missing indicators, the recency of the data, and the degree of subnational data that was included (national averages were used when subnational data was missing – a less desired practice). The reliability index scores data on a 0 to 10 scale, where 10 is least reliable. The reliability index shows that results for all areas in Turkmenistan are deemed less reliable.

### How to use the model

National government or intergovernmental risk assessment and development planning can be updated to include interim assess and components.

INFORM can help integrate disaster risk management into ongoing government, development, civil, humanitarian, and preparedness planning processes.

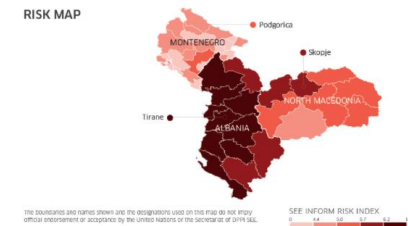
By relying on shared risk analysis, government, donors, humanitarian & development actors can align their actions and funding decisions towards risk reduction and management.

Validated to global standards, INFORM can support inter-agency processes: Common Country Assessment, UN Development Assistance Framework, Sendai Framework for DRR, etc.

[Proceed to Main Dashboard](#)

## South East Europe: Subnational INFORM risk 2021

### RISK MAP



The countries and names shown are the designations used on this map by the UN. Official endorsement or acceptance by the United Nations or the Secretariat of UNDRR S.E.E.

SEE INFORM RISK INDEX



### Overview

The subnational INFORM risk index is a tool for understanding and measuring the risk of disasters. It helps identify where and why humanitarian crises are likely to occur and shows how risks differ within each country across its subnational units and between subnational units of different countries.

The data is collected at the largest subdivision of a country. The subnational INFORM risk index 2021 for the South East Europe (SEE) region gathered data at 44 subdivisions (the subnational regions, capitals and municipalities) across three countries - Albania, Montenegro and North Macedonia.

The model simplifies a lot of information about risk and brings together 68 different indicators that measured in three risk dimensions: hazard and exposure, vulnerability, and lack of coping capacity. Each dimension consists of a number of risk categories, e.g. natural hazards, vulnerable groups, or infrastructure capacity. Categories comprise a number of components. Components are carefully chosen sets of indicators that capture a specific topic, e.g. earthquake, inequality, or access to health care. Indicators are the individual datasets that make up INFORM, e.g. the physical exposure to earthquakes of a certain magnitude, gender inequality index, or density of nurses.

### Data reliability

The INFORM risk index calculates a **lack of reliability index**, which is composed of three indicators: number of missing and imputed datasets, the recency of the data, and the degree of subnational data that was included (national values were used when subnational data was missing – a less desired practice). The lack of reliability index scores data on a 0 to 10 scale, where 10 is least reliable. The lack of reliability index shows that results for three municipalities in Montenegro and all regions in North Macedonia are deemed less reliable (scored above 6.0).

### How to use the model

National government or intergovernmental risk assessment and development planning can be updated to include interim results and components.

By relying on shared risk analysis, government, donors, humanitarian & development actors can align their actions and funding decisions towards risk reduction and management.

INFORM can help integrate disaster risk management into ongoing government, development, civil, humanitarian, and preparedness planning processes. Also, it identifies areas for improvement in national disaster statistics (Sendai Monitoring) as critical factor for the overall results.

Validated to global standards, INFORM can support inter-agency processes: Common Country Assessment, Implementation of the Sendai Framework for Disaster Reduction, UN Development Assistance Framework, Humanitarian Program Cycle, etc.

[Proceed to Main Dashboard](#)

<https://bit.ly/2ZM6YBI>

<https://bit.ly/3CeiyTu>

### More information:

**C&CA** <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Subnational-Risk/Central-Asia-Caucasus>

**SEE** <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Subnational-Risk/South-East-Europe>

**INFORM subnational methodology** <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Subnational-Risk>

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THANK YOU!