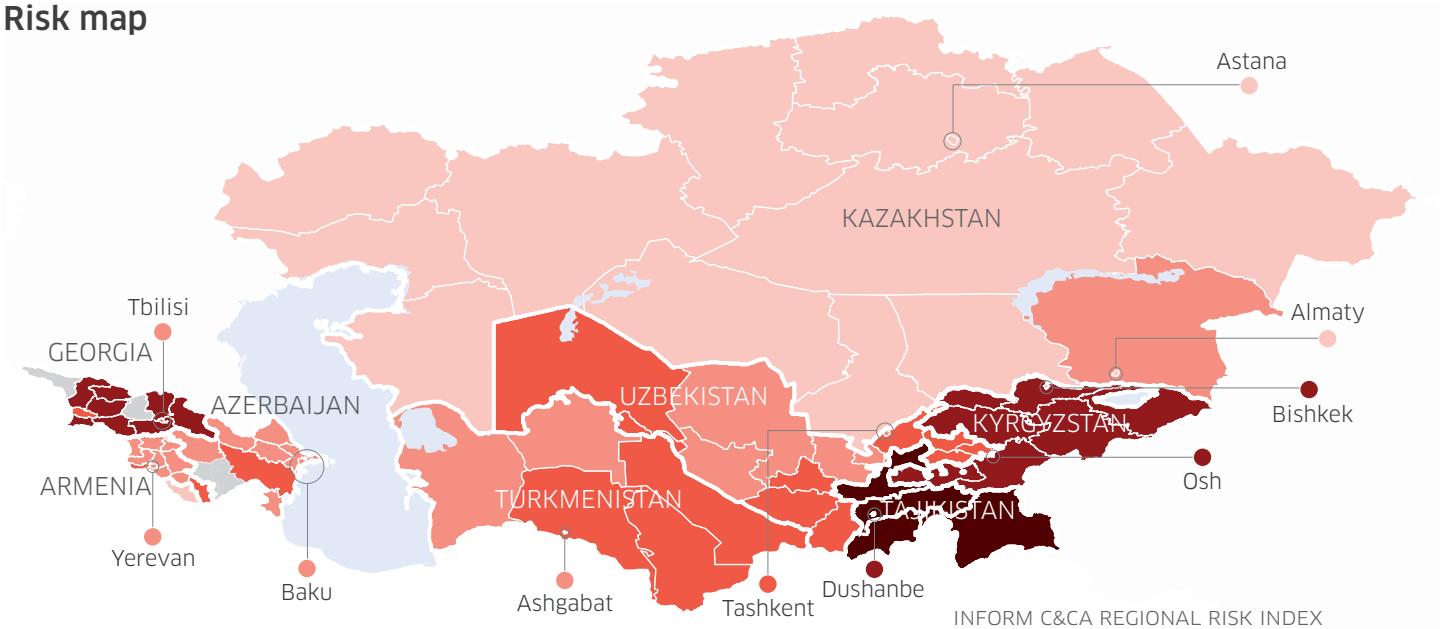
Caucasus and Central Asia: Subnational INFORM 2017

INFORM INDEX FOR RISK MANAGEMENT SUBNATIONAL Caucasus and Central Asia

Risk map



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Overview

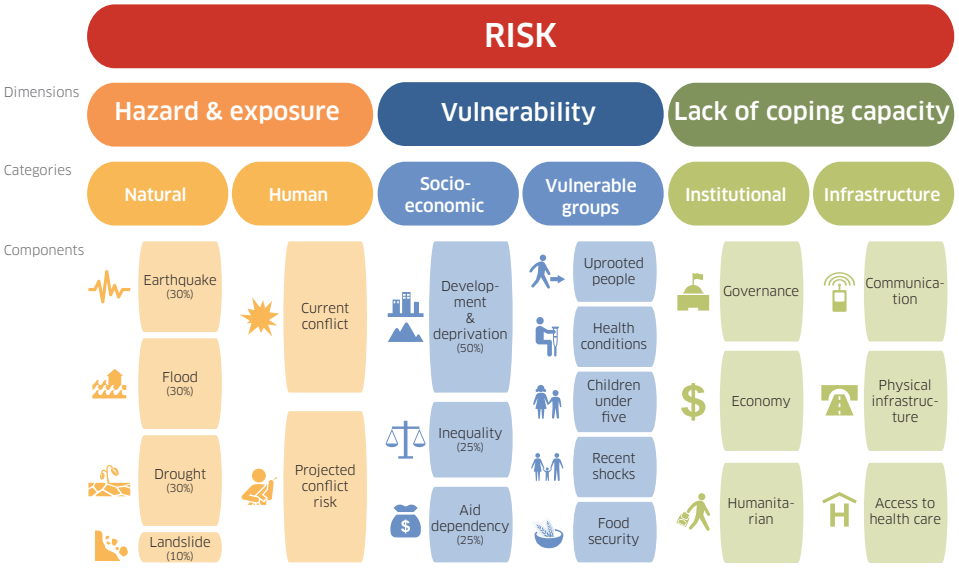
The subnational Index for Risk Management (INFORM) is a way to understand and measure the risk of disasters. It helps identify where and why humanitarian crises are likely to occur, and shows how risks differ **within** each country across its subnational units and **between** subnational units of different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

Data on 82 first admin levels

The first administrative level is the largest subdivision of a country. There are 84 such subdivisions in the Caucasus and Central Asia, and commonly include oblasts, regions and capital cities. The subnational INFORM includes data on 82 of these first administrative levels.

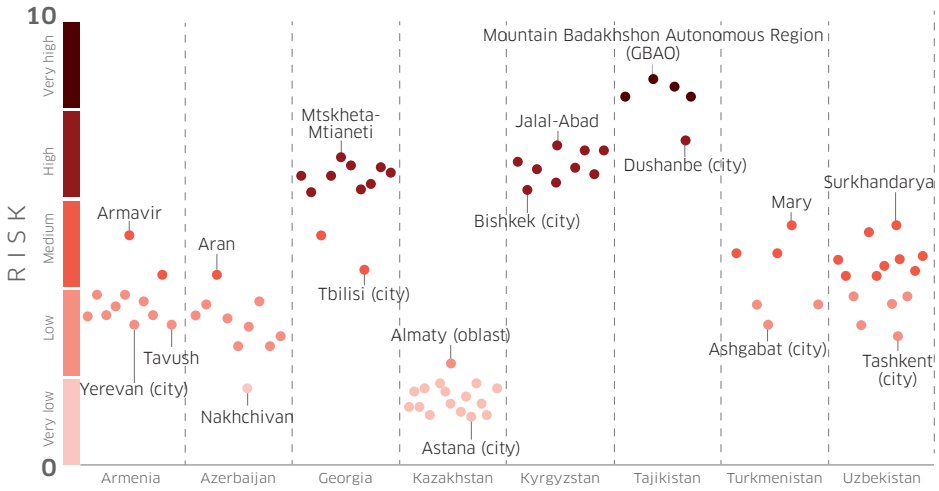
55 indicators

The model builds up a picture of risk by bringing together 55 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 distribution

The graph below illustrates how risk levels are spread within a country and allows comparison across the region. All oblasts in Tajikistan are more prone to risk than any other country/region in the Caucasus and Central Asia.



Data reliability

The model includes a **reliability index**, which considers missing indicators, the recentness 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.

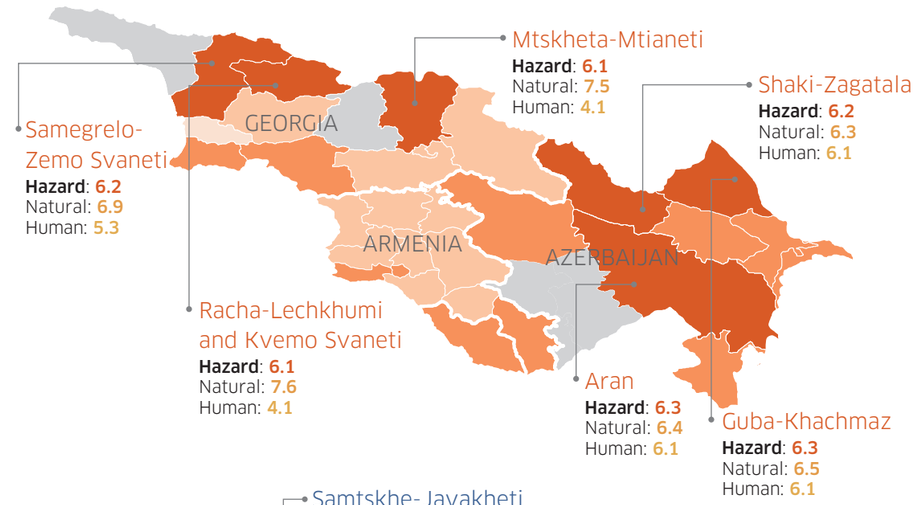
How to use the model

- National government or intergovernmental risk assessment and development planning can be updated to include INFORM 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, DRR, humanitarian, and preparedness planning processes.
- Validated to global standards, INFORM can support inter-agency processes: Common Country Assessment, UN Development Assistance Framework, Humanitarian Program Cycle, etc.

Developed by OCHA for the Regional IASC Task Force for the Caucasus and Central Asia **Creation date:** 17 Apr 2017 **Updated:** 4 July 2017 **More info:** http://www.inform-index.org/Subnational/Central-Asia-Caucasus
Subnational data sources: Agency on Statistics under President of the Republic of Tajikistan, Committee on Statistics of the Republic of Kazakhstan, National Statistical Committee of the Kyrgyz Republic, National Statistical Service of the Republic of Armenia, National Statistics Office of Georgia, State Committee of the Republic of Uzbekistan on Statistics, State Committee on Statistics of Turkmenistan, State Statistical Committee of the Republic of Azerbaijan, CIESIN, EC-JRC, EM-DAT, ETH Zürich, FAO, GADM, GSHAP, HIIK, IFRC, National Red Cross/Crescent Societies, OPHI, OSM, UNDP, UNHCR, UNICEF, UNEP, UNISDR, USGS, WHO.
Sources for data at national level: Barro and Lee, Central Bank of Russian Federation, Inter-Parliamentary Union, National Central Banks, OCHA, OECD, Transparency International, UNECE, UNIDO, World Bank, XE.

Caucasus

200 km

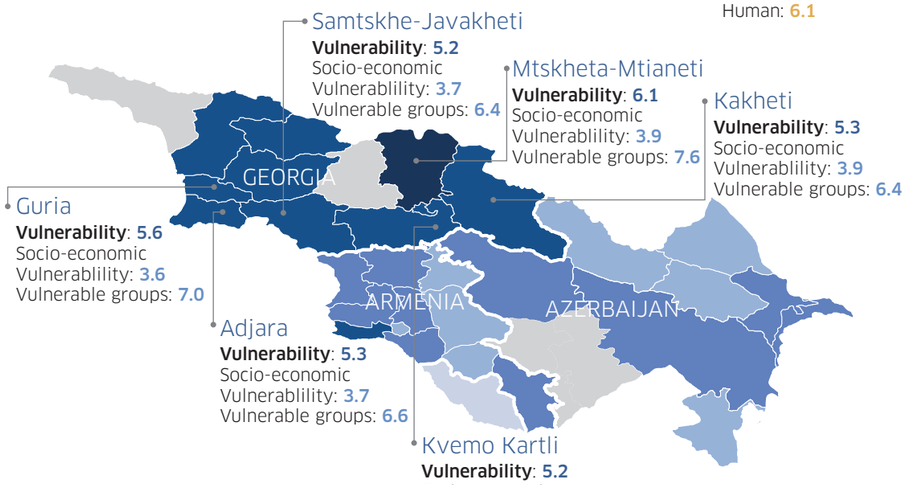


HAZARD AND EXPOSURE

This dimension of INFORM measures hazardous events that could occur and the people or assets potentially affected by them. It is made up of two categories – natural hazards and human hazards. These maps show details for the six subnational units in each sub-region with the highest values in the hazard & exposure dimension.

LEGEND

0	3.7	5.0	5.9	7.3	10.0
Very low	Low	Medium	High	Very high	Only partial data and/or incomplete data and/or unknown geographic boundary

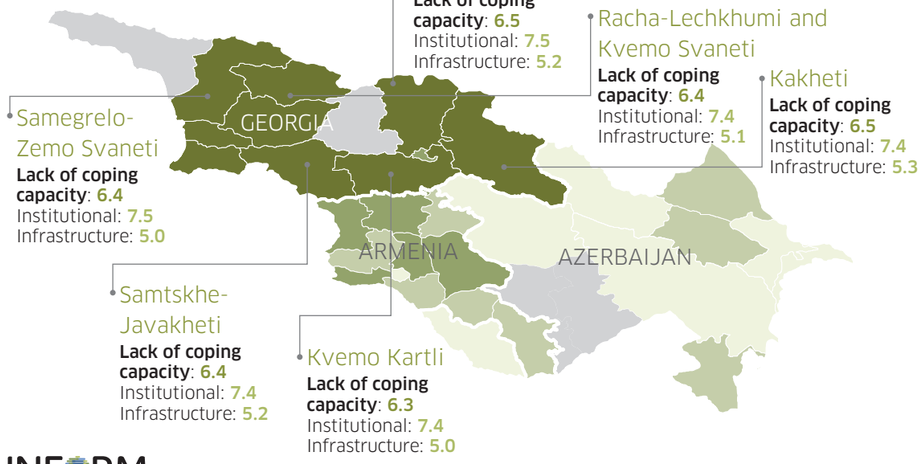


VULNERABILITY

This dimension of INFORM measures the susceptibility of people to potential hazards. It is made up of two categories – socio-economic vulnerability and vulnerable groups. These maps show details for the six subnational units in each sub-region with the highest values in the vulnerability dimension.

LEGEND

0	2.0	3.2	4.6	6.1	10.0
Very low	Low	Medium	High	Very high	Only partial data and/or incomplete data and/or unknown geographic boundary



LACK OF COPING CAPACITY

This dimension of INFORM measures the lack of resources available that can help people cope with hazardous events. It is made up of two categories – institutions and infrastructure. These maps show details for the six subnational units in each sub-region with the highest values in the lack of coping capacity dimension.

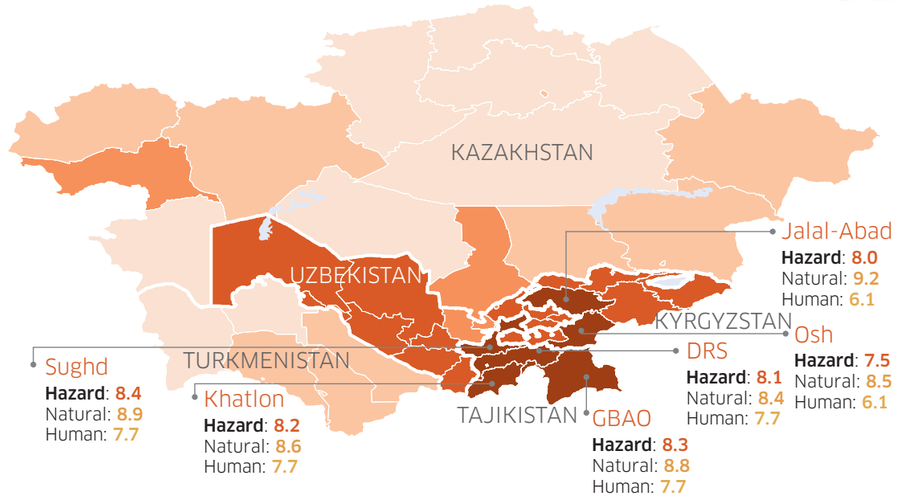
LEGEND

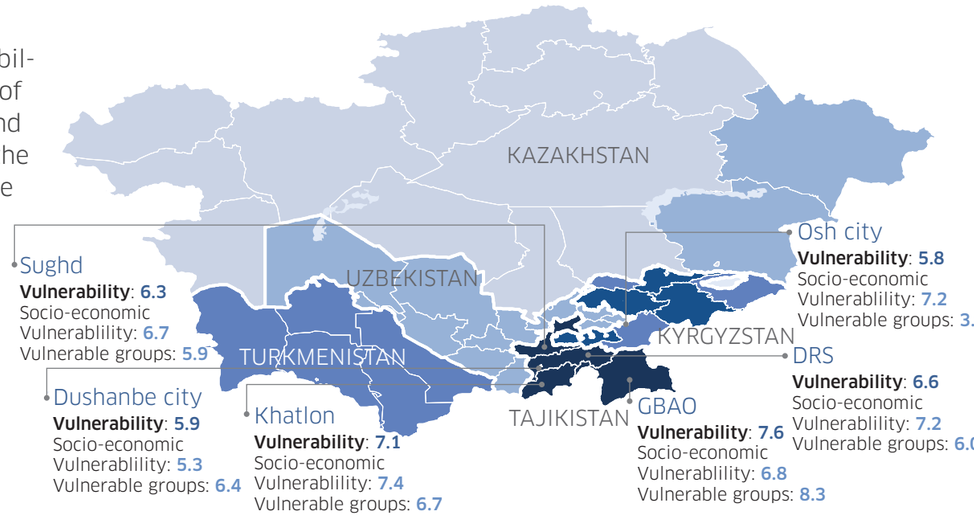
0	3.9	4.7	5.8	7.0	10.0
Very low	Low	Medium	High	Very high	Only partial data and/or incomplete data and/or unknown geographic boundary

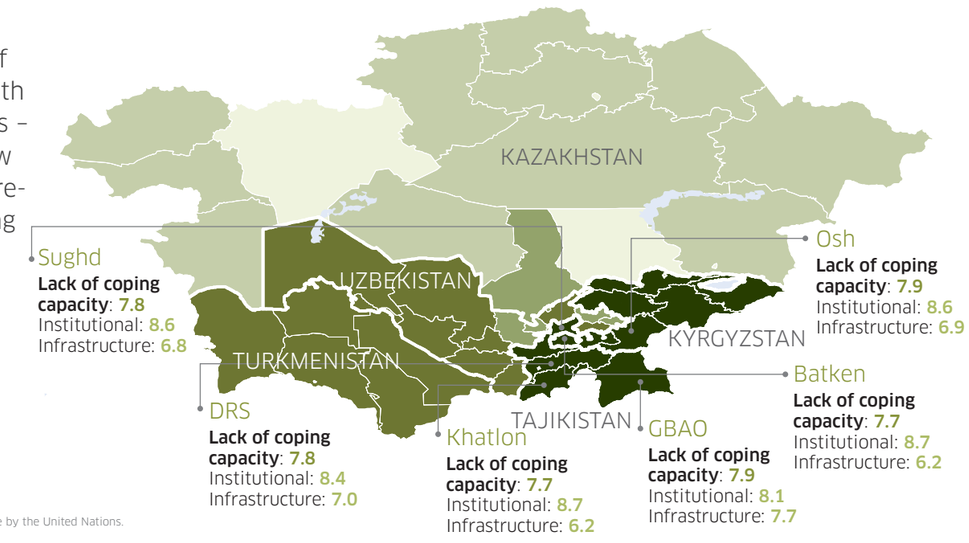
INFORM
INDEX FOR RISK MANAGEMENT
SUBNATIONAL
Caucasus and Central Asia

Central Asia

200 km







Detailed results

COUNTRY	FIRST ADMINISTRATIVE LEVEL	Rank	Natural	Human	HAZARD & EXPOSURE	Socio-Economic Vulnerability	Vulnerable Groups	VULNERABILITY	Institutional	Infrastructure	LACK OF COPING CAPACITY	INFORM RISK	RISK CLASS	Reliability Index[1]
		(1-82)	(0-10)	(0-10)	(0-10)	(0-10)	(0-10)	(0-10)	(0-10)	(0-10)	(0-10)	(0-10)	(Very low-Very high)	(0- 10)
Armenia	Aragatsotn	55	4.1	3.6	3.9	3.1	3.5	3.3	4.8	4.4	4.6	3.9	Low	3.4
	Ararat	41	5.8	3.6	4.8	3.5	4.3	3.9	4.2	4.3	4.3	4.3	Low	3.4
	Armavir	26	6.2	3.6	5.0	3.4	6.0	4.8	5.1	4.6	4.9	4.9	Medium	3.4
	Gegharkunik	55	5.0	3.6	4.3	3.3	2.7	3.0	4.9	4.5	4.7	3.9	Low	3.4
	Kotayk	50	4.9	3.6	4.3	3.5	2.8	3.2	5.2	4.7	5.0	4.1	Low	3.4
	Lori	41	5.4	3.6	4.6	3.8	3.2	3.5	3.8	5.6	4.8	4.3	Low	3.4
	Shirak	45	5.0	3.6	4.3	3.8	3.4	3.6	3.9	5.6	4.8	4.2	Low	3.4
	Syunik	37	6.5	3.6	5.2	3.2	4.1	3.7	4.6	4.2	4.4	4.4	Medium	3.4
	Tavush	59	5.5	3.6	4.6	3.1	2.6	2.9	3.4	4.8	4.1	3.8	Low	3.4
	Vayots Dzor	55	5.7	3.6	4.7	3.4	2.2	2.8	3.4	5.5	4.5	3.9	Low	3.4
	Yerevan (city)	59	3.6	6.5	5.2	3.1	2.8	3.0	3.4	3.4	3.4	3.8	Low	3.4
Azerbaijan	Absheron	52	4.1	6.1	5.2	2.3	5.4	4.0	2.7	3.3	3.0	4.0	Low	4.8
	Aran	37	6.4	6.1	6.3	2.1	5.0	3.7	2.4	4.8	3.7	4.4	Medium	4.8
	Ganja-Gazakh	50	5.1	6.1	5.6	2.0	4.4	3.3	2.4	4.6	3.6	4.1	Low	4.8
	Guba-Khachmaz	55	6.5	6.1	6.3	2.3	2.3	2.3	2.4	5.5	4.1	3.9	Low	4.8
	Lankaran	59	5.1	6.1	5.6	2.1	2.5	2.3	2.4	5.5	4.1	3.8	Low	4.8
	Mountainous Shirvan	64	4.8	6.1	5.5	2.2	2.1	2.2	2.4	5.1	3.9	3.6	Low	4.8
	Nakhchivan	70	3.9	6.1	5.1	1.7	1.7	1.7	2.2	4.0	3.2	3.0	Very Low	4.5
	Shaki-Zagatala	64	6.3	6.1	6.2	1.9	2.2	2.1	2.4	4.8	3.7	3.6	Low	4.8
	Upper Garabagh[2]	45	4.3	7.2	5.9	1.7	5.0	3.5	2.4	4.8	3.7	4.2	Low	4.8
	Baku (city)	63	4.0	6.8	5.6	2.4	5.1	3.9	2.0	2.8	2.4	3.7	Low	4.5
Georgia	Autonomous Republic of Adjara	18	6.5	2.9	5.0	3.7	6.6	5.3	7.3	4.8	6.2	5.5	High	5.0
	Guria	28	3.4	2.9	3.2	3.6	7.0	5.6	7.3	4.9	6.2	4.8	Medium	5.0
	Imereti	22	5.4	4.1	4.8	3.5	6.4	5.1	7.4	4.7	6.2	5.3	High	5.0
	Kakheti	22	5.5	2.9	4.3	3.9	6.4	5.3	7.4	5.3	6.5	5.3	High	5.0
	Kvemo Kartli	20	5.4	4.1	4.8	3.7	6.4	5.2	7.4	5.0	6.3	5.4	High	5.0
	Mtskheta-Mtianeti	9	7.5	4.1	6.1	3.9	7.6	6.1	7.5	5.2	6.5	6.2	High	5.0
	Racha-Lechkhumi and Kvemo Svaneti	13	7.6	4.1	6.1	3.6	6.4	5.2	7.4	5.1	6.4	5.9	High	5.0
	Samegrelo-Zemo Svaneti	14	6.9	5.3	6.2	3.6	6.4	5.2	7.3	4.9	6.2	5.8	High	5.0
	Samtskhe-Javakheti	18	6.4	3.3	5.0	3.7	6.4	5.2	7.4	5.2	6.4	5.5	High	5.0
	Shida Kartli[2]	16	6.2	4.1	5.2	3.7	6.4	5.2	7.5	5.0	6.4	5.6	High	5.0
	Tbilisi (city)	34	4.5	2.9	3.7	3.6	5.4	4.6	6.8	3.7	5.5	4.5	Medium	5.0
Kyrgyzstan	Batken	9	7.2	5.3	6.3	6.2	3.1	4.8	7.9	7.4	7.7	6.2	High	3.7
	Bishkek (city)	20	5.6	6.1	5.9	4.5	3.9	4.2	8.0	4.2	6.5	5.4	High	3.8
	Chui	11	7.2	4.5	6.0	5.4	4.8	5.1	8.1	5.9	7.1	6.0	High	3.7
	Issyk-Kul	16	7.0	5.0	6.1	5.0	3.1	4.1	7.5	6.4	7.0	5.6	High	3.7
	Jalal-Abad	6	9.2	6.1	8.0	5.8	3.1	4.6	8.2	6.6	7.5	6.5	High	3.7
	Naryn	11	7.1	4.5	6.0	6.0	3.4	4.8	7.7	7.0	7.4	6.0	High	3.7
	Osh	7	8.5	6.1	7.5	5.7	2.9	4.4	8.6	6.9	7.9	6.4	High	3.7
	Osh (city)	7	7.4	6.1	6.8	7.2	3.9	5.8	8.0	4.3	6.5	6.4	High	3.8
	Talas	14	6.6	6.1	6.4	5.7	2.9	4.4	7.8	6.0	7.0	5.8	High	3.7
Kazakhstan	Akmola	76	3.1	1.6	2.4	1.8	1.4	1.6	4.9	3.6	4.3	2.5	Very Low	4.3
	Aktobe	76	3.5	2.1	2.8	1.2	2.0	1.6	4.3	3.0	3.7	2.5	Very Low	4.3
	Almaty	66	6.5	2.1	4.7	1.4	2.5	2.0	5.4	3.4	4.5	3.5	Low	4.3
	Almaty (city)	71	5.5	3.6	4.6	1.1	1.8	1.5	4.6	1.9	3.4	2.9	Very Low	4.3
	Astana (city)	82	3.5	2.1	2.8	0.8	1.4	1.1	4.5	2.3	3.5	2.2	Very Low	4.4
	Atyrau	68	7.1	2.1	5.1	1.3	1.4	1.4	4.5	3.7	4.1	3.1	Very Low	4.3
	East Kazakhstan	67	4.0	3.6	3.8	1.4	3.0	2.2	4.7	3.6	4.2	3.3	Very Low	4.3
	Zhambyl	73	5.9	2.1	4.3	1.4	1.3	1.4	3.9	3.3	3.6	2.8	Very Low	4.3
	Karaganda	76	2.9	1.6	2.3	1.5	1.8	1.7	4.3	3.8	4.1	2.5	Very Low	4.3
	Kostanai	79	3.0	1.6	2.3	1.6	1.6	1.6	4.7	3.0	3.9	2.4	Very Low	4.3
	Kyzylorda	74	4.2	1.6	3.0	1.9	1.1	1.5	4.7	4.4	4.6	2.7	Very Low	4.3
	Mangistau	75	3.2	3.6	3.4	1.1	1.2	1.2	4.7	3.5	4.1	2.6	Very Low	4.3
	North Kazakhstan	80	2.2	1.6	1.9	1.4	1.7	1.6	4.7	3.2	4.0	2.3	Very Low	4.3
	Pavlodar	80	2.9	1.6	2.3	1.0	1.6	1.3	4.6	3.4	4.0	2.3	Very Low	4.3
	South Kazakhstan	68	6.5	3.6	5.2	1.3	1.0	1.2	5.7	3.9	4.9	3.1	Very Low	4.3
	West Kazakhstan	71	6.4	1.6	4.4	1.4	1.2	1.3	4.7	3.5	4.1	2.9	Very Low	4.3
Tajikistan	Districts of Republican Subordination	3	8.4	7.7	8.1	7.2	6.0	6.6	8.4	7.0	7.8	7.5	Very High	6.1
	Dushanbe (city)	5	5.1	7.7	6.6	5.3	6.4	5.9	8.5	6.2	7.5	6.6	High	5.8
	Mountain Badakhshon Autonomous Region (GBAO)	1	8.8	7.7	8.3	6.8	8.3	7.6	8.1	7.7	7.9	7.9	Very High	6.1
	Khatlon	2	8.6	7.7	8.2	7.4	6.7	7.1	8.7	6.2	7.7	7.7	Very High	6.1
	Sughd	4	8.9	7.7	8.4	6.7	5.9	6.3	8.6	6.8	7.8	7.4	Very High	5.7
Turkmenistan	Ahal	29	5.5	1.3	3.7	5.0	3.4	4.2	4.5	7.9	6.5	4.7	Medium	8.2
	Ashgabat (city)	52	5.1	1.3	3.4	4.8	2.9	3.9	2.5	6.8	5.0	4.0	Low	8.2
	Balkan	45	4.4	1.3	3.0	4.9	2.9	4.0	3.3	7.9	6.1	4.2	Low	8.2
	Daşoguz	45	4.3	1.3	2.9	5.2	2.5	4.0	4.9	7.9	6.6	4.2	Low	8.1
	Lebap	29	6.2	1.3	4.2	5.1	2.3	3.8	3.8	7.9	6.3	4.7	Medium	8.1
	Mary	24	6.8	1.3	4.6	5.1	3.5	4.3	3.8	7.9	6.3	5.0	Medium	8.1
Uzbekistan	Andizhan	32	6.7	7.1	6.9	3.0	1.9	2.5	5.5	5.4	5.5	4.6	Medium	4.8
	Bukhara	41	6.4	6.0	6.2	2.6	1.5	2.1	6.3	5.7	6.0	4.3	Low	4.8
	Fergana	37	6.5	6.0	6.3	2.9	1.5	2.2	6.7	5.5	6.1	4.4	Medium	4.8
	Djizhak	52	5.0	6.0	5.5	2.8	1.4	2.1	5.0	5.9	5.5	4.0	Low	4.8
	Republic of Karakalpakstan	26	7.7	6.0	6.9	3.4	2.1	2.8	6.0	5.9	6.0	4.9	Medium	4.8
	Namangan	37	6.8	6.0	6.4	3.0	1.5	2.3	5.6	5.5	5.6	4.4	Medium	4.8
	Navoi	45	5.9	6.0	6.0	2.7	1.4	2.1	5.8	5.7	5.8	4.2	Low	4.8
	Kashkadarya	34	6.6	6.0	6.3	2.9	1.6	2.3	6.7	6.0	6.4	4.5	Medium	4.8
	Samarkand	32	6.2	6.0	6.1	3.0	1.8	2.4	7.1	5.8	6.5	4.6	Medium	4.8
	Syrdarya	41	4.9	6.0	5.5	3.0	2.6	2.8	4.9	5.3	5.1	4.3	Low	4.8
	Surkhandarya	24	7.7	6.0	6.9	3.1	2.6	2.9	6.5	6.2	6.4	5.0	Medium	4.8
	Tashkent	29	7.3	6.0	6.7	3.0	2.1	2.6	6.0	5.7	5.9	4.7	Medium	5.0
	Tashkent (city)	59	4.6	6.0	5.3	2.7	2.2	2.5	5.4	2.7	4.2	3.8	Low	4.8
	Khorezm	34	5.7	6.0	5.9	3.1	1.6	2.4	6.7	5.9	6.3	4.5	Medium	4.8

[1]First administrative areas with a lower Reliability Index have risk scores that are based on more reliable data.

[2]There were no accurate geographic boundaries available to visualize results of these areas on maps.

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