Use of geo-referenced data for DRM in Central Asia, problems and prospective

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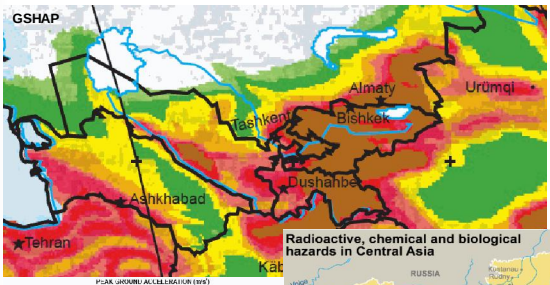
The Central Asia

Country	Area, 1000 km^2	% of Region	Population, Mln	% of Region	Population Density, per km2	% Population below poverty line	Annual population growth , %	Urban population (2006), %	GDP growth, annual %	GNI per capita PPP, $
Kazakhstan	2 724,90	68,1	15,48	26,1	6	13,8 (2007)	1,1	56	8,5	9 700
Kyrgyzstan	199,9	5,0	5,24	8,8	26	40,0 (2004)	1,0	34	7,4	1 950
Tajikistan	142,6	3,6	6,74	11,4	47	60,0 (2007)	1,5	24	7,8	1 710
Turkmenistan	488,1	12,2	4,96	8,4	10	30,0 (2007)	1,3	46	11,5	5 300
Uzbekistan	447,4	11,2	26,87	45,3	60	33,0 (2007)	1,4	36	9,5	2 430
Total	4 002,90	100,0	59,29	100						

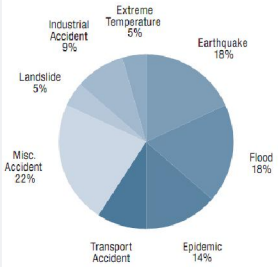
Source: Sushil Gupta (2009) CAC DRMI

Natural and Man-Made Hazards



Central Asia is particularly exposed to natural hazards like earthquakes, its secondary effects, and man-made hazards

Country Risk Profiles - Kazakhstan

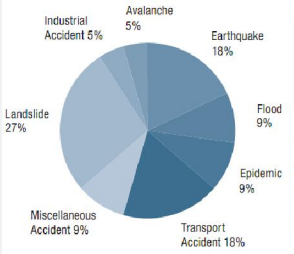


Disaster Risk Statistics (1988-2007)

Disaster type	No. of disasters / year	Total no. of deaths	Deaths / year	Relative vulnerability (deaths/year/ million)
Earthquake	0.20	15	0.75	0.05
Flood	0.20	10	0.50	0.03
Landslide	0.05	48	2.40	0.16
Extensive Temperatures	0.05	11	0.55	0.04
Epidemic	0.15	7	0.35	0.02
Transport Accidents	0.10	42	2.10	0.14
Miscellaneous Accidents	0.25	85	4.25	0.27
Industrial Accidents	0.10	64	3.20	0.21

Source: Sushil Gupta (2009) CAC DRMI

Country Risk Profiles - Kyrgyzstan

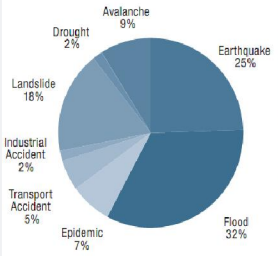


Disaster Risk Statistics (1988-2007)

Disaster type	No. of disasters / year	Total no. of deaths	Deaths/ year	Relative vulnerability (deaths/year/ million)
Earthquake	0.20	58	2.90	0.55
Flood	0.10	4	0.20	0.04
Landslide	0.30	238	11.90	2.27
Avalanche	0.05	11	0.55	0.10
Epidemic	0.10	22	1.10	0.21
Industrial Accidents	0.05	4	0.20	0.04
Transpot Accidents	0.20	88	4.40	0.84
Miscellaneous Accidents	0.10	21	1.05	0.20

Source: Sushil Gupta (2009) CAC DRMI

Country Risk Profiles - Tajikistan

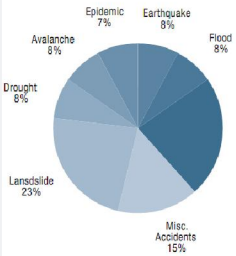


Disaster Risk Statistics (1988-2007)

Disaster type	No. of disasters / year	Total no. of deaths	Deaths/ year	Relative vulnerability (deaths/year/ million)
Earthquake	0.70	6,601	330.05	48.97
Flood	0.95	1,498	74.90	11.11
Landslide	0.50	339	16.95	2.51
Drought	0.05	-	-	0.00
Avalanche	0.25	100	5.00	0.74
Epidemic	0.20	171	8.55	1.27
Transport Accidents	0.15	124	6.20	0.92
Industrial Accidents	0.05	30	1.50	0.22

Source: Sushil Gupta (2009) CAC DRMI

Country Risk Profiles - Uzbekistan



Disaster Risk Statistics (1988-2007)

Disaster type	No. of disasters/ year	Total no. of deaths	Deaths/ year	Relative vulnerability (deaths/year/ million)
Earthquake	0.05	9	0.45	0.02
Flood	0.05	-	-	0.00
Landslide	0.15	75	3.75	0.14
Drought	0.05	-	-	0.00
Avalanche	0.05	24	1.20	0.04
Epidemic	0.05	40	2.00	0.07
Transport Accidents	0.15	83	4.15	0.15
Miscellaneous Accidents	0.10	107	5.35	0.20

Source: Sushil Gupta (2009) CAC DRMI

National Mapping and Emergency Management Agencies

Kazakhstan
- Ministry of Emergency Situations
- Land Management Agency of the Republic of Kazakhstan

Kyrgyzstan
- Ministry of Emergency Situations
- Kyrgyz State Service for Cartography and Geodesy

Tajikistan
- State Committee on Emergency Situations and Civil Protection
- State Agency for Land Management, Geodesy and Cartography

Turkmenistan
- State Commission for Emergency Situations
- State Committee Geodesy, Cartography and Cadastre

Uzbekistan
- Ministry of Emergency Situations
- State Committee for Land Resources, Geodesy, Cartography and State Cadastre

Central Asia and Hyogo Framework for Action 2005-2015 (HFA)

Building the resilience of nations and communities to disasters

- ü 3 Strategic goals
- ü 5 Priorities for action
- ü Implementation and follow-up

All countries in the region are actively involved in HFA - ISDR Central Asia Partnership

National Platforms are established in Kazakhstan and Kyrgyzstan

UNDP Project “Enhancing Disaster Risk Reduction Capacities in Central Asia”

Regional Initiatives and Projects

Global Earthquake Model
"Earthquake Model of Central Asia"

InWent , GFZ, CAIAG Project
"Cross Border Disaster Prevention in Central Asia"

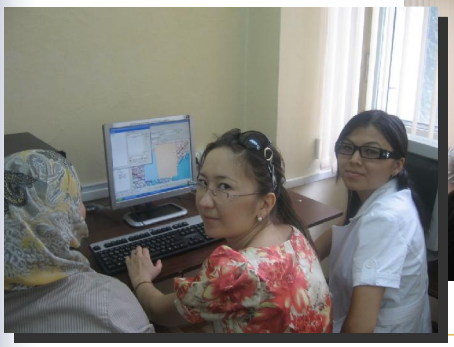
NATO Project
"GIS for seismic risk assessment in Bishkek and Tashkent cities"

Swiss Disaster Risk Reduction Program in Central Asia

UNDP Project:
"Enhancing Disaster Risk Reduction Capacities in Central Asia", etc.

International Trainings within the Project "Cross Border Disaster Prevention in Central Asia"

Kazakhstan, Almaty, KazNU – 8 participants
07.07-09.07.09



International Trainings within the Project "Cross Border Disaster Prevention in Central Asia"

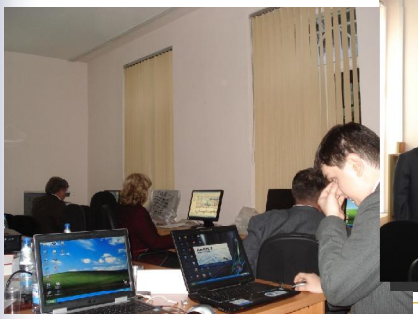
Kyrgyzstan, Bishkek, KSUCTA – 12 participants
29.06-01.07.09c

International Trainings within the Project "Cross Border Disaster Prevention in Central Asia"

Tajikistan, Dushanbe, TTU – 10 participants
07.07-11.07.09

International Trainings within the Project
“Cross Border Disaster Prevention in Central Asia”

Turkmenistan, Ashkhabad , ISS – 10 participants
24.11-26.11.09



International Trainings within the Project
“Cross Border Disaster Prevention in Central Asia”

Uzbekistan, Tashkent, IS – 12 participants
22.06-24.06.09