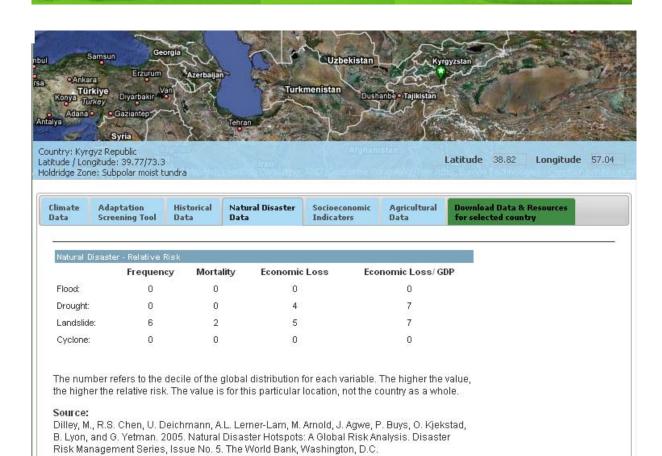
# 2. Climate Survey for the Kyrgyz Republic

By mid-century, the coarser-resolution global climate models project that this site will become warmer, with more frequent heatwaves and fewer frost days. They disagree on whether this site will become wetter or drier. Rainfall intensity is expected to increase. Runoff (precipitation minus evapotranspiration), a measure of water availability, is projected to increase. The maximum amount of rain that falls in any 5-day period (a surrogate for an extreme storm event) is expected to increase.

One particular higher-resolution (finer spatial scale) climate model projects that this site will become wetter by the end of the century. The maximum amount of rain that falls in any 5-day period (a surrogate for an extreme storm event) is projected to increase. The maximum period between rainy days is expected to decrease. Sometimes this higher-resolution model can be in conflict with the ensemble of coarser-resolution models, underscoring the need to consider many different climate models.

	Japanese High Resolution GCM (20 km.)	IPCC	IPCC GCMs		
	Change Change # Models (2091 - 2100 vs. 1981- 1990) (2030 - 2049 vs. Projecting Same 1980-1999) Change		Projecting Same	Values	
Mean Annual Precipitation:	23%	1%	12 out of 20	2%	
DJF Precipitation:		2%	11 out of 20	2%	
MAM Precipitation:		-5%	13 out of 20	-5%	
JJA Precipitation:		2%	11 out of 20	0	
SON Precipitation:		6%	13 out of 20	6%	
Runoff:		3%	8 out of 12	4%	
Mean Annual Temperature:	3 (°C)	2 (°C)		2 (°C)	
DJF Temperature:		2 (°C)		2 (°C)	
JJA Temperature:		2 (°C)		2 (°C)	
Sea Surface Temperature:					
Maximum 5-day Precipitation Total:	39%	8%	8 out of 8	2%	
Daily Precipitation Intensity:		4%	7 out of 8	5%	
Consecutive Dry Days:	5 day(s)	2 day(s)	5 out of 8	2 day(s)	
Frost Days:		-32 day(s)	8 out of 8	-29 day(s)	
Heatwave Duration Index:		23 day(s)	8 out of 8	23 day(s)	
Wildfire Frequency:	NA				
Biome Change:	NA				

- No significant change in mean annual rainfall (-15 to +15%) is projected for your site.
- No significant change (-10 to + 10) in consecutive dry days is projected for your site
- A moderate increase in temperature (1 2.5° C) is projected for your site.
- A significant increase in runoff (>35%) is estimated for your site. A significant increase can lead to some shifts in biodiversity and ecosystems. Increase of agricultural land will intensify land use changes. However, lack of soil cover and water holding capacity can promote floods, excess runoff, and siltation in surrounding areas.
- No significant change ( ± 25 mm) in the maximum 5-day precipitation (rainfall extreme events) is projected for your site.



# 3. Climate Survey for Tajikistan

By mid-century, the coarser-resolution global climate models project that this site will become warmer, with more frequent heatwaves and fewer frost days. They disagree on whether this site will become wetter or drier. Rainfall intensity is expected to increase. Runoff (precipitation minus evapotranspiration), a measure of water availability, is projected to decrease. The maximum amount of rain that falls in any 5-day period (a surrogate for an extreme storm event) is expected to increase.

One particular higher-resolution (finer spatial scale) climate model projects that this site will become wetter by the end of the century. The maximum amount of rain that falls in any 5-day period (a surrogate for an extreme storm event) is projected to increase. The maximum period between rainy days is expected to increase. Sometimes this higher-resolution model can be in conflict with the ensemble of coarser-resolution models, underscoring the need to consider many different climate models.

	Japanese High Resolution GCM (20 km.)	IPCC	IPCC GCMs		
	Change (2091 - 2100 vs. 1981- 1990)			Values	
Mean Annual Precipitation:	14%	-1%	12 out of 20	0%	
DJF Precipitation:		-2%	11 out of 20	-2%	
MAM Precipitation:		-5%	11 out of 20	-2%	
JJA Precipitation:		1%	10 out of 20	0	
SON Precipitation:		4%	12 out of 20	4%	
Runoff:		-10%	3 out of 12	-6%	
Mean Annual Temperature:	3 (°C)	2 (°C)		2 (°C)	
DJF Temperature:		2 (°C)		2 (°C)	
JJA Temperature:		2 (°C)		2 (°C)	
Sea Surface Temperature:					
Maximum 5-day Precipitation Total:	-3%	0%	6 out of 8	4%	
Daily Precipitation Intensity:		4%	7 out of 8	4%	
Consecutive Dry Days:	13 day(s)	3 day(s)	4 out of 8	3 day(s)	
Frost Days:		-34 day(s)	8 out of 8	-35 day(s)	
Heatwave Duration Index:		28 day(s)	8 out of 8	26 day(s)	
Wildfire Frequency:	NA				
Biome Change:	NA				

- No significant change in mean annual rainfall (-15 to +15%) is projected for your site.
- No significant change (-10 to + 10) in consecutive dry days is projected for your site
- A moderate increase in temperature (1 2.5° C) is projected for your site.
- A moderate decrease in runoff (>35%) is estimated for your site. These areas are quite prone to desertification, so strict water management and sustainable land uses are important issues to be considered.
- No significant change (  $\pm$  25 mm) in the maximum 5-day precipitation (rainfall extreme events) is projected for your site.



Natural Disaster - Relative Risk						
	Frequency	Mortality	Economic Loss	Economic Loss/GDP		
Flood:	8	9	6	8		
Drought:	0	0	8	9		
Landslide:	6	7-	6	7		
Cyclone:	0	0	0	0		

The number refers to the decile of the global distribution for each variable. The higher the value, the higher the relative risk. The value is for this particular location, not the country as a whole.

#### Source

Dilley, M., R.S. Chen, U. Deichmann, A.L. Lerner-Lam, M. Arnold, J. Agwe, P. Buys, O. Kjekstad, B. Lyon, and G. Yetman. 2005. Natural Disaster Hotspots: A Global Risk Analysis. Disaster Risk Management Series, Issue No. 5. The World Bank, Washington, D.C.

# 4. Climate Survey for the Turkmenistan

By mid-century, the coarser-resolution global climate models project that this site will become warmer, with more frequent heatwaves and fewer frost days. They project that this site will become drier. Runoff (precipitation minus evapotranspiration), a measure of water availability, is projected to decrease. The maximum amount of rain that falls in any 5-day period (a surrogate for an extreme storm event) is expected to decrease.

The maximum amount of rain that falls in any 5-day period (a surrogate for an extreme storm event) is projected to decrease. The maximum period between rainy days is expected to increase. Sometimes this higher-resolution model can be in conflict with the ensemble of coarser-resolution models, underscoring the need to consider many different climate models.

	Japanese High Resolution GCM (20 km.)	IPCC	Country Average	
	Change (2091 - 2100 vs. 1981- 1990)	Change (2030 - 2049 vs. 1980-1999)	# Models Projecting Same Change	Values
Mean Annual Precipitation:	0%	-11%	17 out of 20	-3%
DJF Precipitation:		-18%	18 out of 20	-4%
MAM Precipitation:		-16%	15 out of 20	-11%
JJA Precipitation:		8%	11 out of 20	4
SON Precipitation:		-2%	10 out of 20	1%
Runoff:		-18%	3 out of 12	-16%
Mean Annual Temperature:	3 (°C)	2 (°C)		2 (°C)
DJF Temperature:		1 (°C)		1 (°C)
JJA Temperature:		3 (°C)		2 (°C)
Sea Surface Temperature:				
Maximum 5-day Precipitation Total:	3%	-9%	6 out of 8	0%
Daily Precipitation Intensity:		4%	5 out of 8	4%
Consecutive Dry Days:	10 day(s)	1 day(s)	5 out of 8	1 day(s)
Frost Days:		-23 day(s)	8 out of 8	-16 day(s)
Heatwave Duration Index:		20 day(s)	8 out of 8	19 day(s)
Wildfire Frequency:	NA			
Biome Change:	NA			

- No significant change in mean annual rainfall (-15 to +15%) is projected for your site.
- No significant change (-10 to + 10) in consecutive dry days is projected for your site
- A moderate increase in temperature (1 2.5° C) is projected for your site.
- A moderate decrease in runoff (>35%) is estimated for your site. These areas are quite prone to desertification, so strict water management and sustainable land uses are important issues to be considered.
- No significant change (  $\pm$  25 mm) in the maximum 5-day precipitation (rainfall extreme events) is projected for your site.



limate lata	Adaptation Screening Tool	Historical Data	Natural Disaster Data	Socioeconomic Indicators	Agricultural Data	Download Data & Resources for selected country
Natural [	Disaster - Relative F	Risk				
	Frequen	y Morta	ality Economic	Loss Eco	nomic Loss/ G	DP
Flood:	4	4	7		10	
Drought:	0	0	0		0	
Landslid	e: 0	0	0		0	
Cyclone:	0	0	0		0	



Climate	Adaptation	Historical	Natural Disaster	Socioeconomic	Agricultural	Download Data & Resources
Data	Screening Tool	Data	Data	Indicators	Data	for selected country
			I COSCREGE		CHARLES .	

	Frequency	Mortality	Economic Loss	Economic Loss/ GDF
Flood:	0	0	0	0
Drought:	0	0	6	7
Landslide:	0	0	0	0
Cyclone:	0	0	0	0

The number refers to the decile of the global distribution for each variable. The higher the value, the higher the relative risk. The value is for this particular location, not the country as a whole.

B. Lyon, and G. Yetman. 2005. Natural Disaster Hotspots: A Global Risk Analysis. Disaster

Risk Management Series, Issue No. 5. The World Bank, Washington, D.C.

#### Source

Dilley, M., R.S. Chen, U. Deichmann, A.L. Lerner-Lam, M. Arnold, J. Agwe, P. Buys, O. Kjekstad, B. Lyon, and G. Yetman. 2005. Natural Disaster Hotspots: A Global Risk Analysis. Disaster Risk Management Series, Issue No. 5. The World Bank, Washington, D.C.

# 5. Climate Survey for Uzbekistan

By mid-century, the coarser-resolution global climate models project that this site will become warmer, with more frequent heatwaves and fewer frost days. They disagree on whether this site will become wetter or drier. Rainfall intensity is expected to increase. Runoff (precipitation minus evapotranspiration), a measure of water availability, is projected to decrease.

One particular higher-resolution (finer spatial scale) climate model projects that this site will become wetter by the end of the century. The maximum amount of rain that falls in any 5-day period (a surrogate for an extreme storm event) is projected to increase. The maximum period between rainy days is expected to increase. Sometimes this higher-resolution model can be in conflict with the ensemble of coarser-resolution models, underscoring the need to consider many different climate models.

	Japanese High Resolution GCM (20 km.)	IPCC	Country Average	
	Change (2091 - 2100 vs. 1981- 1990)	Change (2030 - 2049 vs. 1980-1999)	# Models Projecting Same Change	Values
Mean Annual Precipitation:	20%	-2%	12 out of 20	-1%
DJF Precipitation:		-3%	14 out of 20	-1%
MAM Precipitation:		-12%	14 out of 20	-5%
JJA Precipitation:		4%	10 out of 20	1
SON Precipitation:		1%	10 out of 20	5%
Runoff:		-17%	3 out of 12	-14%
Mean Annual Temperature:	3 (°C)	2 (°C)		2 (°C)
DJF Temperature:		1 (°C)		2 (°C)
JJA Temperature:		3 (°C)		2 (°C)
Sea Surface Temperature:				
Maximum 5-day Precipitation Total:	8%	-3%	4 out of 8	3%
Daily Precipitation Intensity:		4%	6 out of 8	4%
Consecutive Dry Days:	-5 day(s)	2 day(s)	5 out of 8	1 day(s)
Frost Days:		-16 day(s)	8 out of 8	-19 day(s)
Heatwave Duration Index:		20 day(s)	8 out of 8	22 day(s)
Wildfire Frequency:	NA			
Biome Change:	NA			

- No significant change in mean annual rainfall (-15 to +15%) is projected for your site.
- No significant change (-10 to + 10) in consecutive dry days is projected for your site
- A moderate increase in temperature (1 2.5° C) is projected for your site.
- A moderate decrease in runoff (>35%) is estimated for your site. These areas are quite prone to desertification, so strict water management and sustainable land uses are important issues to be considered.
- No significant change (  $\pm$  25 mm) in the maximum 5-day precipitation (rainfall extreme events) is projected for your site.



Socioeconomic Indicators Agricultural Data Download Data & Resources for selected country

Natural Disast	ter - Relative Risk			
	Frequency	Mortality	Economic Loss	Economic Loss/GDP
Flood:	7	9	7	8
Drought:	0	0	10	9
Landslide:	0	0	0	0
Cyclone:	0	0	Ö	0

Natural Disaster Data

The number refers to the decile of the global distribution for each variable. The higher the value, the higher the relative risk. The value is for this particular location, not the country as a whole.

#### Source:

Climate Data Adaptation Screening Tool

Historical Data

Dilley, M., R.S. Chen, U. Deichmann, A.L. Lerner-Lam, M. Arnold, J. Agwe, P. Buys, O. Kjekstad, B. Lyon, and G. Yetman. 2005. Natural Disaster Hotspots: A Global Risk Analysis. Disaster Risk Management Series, Issue No. 5. The World Bank, Washington, D.C.