CLIMATE VULNERABILITY MONITOR







COUNTRY PROFILE









THE MONITOR ASSESSMENT

The Climate Vulnerability Monitor provides a comprehensive national-level assessment of vulnerabilities and impact specifically related to contemporary climate change and carbon intensiveness. This 2012 Monitor assessment was commissioned by the Climate Vulnerable Forum and has been independently developed by DARA. It is grounded in leading and up-to-date scientific studies, research and data assimilated on the basis of an externally reviewed methodology. The assessment spans 34 indicators of impact/vulnerability: 22 for climate change ("Climate") and 12 for carbon intensiveness ("Carbon"). Estimates in human, economic and environmental terms are for 2010 and 2030. Vulnerability at country-level and by indicator is comparative to the 184 countries included in the assessment.

→ For the full report, data & additional info: www.daraint.org/cvm2 - cvm@daraint.org - +34 915310372



ECONOMIC NATIONAL LOSS TOTALS: KYRGYZSTAN

ADDITIONAL ECONOMIC COSTS (NEGATIVE NUMBERS SHOW POSITIVE EFFECTS) - YEARLY AVERAGE



LOSSES PER YEAR

2010 **4.2%**_{GDP}

2030 **6.0%**_{GDP}



LOSSES PER YEAR

2010 **0.7%**_{GDP} 2030 **0.3%**_{GDP}



HUMAN NATIONAL LOSS TOTALS: KYRGYZSTAN

ADDITIONAL HUMAN IMPACTS (NEGATIVE NUMBERS SHOW POSITIVE EFFECTS) - YEARLY AVERAGE

ΔΠΠΙΤΙΠΝΔΙ

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON COMBINED

2010 **4,000**

2030 4,500

CLIMATE

ΔΠΠΙΤΙΠΝΔΙ

2010 150,000

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 **500,000**

2030 **950,000**

2030 150,000

FULL COUNTRY ASSESSMENT: KYRGYZSTAN

FLOODS AND LANDSLIDES 5 35 1 9 15			VULNERABILITY LEVEL	ECONON	TIONAL AIC COSTS I USD PPP)	ADDIT MORT	ADDITIONAL MORTALITY		ADDITIONAL AFFECTED POPULATION (1000s)		OTHER VALUE 1*		HER JE 2*	_			
DROUGHT A. CLIBAR			2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030		T		
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Severe Month Maritar Chance Severe Month Maritar Chance Severe Month Maritar Chance Severe Month Maritar Chance Severe Month Mon			- +	5	35	1	1	9	15					- Acute-	- High-		
WILD-INES														Severe+	Mode	rate	
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BIODIVERSITY 1				5	35	1	1	9	15					Severe	LOW		
DESERTIFICATION HARTING AND COOLING				00	000					4.050	0.500	00	450				
## LEATING AND COOLING First			+ +	90	600					-1,250	-2,500	60	150				
LABOUR PRODUCTIVITY 5				-10	-75					-250	-400	-20	-40	- = Lower tier of vulnerability level			
PERMARROST												-20	-40				
SEA_LEVEL RISE VAUTER			+ +					450	850					Environmental disasters			
WATER					.,									Habitat change			
TOTAL			- +	40	300					1	1						
HEAT AND COLD ILLNESSES	빎	TOTAL		525	2,600			450	850								
HEAT AND COLD ILLNESSES	CLIM	HEALTH IMPACT												ndustry stress			
HUNGER MALARIA AND VECTOR-BORNE MALARIA AND VECTOR-BORNE MENINGITIS 2		DIARRHEAL INFECTIONS						0						_			
MALARIA AND VECTOR-BORNE MENINGITIS TOTAL NOUSTRY STRESS AGRICULTURE 1 15 100 FISHERIES FORESTRY FORESTRY FORESTRY FORESTRY TOTAL CLIMATE TOTAL CLIMATE TOTAL ENVIRONMENTAL DISASTERS OIL SANDS OIL						60	75										
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TOTAL 95 110 0 0 0														CARBON =	mpact/Vulne	ability	
NOUSTRY STRESS AGRICULTURE														, •	o Carbon Inte	nsiveness	
AGRICULTURE FISHERIES FORESTRY FORESTRY HYDRO ENERGY TOURISM TRANSPORT TOTAL 25 -145 COLIMATE TOTAL 506 2,490 96 111 459 865 ENVIRONMENTAL DISASTERS OIL SANDS OIL SA						95	110	0	0								
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TOTAL 2-5 1-145		TRANSPORT												DESERTI-	Additional land		
ENVIRONMENTAL DISASTERS		TOTAL		-25	-145									FICATION			
ENVIRONMENTAL DISASTERS		CLIMATE TOTAL		506	2,490	96	111	459	865					LIEATING 0			
OIL SANDS OIL SPILLS TOTAL HABITAT CHANGE BIODIVERSITY CORROSION WATER TOTAL HEALTH IMPACT AIR POLLUTION INDOOR SMOKE OCCUPATIONAL HAZARDS SIN CANCER TOTAL 10 0 0 11 5 50 15 50 SEA-LEVEL RISE Cumulative WATER WATER OIL SANDS OIL	1	ENVIDONMENTAL DISASTERS														·99	
FRODUCTIVITY Particularly PRODUCTIVITY Particularly Part	CARBON														Share of		
TOTAL		OIL SPILLS													workforce		
HABITAT CHANGE				0	0									PRODUCTIVITY			
BIODIVERSITY		HABITAT CHANGE												Niekless of			
CORROSION WATER Confidence Confidence WATER Confidence		BIODIVERSITY		25	150					15	50						
TOTAL 25 150 WATER CLINIFORM (mm)? AIR POLLUTION														RISE	(cumulative)		
HEALTH IMPACT														WATER	Loss in water		
INDOOR SMOKE				25	150									WATER			
INDOOR SMOKE																	
INDUCK SMORE			+ -											OIL SANDS	waste (1000s)		
SKIN CANCER - 5 15 0 0 OIL SPILLS Spill (1000s) TOTAL 3940 4750 157 161																	
TOTAL 3940 4750 157 161 — Spirit (1000s)			+ -											OIL SPILLS			
			-												spill (1000s)		
		INDUSTRY STRESS				3340	4730	157	101					DIODII IEDOITII	Decline in		
- ACDICILITUDE 5 250		A O DICUIL TUDE		-5	-250									BIUDIVERSITY	biological richr	ess	
SISHERIES Volume of		FISHERIES													Valume of		
FORESTRY WATER water to tree														WATER	water to treat		
TOTAL -5 -250 (millions m ²				-5	-250										(millions m³)		
CARBON TOTAL 20 -100 3,940 4,750 157 161		CARBON TOTAL		20	-100	3,940	4,750	157	161								