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: GHANA

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



2010 **4.4%**_{GDP} 2030 **8.9%**cm

CARBON INTENSIVENESS

2010 **1.7%**_{GDP} 2030 **1.6%**cpp



HUMAN NATIONAL LOSS TOTALS: GHANA

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

ΔΠΠΙΤΙΠΝΔΙ

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON

2010 **15,000**

2030 15,000

🕼 CLIMATE

CARBON

ADDITIONAL

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 1,500,000 2030 1,950,000

2010 **500,000**

2030 450,000

FULL COUNTRY ASSESSMENT: GHANA

			VULNERABILITY ECONOMIC COSTS LEVEL (MILLION USD PPP)		ADDITIONAL MORTALITY		AFFECTED POPULATION (1000s)		OTHER VALUE 1*		OTHER VALUE 2*							
			2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030	_				
		ENVIRONMENTAL DISASTERS												VULNERABIL				
	(4)	DROUGHT	+ +	5	15									+ Acute+	+ High+			
		FLOODS AND LANDSLIDES		1	5	1	1	6	9					- Acute-	- High-			
		STORMS												+ Severe+	Mode	ate		
		WILDFIRES												_		dic		
		TOTAL		6	20	1	1	6	9					- Severe-	Low			
		HABITAT CHANGE																
		BIODIVERSITY	-	55	350					-3,000	-6,000	150	500	+ = Upper tier	of vulnerabilitų	j level		
CLIMATE		DESERTIFICATION	- +	10	65			75	200	750	1,500			- = Lower tier	of vulnerabilitų	j level		
	•	HEATING AND COOLING	+	30	250					350	900	60	150					
		LABOUR PRODUCTIVITY	- +	2,000	15,000					55	45			A Environme	ental disasters			
		PERMAFROST												_				
		SEA-LEVEL RISE		200	850					15	35			• Habitat ch	-			
		WATER		10	55			75	000	0	0			, Pealth imp	oact			
		TOTAL		2,305	16,570			75	200					(V) Industru st	rocc			
		HEALTH IMPACT				900	1,250	1										
		DIARRHEAL INFECTIONS				200	250	ı						•				
		HEAT AND COLD ILLNESSES HUNGER	+ +			900	950	0	0					CLIMATE =	mpact/Vulner o Climate Char	ability		
		MALARIA AND VECTOR-BORNE	- +			100	65	30	20					_				
		MENINGITIS				95	150	0	0					CARBON =				
	>	TOTAL				2.195	2.665	31	20						o Carbon Inten	siveness		
		INDUSTRY STRESS				2,190	2,000	31	20									
		AGRICULTURE	- +	200	1.500										OTHER	OTHER		
		FISHERIES	+ +	200	2,250										VALUE 1	VALUE 2		
		FORESTRY		15	150										Contraction of biological	Decline in		
		HYDRO ENERGY		-5	-35									BIODIVERSITY	zones (km²)	biological		
		TOURISM			00										(cumulative)	richness		
		TRANSPORT												DESERTI-	Additional land			
		TOTAL		410	3,865									FICATION	degraded (km²) (cumulative)			
		CLIMATE TOTAL		2,720	20,455	2,195	2,666	113	230									
CARBON		ENVIRONMENTAL DISASTERS												HEATING & Change in energy COOLING load (GWh)		19		
		OIL SANDS													Share of			
		OIL SPILLS												LABOUR	workforce			
		TOTAL		0	0									PRODUCTIVITY particularly affected (%)				
		HABITAT CHANGE																
		BIODIVERSITY	- +	600	4,000					2,000	5,000			SEA-LEVEL	Net loss of land (km²)			
		CORROSION												RISE	(cumulative)			
		WATER		1	5					250	350				Loss in water			
		TOTAL		601	4005									WATER	runoff 2030 (km³)			
	•	HEALTH IMPACT																
		AIR POLLUTION	+ +			2,250	3,500	40	100					OIL SANDS	Tonnes toxic waste (1000s)			
		INDOOR SMOKE	+ -			10,000	8,250	450	350						waste (1000s)			
		OCCUPATIONAL HAZARDS	-			30	50	6	10						Gallons oil			
		SKIN CANCER				25	60	0	0					OIL SPILLS	spill (1000s)			
		TOTAL				12305	11860	496	460									
	%	INDUSTRY STRESS												BIODIVERSITY	Decline in biological richne	155		
		AGRICULTURE		-65	-1,750											:33		
		FISHERIES			11									Volume of WATER water to treat (millions m³)				
		FORESTRY		1	15													
		TOTAL		-64	-1734	40.005	44.000	400	400									
		CARBON TOTAL		537	2,271	12,305	11,860	496	460									