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: ZAMBIA

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



2010 **3.1%**_{GDP} 2030 **7.1%**_{GDP}

CARBON INTENSIVENESS

2010 **5.2%**_{GDP} 2030 **7.1%**_{GDB}



HUMAN NATIONAL LOSS TOTALS: ZAMBIA

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 1,050,000 2030 1,700,000

2010 600,000

2030 650,000

FULL COUNTRY ASSESSMENT: ZAMBIA

			VULNERABILITY ECONOMIC COSTS ADDITION LEVEL (MILLION USD PPP) MORTALI		IONAL ALITY	AFFE	CTED ON (1000s)	OTHER VALUE 1*		OTHER VALUE 2*		_				
			2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030			
CLIMATE		ENVIRONMENTAL DISASTERS												VULNERABIL	.ITY LEVELS:	
	(4)	DROUGHT		1	1									+ Acute+	+ High+	
		FLOODS AND LANDSLIDES			1	1	1	10	20					- Acute-	- High-	
		STORMS												+ Severe+	Mode	rato
		WILDFIRES												_		ate
		TOTAL		1	2	1	1	10	20					Severe-	Low	
		HABITAT CHANGE														
		BIODIVERSITY	- +	65	400					-85,000	-150,000	70	200	+ = Upper tier	of vulnerability	ı level
		DESERTIFICATION		-1	-15									- = Lower tier	of vulnerability	j level
		HEATING AND COOLING		-1	-5					-55	-45					
		LABOUR PRODUCTIVITY	+ +	200	1,500					54	43			Environme	antal disastors	
		PERMAFROST												=		
		SEA-LEVEL RISE												🕟 Habitat ch	ange	
		WATER		-1	-5									Health imp	pact	
		TOTAL		262	1,875			0	0					(V) Industry st		
		HEALTH IMPACT												(Industry st	ress	
		DIARRHEAL INFECTIONS	+ -			400	750	0								
		HEAT AND COLD ILLNESSES	+ +			250	400							CLIMATE =	mpact/Vulner	ability
		HUNGER				600	900	0	0						o Climate Chai	nge
		MALARIA AND VECTOR-BORNE				600	600	150	150					CARBON =		
		MENINGITIS	- +			250	400	0	0					, "	o Carbon Inten	siveness
		TOTAL				2,100	3,050	151	151							
		INDUSTRY STRESS		05	000										OTHER	OTHER
		AGRICULTURE	- +	85 35	600 500										VALUE 1	VALUE 2
		FISHERIES FORESTRY	+ +	150	1,500										Contraction	Decline in
		HYDRO ENERGY	+ +	-5	-25									BIODIVERSITY	of biological zones (km²)	biological
		TOURISM		-5	-25										(cumulative)	richness
		TRANSPORT												DESERTI-	Additional land	
		TOTAL		265	2,575									FICATION	degraded (km²)	
		CLIMATE TOTAL		527	4.452	2.101	3,051	161	171						(cumulative)	
		SEIMATE TOTAL		V	.,	_,	0,00.							HEATING &	Change in energ	9 y
CARBON	_	ENVIRONMENTAL DISASTERS												COOLING	load (GWh)	
		OIL SANDS													Share of	
		OIL SPILLS												LABOUR PRODUCTIVITY	workforce particularly	
		TOTAL		0	0									affected (%)		
	(HABITAT CHANGE												SEA-LEVEL	Net loss of	
		BIODIVERSITY	- +	600	3,750					600	1,750			RISE	land (km²)	
		CORROSION													(cumulative)	
		WATER								20	30			WATER	Loss in water runoff 2030	
	;	TOTAL		600	3750									***************************************	(km³)	
	•	HEALTH IMPACT				0.000	0.750	40	450						Tonnes toxic	
		AIR POLLUTION	- +			2,000	3,750	40	150					OIL SANDS	waste (1000s)	
		INDOOR SMOKE OCCUPATIONAL HAZARDS	+ +			10,000	9,000 50	550 10	500 15							
		SKIN CANCER				35	55	0	0					OIL SPILLS	Gallons oil	
		TOTAL	-			20 12055	12855	600	665						spill (1000s)	
	Ιi	INDUSTRY STRESS				12000	12000	600	665						Decline in	
		AGRICULTURE		-5	-200									BIODIVERSITY	biological richne	ess
	>	FISHERIES		-0	-200											
		FORESTRY	+ +	50	250									Volume of WATER water to treat (millions m³)		
		TOTAL		45	50											
		CARBON TOTAL		645	3,800	12,055	12,855	600	665							
		OARBON TOTAL		0.70	5,500	12,000	12,000		- 000					I		