# **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: LESOTHO**

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



2010 **0.9%**<sub>GDP</sub> 2030 **1.9%**<sub>GDP</sub>

CARBON INTENSIVENESS LOSSES PER YEAR

2010 **0.4%**<sub>GDP</sub> 2030 **0.4%**<sub>GDB</sub>

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE



### **HUMAN NATIONAL LOSS TOTALS: LESOTHO**

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

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON

2010 550 2030 500

CLIMATE

🔊 CARBON

ADDITIONAL

2010 **65,000** 

2030 **85,000** 

2010 20,000 2030 30,000

## **FULL COUNTRY ASSESSMENT: LESOTHO**

			VULNERABILITY ECONOMIC COSTS ADDITIONA LEVEL (MILLION USD PPP) MORTALIT		IONAL ALITY	AFFE POPULATI	CTED ON (1000s)	OTHER VALUE 1*		OTHER VALUE 2*		_					
			2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030				
		ENVIRONMENTAL DISASTERS												VULNERABILITY LEVELS:			
	<b>(4)</b>	DROUGHT	- +		1									+ Acute+	+ High-		
		FLOODS AND LANDSLIDES						3	3					- Acute-	- High-		
		STORMS												_			
		WILDFIRES												+ Severe+	Mode	rate	
		TOTAL		0	1	0	0	3	3					- Severe-	Low		
	•	HABITAT CHANGE															
		BIODIVERSITY		5	40					-25	-50	100	350	+ = Upper tier of vulnerability level			
		DESERTIFICATION			-1			-1	-2	-15	-30				of vulnerabilit		
CLIMATE		HEATING AND COOLING		-1	-10					-20	-35					g	
		LABOUR PRODUCTIVITY		5	50					39	32			<b>A</b> -			
		PERMAFROST												Environmental disasters			
		SEA-LEVEL RISE												Habitat change			
		WATER	- +	10	65					1	1			Health im	nact		
		TOTAL		19	145			-1	-2					~			
		HEALTH IMPACT												🐪 🕽 Industry s	tress		
		DIARRHEAL INFECTIONS				25	45	0									
		HEAT AND COLD ILLNESSES	+ +			40	35							CLIMATE =	Impact/Vulner	abilitu	
		HUNGER				30	50	0	0						to Climate Cha		
		MALARIA AND VECTOR-BORNE						0	0					CAPBON -	Impact/Vulner	ahilihu	
		MENINGITIS	+ +			15	20	0	0						to Carbon Inter		
	<b>%</b>	TOTAL				110	150	0	0							1011011000	
		INDUSTRY STRESS													OTHER	OTHER	
		AGRICULTURE	+ +	10	55										VALUE 1	VALUE 2	
		FISHERIES													Contraction		
		FORESTRY												BIODIVERSITY	of biological	Decline in biological	
		HYDRO ENERGY												BIUDIVERSITY	zones (km²)	richness	
		TOURISM													(cumulative)		
		TRANSPORT												DESERTI-	Additional land degraded (km²)		
		TOTAL		10	55									FICATION	(cumulative)		
	I	CLIMATE TOTAL		29	199	110	150	2	1					HEATING &	Change in ener	011	
CARBON		ENVIRONMENTAL DISASTERS												COOLING	load (GWh)	99	
		OIL SANDS													Charact		
		OIL SANDS												LABOUR	Share of workforce		
		TOTAL		0	0									PRODUCTIVITY	particularly		
		HABITAT CHANGE		U	U									affected (%)			
		BIODIVERSITY		5	25					70	200			SEA-LEVEL	Net loss of land (km²)		
		CORROSION		3	25					70	200			RISE	(cumulative)		
		WATER													Loss in water		
		TOTAL		5	25									WATER	runoff 2030		
	l i	HEALTH IMPACT		Ü	20										(km³)		
	•	AIR POLLUTION				150	200	5	20					OIL SANDS	Tonnes toxic		
		INDOOR SMOKE				300	150	15	7					UIL SANDS	waste (1000s)		
		OCCUPATIONAL HAZARDS				5	5	1	1								
		SKIN CANCER				1	1	0	0					OIL SPILLS	Gallons oil spill (1000s)		
		TOTAL				456	356	21	28						эрік (1000э)		
		INDUSTRY STRESS												BIODIVERSITY	Decline in		
		AGRICULTURE			-15									BIUDIVERSITY biological richness			
		FISHERIES												Valume of			
		FORESTRY	+ +	5	20									WATER water to treat			
		TOTAL		5	5										(millions m³)		
		CARBON TOTAL		10	30	456	356	21	28								
														-			