# **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: LIBYA**

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



2010 **0.5%**<sub>GDP</sub> 2030 **1.0%**<sub>GDP</sub>



LOSSES PER YEAR

2010 **0.2%**<sub>GDP</sub> 2030 NIL

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE



### **HUMAN NATIONAL LOSS TOTALS: LIBYA**

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

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON

2010 3,000 2030 4,000 👀 CLIMATE

🔊 CARBON

ΔΠΠΙΤΙΠΝΔΙ

2010 150,000

2010 35,000

2030 150,000

2030 60,000

## **FULL COUNTRY ASSESSMENT: LIBYA**

			VULNERABILITY LEVEL	ADDITIONAL ECONOMIC COSTS (MILLION USD PPP)		ADDITIONAL MORTALITY		ADDITIONAL AFFECTED POPULATION (1000s)		OTHER VALUE 1*		OTHER VALUE 2*		_					
			2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030	VIII NEDADI	ITVI EVELO				
		<b>ENVIRONMENTAL DISASTERS</b>												VULNERABIL					
		DROUGHT	-	1	10									+ Acute+	+ High+				
4		FLOODS AND LANDSLIDES		1	5			0	0					- Acute-	- High-				
	•	STORMS												Severe+	Mode	rate			
		WILDFIRES							_					- Severe-	Low				
		TOTAL		2	15	0	0	0	0					Severe	LOW				
		HABITAT CHANGE		400	750					40.000	05.000	40	40		. Hannakina of a administration of				
		BIODIVERSITY DESERTIFICATION		100 15	750 100					-40,000	-85,000	10	40	Upper tier of vulnerability level Lower tier of vulnerability level					
		HEATING AND COOLING	- +	-55	-200					-500	-450	-500	-450	- = Lowertier	or vulnerability	y level			
(	<b>(4</b>	LABOUR PRODUCTIVITY		40	250					23	16	-300	-430						
`	${}^{\circ}$	PERMAFROST		40	230					20	10			🕒 🖨 Environme	ental disasters				
		SEA-LEVEL RISE		200	1,000			0	0	90	250			♠ Habitat ch	anne				
		WATER		1	5			-							-				
쁘		TOTAL		301	1,905			0	0					Health imp					
CLIMATE		HEALTH IMPACT												ndustry stress					
ᆲ		DIARRHEAL INFECTIONS				5	0	0											
	$\Rightarrow$	HEAT AND COLD ILLNESSES				20	30							CLIMATE =	mpact/Vulner	abilitu			
(	$\bigcirc$	HUNGER				15	20	0	0						o Climate Cha				
		MALARIA AND VECTOR-BORNE												CARBON =	mnact/\/ulner	ahilihu			
		MENINGITIS				5	10	0	0						o Carbon Inter				
	- 1	TOTAL				45	60	0	0										
		INDUSTRY STRESS													OTHER	OTHER			
		AGRICULTURE	- +	150	1,000										VALUE 1	VALUE 2			
		FISHERIES		25	300										Contraction	Deeline in			
(	<b>X</b>	FORESTRY												BIODIVERSITY	of biological	Decline in biological			
	_	HYDRO ENERGY													zones (km²) (cumulative)	richness			
		TOURISM TRANSPORT													Additional land				
		TOTAL		175	1,300									DESERTI- FICATION	degraded (km²)				
		CLIMATE TOTAL		477	3,220	45	60	0	1					1	(cumulative)				
				411	0,220	70	00		•					HEATING & COOLING	Change in ener load (GWh)	gy			
		ENVIRONMENTAL DISASTERS																	
(		OIL SANDS												LABOUR	Share of workforce				
		OIL SPILLS TOTAL		0	0									PRODUCTIVITY	particularly				
	i	HABITAT CHANGE		U	U										affected (%)				
CARBON		BIODIVERSITY		15	150					1	5			SEA-LEVEL	Net loss of				
		CORROSION		10	1					'	- 3			RISE	land (km²) (cumulative)				
		WATER													Loss in water				
		TOTAL		15	150.5									WATER	runoff 2030				
	- 1	HEALTH IMPACT													(km³)				
		AIR POLLUTION	+ +			2,500	3,500	25	45					OIL SANDS	Tonnes toxic				
		INDOOR SMOKE				450	500	8	9					OIL SANDS	waste (1000s)				
		OCCUPATIONAL HAZARDS				10	15	2	3						Gallons oil				
		SKIN CANCER				1	10	0	0					OIL SPILLS	spill (1000s)				
		TOTAL				2961	4025	35	57										
		INDUSTRY STRESS												BIODIVERSITY	Decline in				
	(a)	AGRICULTURE		-5	-500										biological richn	ess			
1	<b>X</b>	FISHERIES													Valume of				
		FORESTRY												WATER	water to treat (millions m³)				
- 1	1	TOTAL		-5	-500										(ITIMOTISTITE)				
		CARBON TOTAL		10	-350	2,961	4,025	35	57										