# **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: GUATEMALA**

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

CLIMATE CHANGE

IMATE 20

2010 **2.9%**<sub>GDP</sub>

2030 **5.8%**<sub>GDP</sub>

CARBON INTENSIVENESS IMPACT LOSSES PER YEAR

2010 **0.8%**<sub>GDP</sub> 2030 **1.2%**<sub>GDP</sub>



## **HUMAN NATIONAL LOSS TOTALS: GUATEMALA**

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

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON COMBINED

2010 3,500

2030 5,000

CLIMATE

**CARBON** 

ΔΠΠΙΤΙΠΝΙΔΙ

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 **1,100,000** 

2030 **1,200,000** 

2010 150,000 2030 250,000

### **FULL COUNTRY ASSESSMENT: GUATEMALA**

HEATING AND COOLING				VULNERABILITY LEVEL	ECONOM	TIONAL IIC COSTS USD PPP)	ADDIT MORT	IONAL ALITY	ADDITIONAL AFFECTED POPULATION (1000s)		OTHER VALUE 1*		OTHER VALUE 2*		_					
DROUGHT   SACURE   1				2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030	- VIII NEDADII	ITVI EVELO				
FLOODS AND LANDSLIDES																				
MULGIFIERS   1   1   1   1   1   1   1   1   1	١.			+ -											+ Acute+	+ High	+			
MILDERS	10						5								_ Acute-	- High-				
WILLIFIER   9 70 6 11 45 90	"				-1	-10		1	0	0					- Severe+	Mode	rate			
### HABITAT CHANGE BHODIVERSITY DESERTIFICATION															_	_	,,,,,,			
BIODIVERSITY					9	70	5	11	45	90					- Severe-	LUW				
□ DESERTIFICATION																				
## AFTING AND COOLING					30	250					-1,250	-2,750	150	500		<ul><li>+ = Upper tier of vulnerability level</li><li>- = Lower tier of vulnerability level</li></ul>				
LABOUR PRODUCTIVITY   1   1,500   10,000   44   34		_			_	4=0								400	- = Lower tier					
PERMAFROST	16			-									10	100						
SEALEVEL RISE				+ +	1,500	10,000					44	34			Environme	ental disasters				
WATER   150   1,250   0   0					60	400			0	0	10	20			- 👸 Habitat ab	Mahitat chango				
TOTAL 1,745 12,050 0 0									U	U										
HEAT AND COLD ILLNESSES   12   90   100									0	0	- '	'			Health imp	oact				
HEAT AND COLD ILLNESSES   12   90   100		i			1,740	12,000			0	0					(V) Industru stress					
HEAT AND COLD ILLNESSES   12   90   100							150	150	0											
HUNGER   1   5   0   1   1   1   1   1   1   1   1   1				+ +											CLIMATE -	maact // /ulao	rabilitu			
MALARIA AND VECTOR-BORNE   MALARIA AND VECTOR-BORNE									0	1										
MENINGITIS TOTAL  NDUSTRY STRESS ARICULTURE FISHERIES FORESTRY FOR										1					_					
TOTAL										0										
NOUSTRY STRESS   AGRICULTURE   1 100   850															· '	.u Carburrinte	isiveriess			
AGRICULTURE   5 85     5 85     FORESTRY   10 150     FORESTRY   10 10 10 25     FORESTRY   10 10 10 2 2 2     FORESTRY   10 10 2 2 2     FORESTRY   10 10 2 2								,								OTHER	OTUED			
FISHERIES 5 85 PORESTRY 1 10 150 HYDROE ENERGY 1 10 55 TOURISM TRANSPORT TOTAL 125 1,140 CLIMATE TOTAL 1,879 13,260 796 1,355 47 93  ENVIRONMENTAL DISASTERS OIL SANDS OIL SANDS OIL SPILLS TOTAL 0 0 0 LABOUR FORDUTIVITY CORROSION WATER TOTAL 350 2,750 1,750 5,000 ESA-LEVEL RISE OCCUPATIONAL 1,879 1,750 5,000  SEA-LEVEL RISE TOTAL 350 2,750 1,750 5,000  SEA-LEVEL RISE TOTAL 1,879 1,750 5,000  SEA-LEVEL RISE OCCUPATIONAL HAZARDS SKIN CANCER 1 0 0 0 2 2 2 SKIN CANCER 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(3)	<b>A</b>		- +	100	850											OTHER VALUE 2			
FORESTRY			FISHERIES		5	85														
FYDRO ENERGY			FORESTRY	+	10										DIODIVEDCITY		Decline in			
TOURISM TRANSPORT TOTAL QLIMATE TOTAL QLIMAT		$\boldsymbol{z}$		- +	10	55									BIUDIVERSITY	zones (km²)	biological richness			
TOTAL   125																				
Collaboration   1,879   1,3260   796   1,355   47   93																				
ENVIRONMENTAL DISASTERS   Class   Cl															FICATION		,			
ENVIRONMENTAL DISASTERS	ı		CLIMATE TOTAL		1,879	13,260	796	1,355	47	93							rgy			
PRODUCTIVITY   Settluding   PRODUCTIVITY   Settluding   SEA-LEVEL   Net loss of loss	CARBON		<b>ENVIRONMENTAL DISASTERS</b>												COOLING	load (GWh)				
TOTAL																				
Maintail			OIL SPILLS																	
BIODIVERSITY					0	0									PRODUCTIVITI					
CORROSION WATER TOTAL AIR POLLUTION INDOOR SMOKE OCCUPATIONAL HAZARDS SKIN CANCER TOTAL AGRICULTURE FISHERIES FORESTRY TOTAL -9 -3440  RISE (carticulative) (corr) RISE (carticulative) (corr) RISE (carticulative) (carticula															CEA LEVEL	Net loss of				
CORROSION WATER TOTAL  WATER  TOTAL  HEALTH IMPACT  AIR POLLUTION  OCCUPATIONAL HAZARDS  SKIN CANCER  TOTAL  INDUSTRY STRESS  AGRICULTURE  FISHERIES  FORESTRY  1 10  -9 -340  CIUTIONAL  10 -350  CIUTIONAL  LOBERT CORROSION  WATER  LOBERT CORROSION  LOBERT CORROSION  WATER  LOBERT CORROSION  TOTAL  TOT				-	350	2,750					1,750	5,000								
TOTAL 350 2750    HEALTH IMPACT															_					
HEALTH IMPACT					0.50										WATER					
NDOOR SMOKE					350	2750									· · · · · · · · · · · · · · · · · · ·					
NDOOR SMOKE							600	000	10	O.F.						Tonnes tovic				
OCCUPATIONAL HAZARDS SKIN CANCER 1															OIL SANDS	waste (1000s)				
SKIN CANCER  TOTAL  2650 3510 162 227  INDUSTRY STRESS  AGRICULTURE FISHERIES FORESTRY 1 1 10  -9 -340  OIL SPILLS Satisfy 1 100  0 0  0 0  0 0  0 0  0 0  0 0  0																				
TOTAL    100   162   227     100   162   227															OIL SPILLS	Gallons oil				
INDUSTRY STRESS   BIODIVERSITY   Decline in biological richness   FISHERIES   FORESTRY   1 10   10   WATER   Water to treat (millions m³)																spiii (1000s)				
AGRICULTURE -10 -350							2000	0010	102	ZEI					DIODUIEDOITI	Decline in				
FISHERIES					-10	-350									BIODIVERSITY		iess			
FORESTRY         1         10         WATER         water to treat (millions m²)           TOTAL         -9         -340         (millions m²)	(					000										Valume of				
TOTAL -9 -340 (millions m <sup>-)</sup>	1				1	10									WATER water to tr					
· <del></del>																(millions m³)				
CARBON TOTAL 341 2,410 2,650 3,510 162 227			CARBON TOTAL		341	2,410	2,650	3,510	162	227										