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: PANAMA

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



2010 **4.2%**_{GDP}

2030 **8.4%**_{GDB}

CARBON INTENSIVENESS

2010 **2.1%**_{GDP} 2030 **3.8%**_{GDD}

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE



HUMAN NATIONAL LOSS TOTALS: PANAMA

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

ADDITIONAL

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON

2010 550

2030 650

🔬 CLIMATE

🔊 CARBON

ADDITIONAL

2010 **25,000**

2010 **200,000**

2030 300,000

2030 **25,000**

FULL COUNTRY ASSESSMENT: PANAMA

DENOIGHT	- = Lower tier Environme Habitat che Health imp Industry st	+ High+ - High- Moderate Low of vulnerability level of vulnerability level ental disasters ange pact
DENOIGHT	Acute+ Acute- Severe+ Severe Upper tier - Lower tier Abitat che Habitat che Halth imp Industry st CLIMATE = I	+ High+ - High- Moderate Low of vulnerability level of vulnerability level ental disasters ange pact
FLOODS AND LANDSLIDES TOOMS TOTAL HABITAT CHANGE BIODIVERSITY DESERTIFICATION HEATING AND COOLING LABOUR PRODUCTIVITY PERMAFROST SEA-LEVEL RISE 300 2,000 1 1 1 1 2 -1,750 -3,500 150 500 -1,750 -3,500 150 500 200 75 60 250 -250	Severe+ Severe Upper tier - Lower tier - Habitat ch: Health imp Industry st	High-Moderate Low of vulnerability level of vulnerability level ental disasters ange ange acct
VILDFIRES	Severe+ Severe- - Upper tier - Lower tier Brivironme Habitat cha Health imp Industry st	Moderate Low of vulnerability level of vulnerability level antal disasters ange ange anct
VILDFIRES	Severe+ Severe- - Upper tier - Lower tier Brivironme Habitat cha Health imp Industry st	Moderate Low of vulnerability level of vulnerability level antal disasters ange ange anct
TOTAL 2 15 1 1 1 2 HABITAT CHANGE BIODIVERSITY 5 550 -1,750 -3,500 150 500 DESERTIFICATION 4 90 700 75 200 1,500 3,250 HEATING AND COOLING 3 30 500 200 750 60 250 LABOUR PRODUCTIVITY 4 1,000 7,750 41 32 PERMAFROST SEA-LEVEL RISE 300 2,000 0 0 150 400 WATER 200 1,250 1 1 1	◆ = Upper tier • = Lower tier ♠ Environme ♠ Habitat cha ♥ Health imp ♥ Industry st	Low of vulnerability level of vulnerability level ental disasters ange pact
HABITAT CHANGE	+ = Upper tier - = Lower tier Environme Habitat cha Health imp Industry st	of vulnerability level of vulnerability level ental disasters ange pact rress
BIODIVERSITY - 75 550 -1,750 -3,500 150 500 DESERTIFICATION + 90 700 75 200 1,500 3,250 HEATING AND COOLING 30 500 200 750 60 250 LABOUR PRODUCTIVITY + 1,000 7,750 41 32 PERMAFROST SEA-LEVEL RISE 300 2,000 0 0 150 400 WATER 200 1,250 1 1 1	- = Lower tier Environme Habitat che Health imp Industry st	of vulnerability level ental disasters ange pact cress
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LABOUR PRODUCTIVITY + 1,000 7,750 41 32 PERMAFROST SEA-LEVEL RISE 300 2,000 0 0 150 400 WATER 300 1,250 1 1	Habitat cha	ange pact tress
PERMAFROST SEA-LEVEL RISE 300 2,000 0 0 150 400 WATEP 200 1 250 1 1	Habitat cha	ange pact tress
SEA-LEVEL RISE	Habitat cha	ange pact tress
WATER 200 1.250 1 1	Health imp	pact
WATER + + 200 1,250 1 1 1	Industry st	tress
111 100 1	Industry st	tress
TOTAL 1,695 12,750 75 200	CLIMATE =	
E HEALTH IMPACT		
		1 6 / 1 1 991
	-	
HUNGER 20 35 0 0	,	to Climate Change
MALARIA AND VECTOR-BORNE 0 0	CARBON =	Impact/Vulnerability
MENINGITIS 5 5 0 0		to Carbon Intensiveness
TOTAL 40 60 0 0		
INDUSTRY STRESS		OTHER OTHER
AGRICULTURE 20 150		VALUE 1 VALUE 2
FISHERIES 85 1,000		Contraction Desline in
(ŷ) FORESTRY 35 400	BIODIVERSITY	of biological biological
HYDRO ENERGY 10 80	DIODIVERSITI	zones (km²) richness
TOURISM		Additional land
	DESERTI-	degraded (km²)
101/1E	FICATION	(cumulative)
CLIMATE TOTAL 1,846 14,395 40 60 76 202	HEATING &	Change in energy
ENVIRONMENTAL DISASTERS	COOLING	load (GWh)
		Share of
OII SPILLS	LABOUR	workforce
TOTAL 0 0	PRODUCTIVITY	particularly affected (%)
HABITAT CHANGE		
BIODIVERSITY 700 5.250 1.500 4.500	SEA-LEVEL	Net loss of land (km²)
CORROSION	RISE	(cumulative)
WATER		Loss in water
Z TOTAL 700 5250	WATER	runoff 2030 (km³)
TOTAL 700 5250 HEALTH IMPACT AIR POLLUTION 200 250 3 5		(KITh*)
AIR POLLUTION 200 250 3 5	OIL SANDS	Tonnes toxic
INDOOR SMOKE 350 350 20 20	OIL O/ II I DO	waste (1000s)
♥ OCCUPATIONAL HAZARDS		Gallons oil
SKIN CANCER 5 10 0 0	OIL SPILLS	spill (1000s)
TOTAL 565 620 24 26		
INDUSTRY STRESS	BIODIVERSITY	Decline in
	D.ODIVEROITI	biological richness
AGRICULTURE 10 20 FISHERIES		Valume of
FORESTRY + + 200 1,000	WATER	water to treat
TOTAL 210 1020		(millions m³)
CARBON TOTAL 910 6,270 565 620 24 26		