

COUNTRY PROFILE

ECUADOR

CLIMATE: **HIGH** CARBON: **HIGH**

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: ECUADOR

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

LOSSES PER YEAR

CLIMATE CHANGE IMPACT

2010 **0.5%GDP**
2030 **1.3%GDP**

LOSSES PER YEAR

CARBON INTENSIVENESS IMPACT

2010 **1.3%GDP**
2030 **2.2%GDP**

HUMAN NATIONAL LOSS TOTALS: ECUADOR

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

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE + CARBON COMBINED

2010 **2,000**
2030 **2,500**

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

CLIMATE

2010 **650,000** 2030 **750,000**

CARBON

2010 **25,000** 2030 **35,000**

FULL COUNTRY ASSESSMENT: ECUADOR

	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
ENVIRONMENTAL DISASTERS												
DROUGHT	+	+	5	30								
FLOODS AND LANDSLIDES	+	+	30	300	1	5	25	30				
STORMS												
WILDFIRES												
TOTAL			35	330	1	5	25	30				
HABITAT CHANGE												
BIODIVERSITY	-	+	150	1,250					-2,750	-5,250	150	500
DESERTIFICATION		+	20	150			25	60	400	850		
HEATING AND COOLING			-30	-10					-350	-20	-95	-5
LABOUR PRODUCTIVITY			500	4,000					43	33		
PERMAFROST												
SEA-LEVEL RISE			150	1,000			0	0	400	900		
WATER			-750	-5,500					-1	-5		
TOTAL			40	890			25	60				
HEALTH IMPACT												
DIARRHEAL INFECTIONS					15	15	0					
HEAT AND COLD ILLNESSES					60	70						
HUNGER					200	350	0	0				
MALARIA AND VECTOR-BORNE					10	20	5	10				
MENINGITIS					20	30	0	0				
TOTAL					305	485	5	10				
INDUSTRY STRESS												
AGRICULTURE	-	+	200	1,500								
FISHERIES		+	300	3,250								
FORESTRY			-40	-500								
HYDRO ENERGY			-5	-40								
TOURISM												
TRANSPORT												
TOTAL			455	4,210								
CLIMATE TOTAL			530	5,430	306	490	56	101				
ENVIRONMENTAL DISASTERS												
OIL SANDS												
OIL SPILLS			350	1,500					2,750	3,000		
TOTAL			350	1,500								
HABITAT CHANGE												
BIODIVERSITY	-	+	1,000	8,000					1,000	3,250		
CORROSION												
WATER				1					10	15		
TOTAL			1000	8001								
HEALTH IMPACT												
AIR POLLUTION					850	1,250	9	15				
INDOOR SMOKE					600	650	15	15				
OCCUPATIONAL HAZARDS					20	25	2	2				
SKIN CANCER					40	100	0	0				
TOTAL					1510	2025	27	32				
INDUSTRY STRESS												
AGRICULTURE			-10	-550								
FISHERIES	+	+	45	350								
FORESTRY	+	-	55	300								
TOTAL			90	100								
CARBON TOTAL			1,440	9,601	1,510	2,025	27	32				

VULNERABILITY LEVELS:

- Acute+ High+
- Acute- High-
- Severe+ Moderate
- Severe- Low

+ = Upper tier of vulnerability level
- = Lower tier of vulnerability level

Environmental disasters
 Habitat change
 Health impact
 Industry stress
 CLIMATE = Impact/Vulnerability to Climate Change
 CARBON = Impact/Vulnerability to Carbon Intensiveness

OTHER VALUE 1 **OTHER VALUE 2**

BIODIVERSITY Contraction of biological zones (km²) (cumulative) Decline in biological richness

DESERTIFICATION Additional land degraded (km²) (cumulative)

HEATING & COOLING Change in energy load (GWh)

LABOUR PRODUCTIVITY Share of workforce particularly affected (%)

SEA-LEVEL RISE Net loss of land (km²) (cumulative)

WATER Loss in water runoff 2030 (km²)

OIL SANDS Tonnes toxic waste ('000s)

OIL SPILLS Gallons oil spill ('000s)

BIODIVERSITY Decline in biological richness

WATER Volume of water to treat (millions m³)