

COUNTRY PROFILE

ETHIOPIA

CLIMATE: **SEVERE**

CARBON: **MODERATE**

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: ETHIOPIA

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



LOSSES PER YEAR

2010 **2.0%GDP**
2030 **3.7%GDP**



LOSSES PER YEAR

2010 **2.7%GDP**
2030 **1.3%GDP**

HUMAN NATIONAL LOSS TOTALS: ETHIOPIA

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



ADDITIONAL MORTALITY-YEARLY AVERAGE

2010 **100,000**
2030 **100,000**



ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 **7,950,000** 2030 **13,500,000**
2010 **5,100,000** 2030 **4,400,000**

FULL COUNTRY ASSESSMENT: ETHIOPIA

	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	20								
FLOODS AND LANDSLIDES			1	5	10	15	75	150				
STORMS												
WILDFIRES												
TOTAL			6	25	10	15	75	150				
HABITAT CHANGE												
BIODIVERSITY	+	+	150	1,000					-25,000	-55,000	70	200
DESERTIFICATION	-	-	-10	-65								
HEATING AND COOLING			-35	-200					-900	-1,500	-100	-150
LABOUR PRODUCTIVITY	+	+	950	6,000					64	52		
PERMAFROST												
SEA-LEVEL RISE												
WATER			-100	-650					-5	-5		
TOTAL			955	6,085			0	0				
HEALTH IMPACT												
DIARRHEAL INFECTIONS	+	+			3,500	6,500	4					
HEAT AND COLD ILLNESSES	-	-			750	1,250						
HUNGER	-	-			3,250	5,250	2	3				
MALARIA AND VECTOR-BORNE	-	-			400	400	100	100				
MENINGITIS	+	+			2,000	3,000	3	5				
TOTAL					9,900	16,400	109	108				
INDUSTRY STRESS												
AGRICULTURE	+	+	450	3,000								
FISHERIES			15	200								
FORESTRY												
HYDRO ENERGY			-1	-10								
TOURISM												
TRANSPORT												
TOTAL			464	3,190								
CLIMATE TOTAL			1,425	9,300	9,910	16,415	184	258				
ENVIRONMENTAL DISASTERS												
OIL SANDS												
OIL SPILLS												
TOTAL			0	0								
HABITAT CHANGE												
BIODIVERSITY			95	650					40	100		
CORROSION												
WATER				1					30	40		
TOTAL			95	650.5								
HEALTH IMPACT												
AIR POLLUTION		-			3,500	6,500	100	400				
INDOOR SMOKE	+	+			100,000	85,000	5,000	4,000				
OCCUPATIONAL HAZARDS					25	40	5	9				
SKIN CANCER	-	-			300	850	0	1				
TOTAL					103,825	92,390	5,106	4,410				
INDUSTRY STRESS												
AGRICULTURE			-40	-1,250								
FISHERIES												
FORESTRY												
TOTAL			-40	-1,250								
CARBON TOTAL			55	-600	103,825	92,390	5,106	4,410				

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 (km ²) (cumulative) | Decline in biological richness |
| DESERTIFICATION | Additional land degraded (km ²) (cumulative) | |
| HEATING & COOLING | Change in energy load (GWh) | |
| LABOUR PRODUCTIVITY | Share of workforce particularly affected (%) | |
| SEA-LEVEL RISE | Net loss of land (km ²) (cumulative) | |
| WATER | Loss in water runoff 2030 (km ³) | |
| OIL SANDS | Tonnes toxic waste ('000s) | |
| OIL SPILLS | Gallons oil spill ('000s) | |
| BIODIVERSITY | Decline in biological richness | |
| WATER | Volume of water to treat (millions m ³) | |