

## 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](http://www.daraint.org/cvm2) - [cvm@daraint.org](mailto:cvm@daraint.org) - +34 915310372

### ECONOMIC NATIONAL LOSS TOTALS: NEPAL

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



LOSSES PER YEAR

2010 **2.2%GDP**  
2030 **4.1%GDP**



LOSSES PER YEAR

2010 **1.0%GDP**  
2030 **0.7%GDP**

### HUMAN NATIONAL LOSS TOTALS: NEPAL

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



ADDITIONAL MORTALITY-YEARLY AVERAGE

2010 **15,000**  
2030 **20,000**



ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 **800,000** 2030 **1,350,000**  
2010 **700,000** 2030 **850,000**

### FULL COUNTRY ASSESSMENT: NEPAL

	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
<b>ENVIRONMENTAL DISASTERS</b>												
DROUGHT	+	+	1	10								
FLOODS AND LANDSLIDES	+	+	15	150	10	15	85	100				
STORMS												
WILDFIRES	-	+										
<b>TOTAL</b>			16	160	10	15	85	100				
<b>HABITAT CHANGE</b>												
BIODIVERSITY		-	25	200					-200	-400	150	400
DESERTIFICATION												
HEATING AND COOLING			-15	-80					-250	-450	-1	-1
LABOUR PRODUCTIVITY	+	-	500	3,750					53	41		
PERMAFROST			65	300			150	300				
SEA-LEVEL RISE												
WATER			-25	-200					-1	-1		
<b>TOTAL</b>			550	3,970			150	300				
<b>HEALTH IMPACT</b>												
DIARRHEAL INFECTIONS	-	-			300	550	0					
HEAT AND COLD ILLNESSES	+	+			250	300						
HUNGER	-	-			2,000	2,500	2	2				
MALARIA AND VECTOR-BORNE						1	0					
MENINGITIS	-	-			100	200	0	0				
<b>TOTAL</b>					2,650	3,551	2	3				
<b>INDUSTRY STRESS</b>												
AGRICULTURE	-	+	150	1,250								
FISHERIES			5	75								
FORESTRY				1								
HYDRO ENERGY			-5	-30								
TOURISM												
TRANSPORT												
<b>TOTAL</b>			150	1,296								
<b>CLIMATE TOTAL</b>			746	5,425	2,660	3,566	237	403				
<b>ENVIRONMENTAL DISASTERS</b>												
OIL SANDS												
OIL SPILLS												
<b>TOTAL</b>			0	0								
<b>HABITAT CHANGE</b>												
BIODIVERSITY			150	1,000					800	2,250		
CORROSION												
WATER									10	15		
<b>TOTAL</b>			150	1000								
<b>HEALTH IMPACT</b>												
AIR POLLUTION					650	1,500	30	100				
INDOOR SMOKE	+	+			15,000	15,000	650	750				
OCCUPATIONAL HAZARDS					25	40	4	5				
SKIN CANCER					15	35	0	0				
<b>TOTAL</b>					15690	16575	684	855				
<b>INDUSTRY STRESS</b>												
AGRICULTURE			-30	-900								
FISHERIES												
FORESTRY				1								
<b>TOTAL</b>			-30	-899.5								
<b>CARBON TOTAL</b>			120	101	15,690	16,575	684	855				

**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 <sup>2</sup> ) (cumulative)	Decline in biological richness
DESERTIFICATION	Additional land degraded (km <sup>2</sup> ) (cumulative)	
HEATING & COOLING	Change in energy load (GWh)	
LABOUR PRODUCTIVITY	Share of workforce particularly affected (%)	
SEA-LEVEL RISE	Net loss of land (km <sup>2</sup> ) (cumulative)	
WATER	Loss in water runoff 2030 (km <sup>3</sup> )	
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 <sup>3</sup> )	