

## COUNTRY PROFILE

### VIETNAM

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

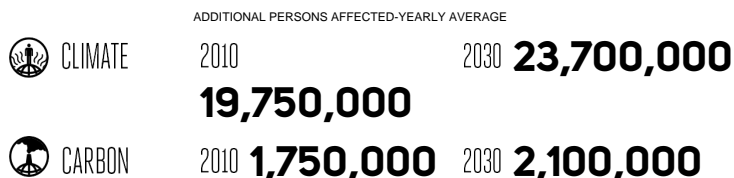
### ECONOMIC NATIONAL LOSS TOTALS: VIETNAM

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



### HUMAN NATIONAL LOSS TOTALS: VIETNAM

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



### FULL COUNTRY ASSESSMENT: VIETNAM

	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	+	+	40	350								
FLOODS AND LANDSLIDES	+	+	150	2,000	50	55	500	500				
STORMS			-5	-75	10	10	15	15				
WILDFIRES												
<b>TOTAL</b>			185	2,275	60	65	515	515				
<b>HABITAT CHANGE</b>												
BIODIVERSITY			70	750					-150	-300	150	500
DESERTIFICATION			-80	-850			-950	-2,000	-3,500	-7,250		
HEATING AND COOLING	-	+	150	3,750					1,500	6,000	550	2,500
LABOUR PRODUCTIVITY	-	+	8,000	85,000					48	37		
PERMAFROST												
SEA-LEVEL RISE	-	+	4,000	40,000			20	25	150	300		
WATER	-	+	-100	-1,000					-1	-1		
<b>TOTAL</b>			12,040	127,650			-930	-1,975				
<b>HEALTH IMPACT</b>												
DIARRHEAL INFECTIONS					90	0						
HEAT AND COLD ILLNESSES	-	-			450	350						
HUNGER					200	250	0	1				
MALARIA AND VECTOR-BORNE					40	55	15	25				
MENINGITIS					70	85	0	0				
<b>TOTAL</b>					850	740	16	26				
<b>INDUSTRY STRESS</b>												
AGRICULTURE	-	-	550	6,000								
FISHERIES	-	+	1,500	25,000								
FORESTRY			1	20								
HYDRO ENERGY	-	-	-30	-300								
TOURISM												
TRANSPORT												
<b>TOTAL</b>			2,021	30,720								
<b>CLIMATE TOTAL</b>			14,246	160,645	910	805	-398	-1,433				
<b>ENVIRONMENTAL DISASTERS</b>												
OIL SANDS												
OIL SPILLS												
<b>TOTAL</b>			0	0								
<b>HABITAT CHANGE</b>												
BIODIVERSITY			800	8,750					2,000	5,000		
CORROSION	+	+	1	20								
WATER	-	+	20	150					2,000	3,000		
<b>TOTAL</b>			821	8920								
<b>HEALTH IMPACT</b>												
AIR POLLUTION	+	+			10,000	20,000	200	550				
INDOOR SMOKE	-	+			45,000	40,000	1,500	1,500				
OCCUPATIONAL HAZARDS	-	-			400	550	50	65				
SKIN CANCER	-	+			250	600	0	0				
<b>TOTAL</b>					55650	61150	1750	2115				
<b>INDUSTRY STRESS</b>												
AGRICULTURE			-100	-5,250								
FISHERIES	+	+	500	3,250								
FORESTRY			25	200								
<b>TOTAL</b>			425	-1800								
<b>CARBON TOTAL</b>			1,246	7,120	55,650	61,150	1,750	2,115				

**VULNERABILITY LEVELS:**

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

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

**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 (1000s)

**OIL SPILLS** Gallons oil spill (1000s)

**BIODIVERSITY** Decline in biological richness

**WATER** Volume of water to treat (millions m<sup>3</sup>)