

COUNTRY PROFILE

THAILAND

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: THAILAND

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



HUMAN NATIONAL LOSS TOTALS: THAILAND

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



FULL COUNTRY ASSESSMENT: THAILAND

	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	+	-	40	200								
FLOODS AND LANDSLIDES	+	+	100	1,000	15	10	150	100				
STORMS	+	+	-5	-35			0	0				
WILDFIRES	+	+										
TOTAL			135	1,165	15	10	150	100				
HABITAT CHANGE												
BIODIVERSITY	+	-	350	2,500					-7,750	-15,000	150	500
DESERTIFICATION	+	-	-80	-650			-250	-600	-2,000	-4,000		
HEATING AND COOLING	+	+	200	3,000					2,000	8,500	1,250	4,750
LABOUR PRODUCTIVITY	-	+	15,000	150,000					45	35		
PERMAFROST												
SEA-LEVEL RISE	+	+	1,500	6,750			5	6	65	150		
WATER	+	+	-300	-2,250					-1	-5		
TOTAL			16,670	159,350			-244	-593				
HEALTH IMPACT												
DIARRHEAL INFECTIONS	+	+			0	0	0	0				
HEAT AND COLD ILLNESSES	+	-			200	350						
HUNGER	-	+			1,000	1,500	1	2				
MALARIA AND VECTOR-BORNE	+	+										
MENINGITIS	+	+			40	50	0	0				
TOTAL					1,240	1,900	1	2				
INDUSTRY STRESS												
AGRICULTURE	+	+	1,250	10,000								
FISHERIES	+	+	700	8,500								
FORESTRY	+	+	100	1,500								
HYDRO ENERGY	-	+	-10	-60								
TOURISM	+	+										
TRANSPORT	+	+										
TOTAL			2,040	19,940								
CLIMATE TOTAL			18,845	180,455	1,255	1,910	-92	-490				
ENVIRONMENTAL DISASTERS												
OIL SANDS	+	+										
OIL SPILLS	+	+										
TOTAL			0	0								
HABITAT CHANGE												
BIODIVERSITY	+	+	1,750	15,000					950	2,750		
CORROSION	-	+	10	45								
WATER	-	+	85	450					4,750	6,750		
TOTAL			1845	15495								
HEALTH IMPACT												
AIR POLLUTION	-	+			4,250	8,250	75	250				
INDOOR SMOKE	-	+			20,000	20,000	1,000	950				
OCCUPATIONAL HAZARDS	+	+			250	450	20	25				
SKIN CANCER	-	+			150	350	0	0				
TOTAL					24650	29050	1095	1225				
INDUSTRY STRESS												
AGRICULTURE	+	+	-15	-4,250								
FISHERIES	+	+	200	1,000								
FORESTRY	-	+	350	2,000								
TOTAL			535	-1250								
CARBON TOTAL			2,380	14,245	24,650	29,050	1,095	1,225				

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 (km³)

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)