## **CLIMATE VULNERABILITY MONITOR**







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 - cvm@daraint.org - +34 915310372



## **ECONOMIC NATIONAL LOSS TOTALS: INDONESIA**

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

CLIMAIE CHANGE

2010 **3.5%**<sub>GDP</sub> 2030 **7.0%**cm

CARBON INTENSIVENESS

2010 **1.8%**<sub>GDP</sub> 2030 **3.0%**cpp



## **HUMAN NATIONAL LOSS TOTALS: INDONESIA**

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

ADDITIONAL MORTALITY-YEARLY AVERAGE

CLIMATE +CARBON

2010 150,000 2030 200,000 CLIMATE

ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE

2010 16,700,000 2030 16,900,000

🕽 CARBON

2010 5,900,000 2030 8,900,000

**FULL COUNTRY ASSESSMENT: INDONESIA** 

			VULNERABILITY LEVEL	ECONOM	TIONAL IIC COSTS USD PPP)		ADDITIONAL MORTALITY POP		ADDITIONAL AFFECTED POPULATION (1000s)		OTHER VALUE 1*		HER JE 2*					
			2010 2030	2010	2030	2010	2030	2010	2030	2010	2030	2010	2030	_				
		ENVIRONMENTAL DISASTERS												VULNERABIL	VULNERABILITY LEVELS:			
	_	DROUGHT		40	200									+ Acute+	+ High-	+		
		FLOODS AND LANDSLIDES	-	75	650	25	30	250	250					- Acute-	- High-			
	₩	STORMS		-50	-400									+ Severe+	Mode			
		WILDFIRES		-20	-150									_	_	rate		
		TOTAL		45	300	25	30	250	250					- Severe-	Low			
		HABITAT CHANGE																
		BIODIVERSITY	-	500	3,750					-5,000	-10,000	150	500	+ = Upper tier	of vulnerabilit	y level		
CLIMATE		DESERTIFICATION		-5	-50			-50	-100	-400	-750			<ul><li>= Lower tier</li></ul>	of vulnerabilit	y level		
		HEATING AND COOLING		150	1,750					2,250	7,000	1,750	5,750					
		LABOUR PRODUCTIVITY	- +	30,000	250,000					40	31			Environme	ental disasters			
		PERMAFROST		2,750	15,000			15	15	2,000	4,500			Habitat ch				
		SEA-LEVEL RISE WATER		-950	-7,500			15	15	-10	-20							
		TOTAL		32,445	262,950			-35	-85	-10	-20			Health imp	pact			
	•	HEALTH IMPACT		32,443	202,930			-33	-03					🚺 Industru sl	tress			
		DIARRHEAL INFECTIONS				0	0	0										
		HEAT AND COLD ILLNESSES				1,250	1,250							CLIMATE =	Impact/Vulne	rabilitu		
		HUNGER	+ -			7,500	10,000	9	15						to Climate Cha			
		MALARIA AND VECTOR-BORNE												_				
		MENINGITIS				550	650	1	1					carbon = Impact/Vu	impaci/ vuinei to Carbon Inter			
	<b>%</b>	TOTAL				9,300	11,900	11	16						to carbon inter	1314611633		
		INDUSTRY STRESS													OTHER	OTHER		
		AGRICULTURE	+	1,250	9,500										VALUE 1	VALUE 2		
		FISHERIES	-	650	7,750									BIODIVERSITY	Contraction			
		FORESTRY		30	350										of biological	Decline in biological		
		HYDRO ENERGY		-10	-75										zones (km²) (cumulative)	richness		
		TOURISM		1,250	10,000										Additional land			
		TRANSPORT TOTAL		3,170	27,525									DESERTI- FICATION	degraded (km²)			
		CLIMATE TOTAL		35,660	290,775	9,325	11,930	226	181					- Individual	(cumulative)			
		SEIMATE TOTAL		55,000	250,775	3,023	11,550	110	101					HEATING & Change in energy		·gy		
CARBON		ENVIRONMENTAL DISASTERS												COOLING	load (GWh)			
		OIL SANDS		85	600					1,250	2,250			LABOUR	Share of workforce			
		OIL SPILLS												PRODUCTIVITY				
	li	TOTAL		85	600										affected (%)			
		HABITAT CHANGE		10,000	90,000					3,750	5,000			SEA-LEVEL	Net loss of			
	•	BIODIVERSITY CORROSION	- +	5	30					3,750	5,000			RISE	land (km²) (cumulative)			
		WATER		1	5					250	250			-	Loss in water			
		TOTAL		10006	90035					200	200			WATER	runoff 2030			
		HEALTH IMPACT		10000	00000									-	(km³)			
	•	AIR POLLUTION	+ +			30,000	55,000	600	2,000					OIL SANDS	Tonnes toxic			
		INDOOR SMOKE	+ +			95,000	150,000	5,000	6,500					012 07 11 400	waste (1000s)			
		OCCUPATIONAL HAZARDS	- +			1,750	3,250	300	400					-	Gallons oil			
		SKIN CANCER	-			400	900	0	1					OIL SPILLS	spill (1000s)			
		TOTAL				127150	209150	5900	8901									
		INDUSTRY STRESS												BIODIVERSITY	Decline in	000		
	(N)	AGRICULTURE		-200	-7,000										biological richn	E33		
	W	FISHERIES	+ +	200	800									Volume of WATER water to tre				
		FORESTRY	+ -	550	2,750									WAICK	water to treat (millions m <sup>3</sup> )			
		TOTAL		550 10.641	-3450	127 150	200.450	E 000	9 001									
		CARBON TOTAL		10,041	87,185	127,150	209,150	5,900	8,901					1				