CLIMATE VULNERABILITY MONITOR

DARA

Climate Vulnerable Forum

COUNTRY PROFILE

BAHRAIN

CLIMATE: LOW CARBON: LOW

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: BAHRAIN

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

	LOSSES PER YEAR	
CLIMATE CHANGE IMPACT	2010 **0.4%GDP**	2030 **0.8%GDP**
CARBON INTENSIVENESS IMPACT	2010 **NIL**	2030 **NIL**

HUMAN NATIONAL LOSS TOTALS: BAHRAIN

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

	ADDITIONAL MORTALITY-YEARLY AVERAGE	
CLIMATE +CARBON COMBINED	2010 **100**	2030 **150**

	ADDITIONAL PERSONS AFFECTED-YEARLY AVERAGE	
CLIMATE	2010 **150,000**	2030 **250,000**
CARBON	2010 **2,000**	2030 **4,000**

FULL COUNTRY ASSESSMENT: BAHRAIN

		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
CLIMATE	**ENVIRONMENTAL DISASTERS**												
	DROUGHT	-	-	1	5								
	FLOODS AND LANDSLIDES				1			0	0				
	STORMS			-5	-35								
	WILDFIRES												
	TOTAL			-4	-30	0	0	0	0				
	HABITAT CHANGE												
	BIODIVERSITY												
	DESERTIFICATION		-	5	25								
	HEATING AND COOLING		-	15	200					100	400	60	250
	LABOUR PRODUCTIVITY			10	60					31	21		
	PERMAFROST												
	SEA-LEVEL RISE			35	95			0	0		1		
	WATER			-1	-5								
	TOTAL			65	375			0	0				
	HEALTH IMPACT												
	DIARRHEAL INFECTIONS					0	0	0					
	HEAT AND COLD ILLNESSES					1	1						
	HUNGER					1	1	0	0				
	MALARIA AND VECTOR-BORNE												
	MENINGITIS					1	1	0	0				
	TOTAL					3	3	0	0				
	INDUSTRY STRESS												
	AGRICULTURE		-	25	200								
	FISHERIES		-	20	200								
	FORESTRY												
	HYDRO ENERGY												
	TOURISM		-	15	150								
	TRANSPORT												
	TOTAL			60	550								
	CLIMATE TOTAL			**120**	**896**	**2**	**2**	**0**	**1**				
CARBON	**ENVIRONMENTAL DISASTERS**												
	OIL SANDS												
	OIL SPILLS												
	TOTAL			0	0								
	HABITAT CHANGE												
	BIODIVERSITY												
	CORROSION												
	WATER												
	TOTAL			0	0								
	HEALTH IMPACT												
	AIR POLLUTION	-	-			75	100	1	3				
	INDOOR SMOKE					20	25	0	0				
	OCCUPATIONAL HAZARDS					1	1	0	0				
	SKIN CANCER						1	0	0				
	TOTAL					95.75	126.5	2	4				
	INDUSTRY STRESS												
	AGRICULTURE			-1	-75								
	FISHERIES		-	1	10								
	FORESTRY												
	TOTAL			0	-65								
	CARBON TOTAL			**0**	**-65**	**95**	**126**	**2**	**4**				

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
DESERTI-FICATION	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 (1000s)	
OIL SPILLS	Gallons oil spill (1000s)	
BIODIVERSITY	Decline in biological richness	
WATER	Volume of water to treat (millions m^3)	