

## COUNTRY PROFILE

### BOTSWANA

CLIMATE: **MODERATE**

CARBON: **ACUTE**

### 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: BOTSWANA

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



### HUMAN NATIONAL LOSS TOTALS: BOTSWANA

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



### FULL COUNTRY ASSESSMENT: BOTSWANA

	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	5								
FLOODS AND LANDSLIDES				1			0	0				
STORMS												
WILDFIRES												
<b>TOTAL</b>			1	6	0	0	0	0				
<b>HABITAT CHANGE</b>												
BIODIVERSITY	+	+	150	750					-1,500	-3,000	150	500
DESERTIFICATION			-5	-25								
HEATING AND COOLING			-5	-30					-70	-100	-90	-150
LABOUR PRODUCTIVITY			60	400					53	43		
PERMAFROST												
SEA-LEVEL RISE												
WATER		-	20	100							0	
<b>TOTAL</b>			220	1,195			0	0				
<b>HEALTH IMPACT</b>												
DIARRHEAL INFECTIONS	-	-			15	25	0					
HEAT AND COLD ILLNESSES		+			15	15						
HUNGER					15	25	0	0				
MALARIA AND VECTOR-BORNE					1	1	0	0				
MENINGITIS		+			15	15	0	0				
<b>TOTAL</b>					61	81	0	0				
<b>INDUSTRY STRESS</b>												
AGRICULTURE			1	10								
FISHERIES												
FORESTRY												
HYDRO ENERGY												
TOURISM												
TRANSPORT												
<b>TOTAL</b>			1	10								
<b>CLIMATE TOTAL</b>			222	1,210	61	81	1	1				
<b>ENVIRONMENTAL DISASTERS</b>												
OIL SANDS												
OIL SPILLS												
<b>TOTAL</b>			0	0								
<b>HABITAT CHANGE</b>												
BIODIVERSITY	+	-	600	4,000					650	2,750		
CORROSION												
WATER												
<b>TOTAL</b>			600	4000								
<b>HEALTH IMPACT</b>												
AIR POLLUTION	-	+			150	250	5	15				
INDOOR SMOKE		+			800	500	50	30				
OCCUPATIONAL HAZARDS		-			5	10	1	2				
SKIN CANCER					1	5	0	0				
<b>TOTAL</b>					956	765	57	47				
<b>INDUSTRY STRESS</b>												
AGRICULTURE	-	+	15	90								
FISHERIES												
FORESTRY		+	90	400								
<b>TOTAL</b>			105	490								
<b>CARBON TOTAL</b>			705	4,490	956	765	57	47				

**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> )	