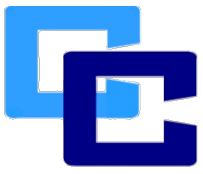


Regional Work on Climate Change Statistics

**Workshop on Environment Statistics and Climate
Change Statistics for the CARICOM Region**

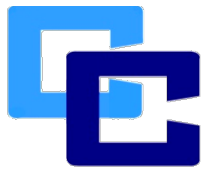
St. Georges, Grenada

4-8 November 2019



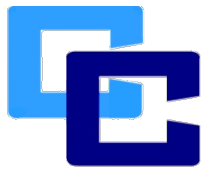
Regional Climate Change-related Statistics

- Loss and damage from the adverse effects of climate change increasing for the Region;
- Need for evidence based decision-making on climate change and therefore demand for climate change- related statistics has increased;
- Challenges: new area of statistics, data gaps in basic environment statistics, lack of dedicated staff, lack of methodology;
- RSP will produce Climate Change-related statistics report
- The United Nations Economic Commission for Europe UN-ECE set of climate change-related indicators organized by Drivers –Emissions – Impacts –Mitigation –Adaptation.



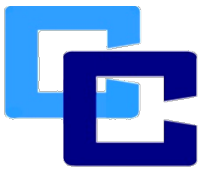
Data availability

- **Climate process drivers** – statistics more readily available on consumption rather than on production
- **Emissions** - some data available from international sources as few countries produce this data.
- **Climate change impacts** – data on impacts available from disaster statistics and some data on land impacts in relation to forest area statistics. Needs further development.
- **Mitigation** – no data available
- **Adaptation** – data available due to collaboration with UNSD for two sectors, waste and water.



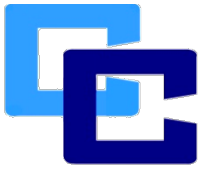
Climate Change-related Statistics

AREA	SUB-AREA	INDICATORS	RELATED SDG INDICATOR	RELATED INDICATOR FROM SENDAI FRAMEWORK
Drivers	1. Production			
	2. Consumption	Energy consumption by type and year: 2009-2013		
		Number of Households by Type of Fuel used for cooking: 2000 and 2010 Round of Censuses		
		Percentage distribution of Households by Type of Fuel used for cooking: 2000 and 2010 Round of Censuses		
		Number of Households by Type of Fuel used for Lighting: 2000 and 2010 Round of Censuses, 2009-2013	7.1.1	
		Percentage distribution of Households by Type of Fuel used for lighting: 2000 and 2010 Round of Censuses	7.1.1	
		Mineral Production by Type: 2009 - 2013		
		Mineral reserves by Type: 2009-2013		



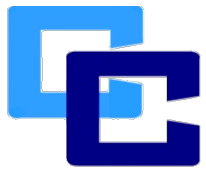
Energy consumption by type and year: 2009-2013

Country	Year	Solid Fuels (tonnes)	Liquid Fuels	Gaseous Fuels	Primary electricity ('000kwh)	Traditional fuels		
						Charcoal	Fuelwood	Bagasse (boe)
AG	2009	...	...	...	220,829	...	...	...
	2010	...	...	...	237,030	...	...	...
	2011	...	...	...	255,424	...	...	...
	2012	...	...	...	250,588	...	...	...
	2013	...	...	...	244,266	...	...	...
DM	2009	...	...	...	36,369	...	...	...
	2010	...	...	...	39,473	...	...	...
	2011	...	...	...	40,419	...	...	...
	2012	...	...	...	40,785	...	...	...
	2013	...	...	...	40,800	...	...	...



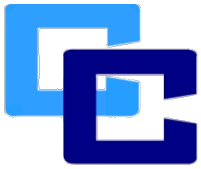
Percentage distribution of Households by Type of Fuel used for cooking: 2000 and 2010 Round of Censuses

Country	Year	Charcoal	Wood	LPG/Gas	Kerosene	Electricity	Solar Energy	None	Not Stated	Other	Total
AG	2001	1.5	0.4	95.7	0.2	0.7		0.0	0.3	1.3	100.0
	2011	0.0	1.0	96.4	0.0	1.4		0.0	0.0	1.2	100.0
BB	2000	0.1	0.0	91.4	2.3	3.0		0.0	2.7	0.5	100.0
	2010	0.1	0.0	92.9	0.5	4.5		0.0	1.7	0.3	100.0
BS	2000	0.3	0.4	74.2	1.0	22.3		0.0	1.7	0.0	100.0
	2010	0.1	0.2	77.9	0.2	20.3		0.0	1.3	0.0	100.0



Climate Change-related Statistics (Cont'd)

AREA	SUB-AREA	INDICATORS	RELATED SDG INDICATOR	RELATED INDICATOR FROM SENDAI FRAMEWORK
Emissions	1. Production	Carbon dioxide emissions (CO2): 2009-2011	9.4.1	
	2. Consumption			
Impacts	1. Physical Conditions			
	2. Water resources			
	3. Land, Land cover, Ecosystems and Biodiversity	Forest Area: 2009-2013	15.1.1	
	4. Extreme Events and Disasters	Natural Disasters by Year: 2009-2014		
	5. Human Settlements and human health			
	6. Agriculture, Forestry and Fishery			



Carbon dioxide emissions (CO₂): 2009-2011

thousand metric tons
of CO₂

Country	2009	2010	2011
Antigua and Barbuda	509.71	524.38	513.38
Bahamas	1,642.82	2,464.22	1,906.84
Barbados	1,624.48	1,518.14	1,565.81
Belize	469.38	553.72	550.05
Dominica	128.35	135.68	124.68
Grenada	253.02	260.36	253.02
Guyana	1,565.81	1,719.82	1,782.16
Haiti	2,262.54	2,119.53	2,211.20
Jamaica	8,591.78	7,190.99	7,755.71
Montserrat	77.01	77.01	80.67
Saint Kitts and Nevis	260.36	260.36	267.69
Saint Lucia	385.04	403.37	407.04
Saint Vincent and the Grenadines	231.02	234.69	238.36
Suriname	2,475.23	2,394.55	1,910.51
Trinidad and Tobago	48,331.06	50,916.30	49,574.17

Associate Members

Anguilla	146.68	150.35	143.01
Bermuda	465.71	476.71	392.37
British Virgin Islands	165.02	172.35	176.02
Cayman Islands	561.05	564.72	583.05
Turks and Caicos Islands	179.68	190.68	190.68



Forest Area: 2009-2013

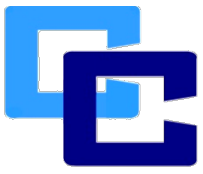
Unit = km²

Country Year	Total Land area	Total forest area	Protected forest area	Protected forest area as a % of Total forest area	Protected forest area as a % of Total land area
AG 2009		137.1	32.42	23.65	7.33
BB 2009		74.43	0.20	0.27	0.05
BS 2009	13,957	3,266	259	8.00	1.86
BZ 2009	22,800	16,530	3,727	22.50	16.30
DM 2013	751		60		7.96



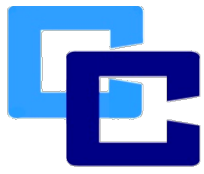
Natural Disasters by Year: 2009-2014

Country	Year	Disaster			Total Casualties					Total Population Affected (Number)	Affected persons by flooding, power outage, or general inconvenience	Damage (US\$ Million)
		Type of Disaster	Name of Disaster	Date Started	Total	Dead /Killed	Injured	Missing	Homeless			
BS	2007	Tropical Storm	...	30-Oct	...	1	...	0	...	6,563	...	10.0
	2012	Hurricane	Irene	22-Aug	...	...	...	...	...	...	...	...
DM	2010	Hurricane	Tomas	...	0	...	...	...	...	...	...	...
	2010	Landslide		...	...	3	...	...	...	...	...	...
	2011	Flooding		...	...	0	...	...	...	...	...	...
	2013	Flooding		...	...	0	...	...	...	...	...	...
GD	2011	Torrential rainfall	...	12-Apr	...	...	...	...	...	60	...	0.2



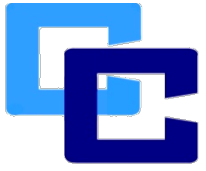
Climate Change-related Statistics (Cont'd)

AREA	SUB-AREA	INDICATORS	RELATED SDG INDICATOR	RELATED INDICATOR FROM SENDAI FRAMEWORK
Mitigation				
	1. Energy resources			
	2. Expenditures			
	3. Environmental governance and regulation			



Climate Change-related Statistics (Cont'd)

AREA	SUB-AREA	INDICATORS	RELATED SDG INDICATOR	RELATED INDICATOR FROM SENDAI FRAMEWORK
Adaptation				
	1. Expenditures			
	2. Water resources	Renewable Freshwater Resources: 2009-2013	6.4.2	
		Freshwater Abstraction and Use: 2009-2013		
		Water Supply Industry (ISIC 36): 2009-2013		
		Population connected to WasteWater Treatment: 2009-2013	6.3.1	
	3. Human settlements and human health	Generation of Waste by Source: 2009-2013		
		Management of Hazardous Waste: 2009-2013	12.4.2	
		Management of Municipal Waste: 2009-2013	11.6.1	
		Composition of Municipal Waste: 2009-2013		
		Management of Municipal Waste - City Data: 2009-2013	11.6.1	
	4. Agriculture, Forestry and fishery			



CARICOM

Thank you for your attention!