

THE CARICOM ENVIRONMENT IN FIGURES 2009



Caribbean Community Secretariat
Regional Statistics Programme

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THE CARICOM ENVIRONMENT IN FIGURES 2009



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PREFACE

The CARICOM Environment in Figures 2009 is the third report in the area of Environment Statistics that has been prepared by the Caribbean Community (CARICOM) Secretariat, Regional Statistics Programme. This report, which contains data for the period 2005 to 2009 (data from the 2010 Round of Population and Census is also included for countries which have data available) is based on data submitted by Member States and Associate Members, from the United Nations Statistics Division (UNSD) and from other regional and National Organisations including The Caribbean Tourism Organisation (CTO) and The Caribbean Epidemiology Centre (CAREC).

The work on Environment Statistics in the CARICOM Region was stimulated by a Project on "Strengthening Capacity in the Compilation of Statistics and Indicators for Conference Follow-up in the CARICOM Region," jointly carried out by the United Nations Statistics Division (UNSD) and the Caribbean Community (CARICOM) Secretariat from 1999 -2004 approximately. The Project was executed in the CARICOM Member States, which are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago. However relative to data collection and capacity building activities the Associate Members were also included in these efforts and data for some of these countries are found in this publication.

Of importance to note is the work of the CARICOM Advisory Group which operated in the area of Social/Gender and Environmental Statistics, developing a programme for sustaining the data collection, compilation and dissemination efforts post the end of the CARICOM/UNSD Project.

Prior to the publication of this latest report, a series of capacity-building activities have been undertaken in the Region with the support of the United Nations Statistics Division (UNSD), to strengthen capacity in the production of Environment Statistics. Workshops were held in successive years from 2009-2011, the objectives of which included, training personnel from member countries on the concepts, definitions and methods on the core set of indicators that are to be produced and disseminated in the publication. These workshops were supported in 2009 by the World Bank Trust Fund for Statistical Capacity Building (TFSCB) and in 2009 and 2010 by the European Union (EU) under the Ninth European Development Fund (EDF). The Caribbean Hub sub-component of the European Commission has also provided support in the area of Biodiversity in three countries, Dominica, Antigua and Barbuda in an effort to concentrate on this specific area to build capacity in filling the data gaps.

The CARICOM Environment in Figures 2009 report, like the previous reports, took considerable time to produce, from the design and submission of table formats to member countries; the monitoring of the submission of the information; the compilation of the statistics and indicators in tables and the submission to countries for review and amendments and the

PREFACE

preparation of various drafts of the report. This was all in an effort to reduce the number of data gaps and to improve data quality. As expressed in the first and second reports, it continues to be the case that in the CARICOM Region, most of the 15 Member States are faced with growing competition between economic interests for limited natural resources, pressures from increasing tourism and a greater frequency of natural disasters. Sound policy decisions must be made using timely and reliable information to enable sustainable development.

This regional report is the third attempt to compile Environment Statistics and there were many challenges faced including the absence of dedicated staff to work in this area both at the regional and national levels, as well as a lack of basic Environment Statistics and Indicators which is a relatively new area of statistics to the region. As a consequence this report is only now being published in 2013. Nonetheless Member countries continue to make tremendous efforts to produce these statistics. These include Suriname, Dominica, Belize and Jamaica. In recent years Bermuda has been able to produce two publications in 2009 and 2011 and St. Vincent and the Grenadines also produced its second environment report in 2011. Dominica has caught up at a phenomenal rate with the other countries and has now published a fifth publication in this area.

The publication includes concepts and definitions, the tables and graphs of the various statistics and indicators. The publication focuses on twelve (12) themes which include: Population and Households, Tourism, Environmental Health, Natural Disasters, Energy and Minerals, Land Use and Agriculture, Coastal and Marine Resources, Biodiversity, Forest, Air, Waste and Water.

In view of the fact that Environment Statistics is a relatively new and emerging field of statistics, with a large number of data sources and institutions involved, and with a lack of benchmarks and standards, it is anticipated that the publication would help bring to the fore some of the problems that exist with these data; differences in national and other sources of data; data that exist within various organisations at the national level but are not available at the CARICOM Secretariat. The need for increased inter-agency collaboration and the use of software such as the United Nations-based DevInfo to facilitate the compilation and dissemination of statistics that are available within agencies at the national levels must be emphasised as primary mechanism of improving data availability.

The CARICOM Secretariat therefore welcomes feedback on the data presented in this report. It is hoped that this publication could contribute to providing a picture of some aspects of the status of the environment as well as in improving the data collection and compilation efforts in the Region.

ACKNOWLEDGEMENTS

Data were collected from several sources during the preparation of this report. The CARICOM Secretariat, therefore, wishes to acknowledge and thank those Organizations and persons for their invaluable contribution in supplying the data either by means of printed publications or through direct contact. The CARICOM Secretariat would also like to express their appreciation to the National Statistical Offices of Member States and Associate Members, The Caribbean Tourism Organisation and The Caribbean Epidemiology Centre (CAREC). The Secretariat looks forward to the continued support of these Organizations in the preparation of future editions of this report.

Sincere thanks and appreciation are also extended to the staff of the Regional Statistics programme for their tireless efforts in compiling and preparing the report.

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ABBREVIATIONS & ACRONYMS

CARICOM Caribbean Community

CARICOM Member States

AG	Antigua and Barbuda
BS	The Bahamas
BB	Barbados
BZ	Belize
DM	Dominica
GD	Grenada
GY	Guyana
HT	Haiti
JM	Jamaica
MS	Montserrat
KN	St. Kitts and Nevis
LC	Saint Lucia
VC	St. Vincent and the Grenadines
SR	Suriname
TT	Trinidad and Tobago

Associate Members

AI	Anguilla
BM	Bermuda
KY	The Cayman Islands
TC	Turks and Caicos Islands
VG	The British Virgin Islands

BOD Biochemical Oxygen Demand

BOE Barrels of Energy

CO₂ Carbon dioxide

CTO Caribbean Tourism Organisation

FAO Food and Agriculture Organization of the United Nations

ABBREVIATIONS & ACRONYMS

FOB	Freight on Board
GIS	Geographic Information System
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
LPG	Liquefied Petroleum Gas
MDG	Millennium Development Goals
MPA	Marine Protected Area
OECD	Organisation for Economic Cooperation and Development
OECS	Organisation of Eastern Caribbean States
UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSD	United Nations Statistics Division
WC	Water Closet
WHO	World Health Organisation

NOTES AND SYMBOLS

NOTE

Unless otherwise stated, the charts refer to data shown in the accompanying table.

Blank cells refer to no data submitted

SYMBOLS

... Data not available

n/a Not applicable

0 Less than half of the unit specified

- Nil, magnitude zero

CHAPTER 1: POPULATION AND HOUSEHOLDS



The **household** is defined as follows: (a) a one-person household, defined as an arrangement in which one person makes provisions for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household; and (b) a multi-person household, defined as a group of two or more persons living together and who make common provision for food or other essentials for living. The indicators under this theme collect data on the main characteristics of dwelling units. There are six (6) Indicators covered in this section.

1. Number of Households by Type of Dwelling;
2. **Households by Type of Tenure (MDG)**
3. Number of Households by Type of Materials of Outer Walls;
4. Number of Households by Type of Material used for Roofing;
5. Households by Number of Bedrooms
6. Population by Size of Household

These indicators are used to measure the impact that changes in both the number and the size of households would have on the environment in terms of land use, energy and water consumption, and waste disposal. Issues such as overcrowding and the sturdiness of the dwelling which are highlighted in indicators such as the size of household and households by type of materials of outer walls can give an indication of the impact of the state of the environment on human condition.

The unavailability of up-to-date data on the housing stock and households presents a major challenge to the reporting of data on this theme since data are primarily collected every ten years in the Population and Housing Census.

CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.1 (a) Number of Households by Type of Dwelling: 2000 and 2010 Round of Censuses

Country	Year	Undivided Private House	Part of a private house	Flat/ Apartment/ Condominium	Townhouse	Double house/ duplex	Combined business & dwelling	Barracks	Other	Not stated	Total all H/holds
AG	2001	18,201	685	1,078		185	229	17	59		20,454
BS	2000	54,226	1,389	14,597	...	17,306	...	...	224		87,742
BB	2000	73,031	...	9,319	...	...	486	122	68		83,026
BZ	2000	43,490	2,735	1,412	...	2,041	1,375	650	242		51,945
	2010	65,426	4,555	4,233	239	1,031	2,260	1,285	358	104	79,491
DM	2001	18,036	2,255	1,066	20	484	377	57	64		22,359
GD	2001	30,219	1,802	507	58	109	674	27	81		33,477
GY	2002	129,648	25,950	13,582	1,474	5,317	4,259	446	1,393	540	182,609
JM	2001	607,903	...	125,878	...	...	5,115	...	9,430	...	748,326
MS	2001	1,814	113	93	-	181	23	-	105		2,329
KN	2001	12,457	1,556	906	14	169	310	164	104		15,680
LC	2001	37,746	4,383	2,922	236	236	942	188	471		47,124
	2010	47,352	4,430	5,198	134	432	750	122	502		58,920
VC	2001	25,805	2,920	664	9	30	451	262	121		30,262
SR	2004	103,221				7,122			6,842	2,972	120,157
TT	2000	235,000	2,968	41,234	2,043	11,585	3,925	448	6,043	625	303,871
AI	2001	2,710	192	571		125	125		7		3,730
BM	2000	6,717	...	17,655	...	...	306	...	470		25,148
	2010	6,280	...	18,533	...	...	234	...	1,876		26,923
KY	2010	9,282	574	6,309	2,895	1,377	91	n/a	51		20,579
VG	2001	2,578	1,083	4,298	35	31	175	48	138		8,386
TC	2001	3,486	61	2,699	102	220	...	424	262		7,254

Please note that the classification from the Population and Housing Census differs from the household survey for Jamaica

Types of Dwelling

An Undivided Private House is a single dwelling unit, which takes up the whole building. It may be occupied by one or more households.

Part of a Private House occurs when a household occupies only a part of a private house in what may be described as a physical subdivision or separation, even if entrance and exit is shared or not shared.

Flat/Apartment/Condominium are self-contained private dwellings in a single or multi-storied building. Each such dwelling must have separate access to the street, either through direct access or a communal staircase,

passage, veranda or corridor, etc. The rooms in this type of dwelling are usually side-by-side on the same floor.

Townhouse This type of dwelling is similar to a flat, apartment or condominium except that the rooms are usually on two floors – living quarters on the ground floor and bedrooms above. This is a self-contained unit (usually in blocks of units) with separate legal title to ownership.

CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.1 (b) Percentage distribution of Households by Type of Dwelling: 2000 and 2010 Round of Censuses*

Country	Year	Undivided Private House	Part of a private house	Flat/ Apartment / Condominium	Townhouse	Double house/ duplex	Combined business & dwelling	Barracks	Other	Not stated	Total all H/holds
AG	2001	89.0	3.3	5.3		0.9	1.1	0.1	0.3		100.0
BS	2000	61.8	1.6	16.6	...	19.7	...	...	0.3		100.0
BB	2000	88.0	...	11.2	...	...	0.6	0.1	0.1		100.0
BZ	2000	83.7	5.3	2.7	...	3.9	2.6	1.3	0.5		100.0
	2010	82.3	5.7	5.3	0.3	1.3	2.8	1.6	0.5	0.1	100.0
DM	2001	80.7	10.1	4.8	0.1	2.2	1.7	0.3	0.3		100.0
GD	2001	90.3	5.4	1.5	0.2	0.3	2.0	0.1	0.2		100.0
	2005	85.0	8.3	2.1		0.0	1.8	...	2.7	...	100.0
GY	2002	71.0	14.2	7.4	0.8	2.9	2.3	0.2	0.8	0.3	100.0
JM	2001	81.2	...	16.8	...	...	0.7	...	1.3	...	100.0
	2006	78.6	10.3	3.4	1.6	5.3	0.8	...	...	0.1	100.0
	2007	80.6	10.0	1.7	1.3	6.0	0.5	...	...	0.1	100.0
	2008	77.6	11.4	2.2	1.1	7.1	0.4	...	...	0.3	100.0
	2009	80.6	11.4	1.5	0.5	5.1	0.4	...	...	0.5	100.0
MS	2001	81.9	-	4.2	-	8.2	1.0	-	4.7		100.0
KN	2001	79.4	9.9	5.8	0.1	1.1	2.0	1.0	0.7		100.0
LC	2001	80.1	9.3	6.2	0.5	0.5	2.0	0.4	1.0		100.0
	2010	80.4	7.5	8.8	0.2	0.7	1.3	0.2	0.9		100.0
VC	2001	85.3	9.6	2.2	0.0	0.1	1.5	0.9	0.4		100.0
SR	2004	85.9				5.9			5.7	2.5	100.0
TT	2000	77.3	1.0	13.6	0.7	3.8	1.3	0.1	2.0	0.2	100.0
AI	2001	72.7	5.1	15.3		3.4	3.4		0.2		100.0
BM	2000	26.7	...	70.2	...	...	1.2	...	1.9		100.0
	2010	23.3	...	68.8	...	...	0.9	...	7.0		100.0
KY	2010	45.1	2.8	30.7	14.1	6.7	0.4	n/a	0.2		100.0
VG	2001	30.7	12.9	51.3	0.4	0.4	2.1	0.6	1.6		100.0
TC	2001	48.1	0.8	37.2	1.4	3.0	...	5.8	3.6		100.0

* Table includes survey data for Grenada and Jamaica for which no values are available.

Double house/duplex This is a dwelling that is joined to only one other dwelling – separated by a wall extending from ground to roof. There must be no other dwellings either above or below and the double house or duplex must be separated from all other structures by open space.

Combined business and dwelling In this type of dwelling, the household occupies part of the building for living purposes. The other portion(s) of the building is used for business such as groceries, garages, etc.

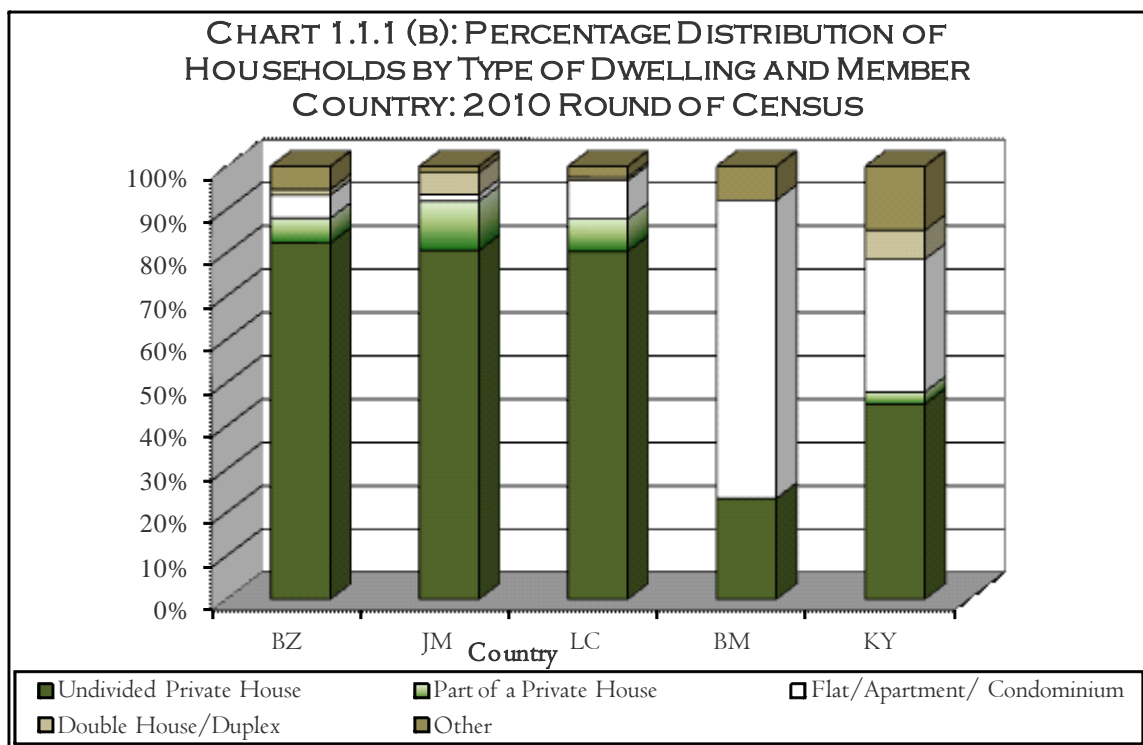
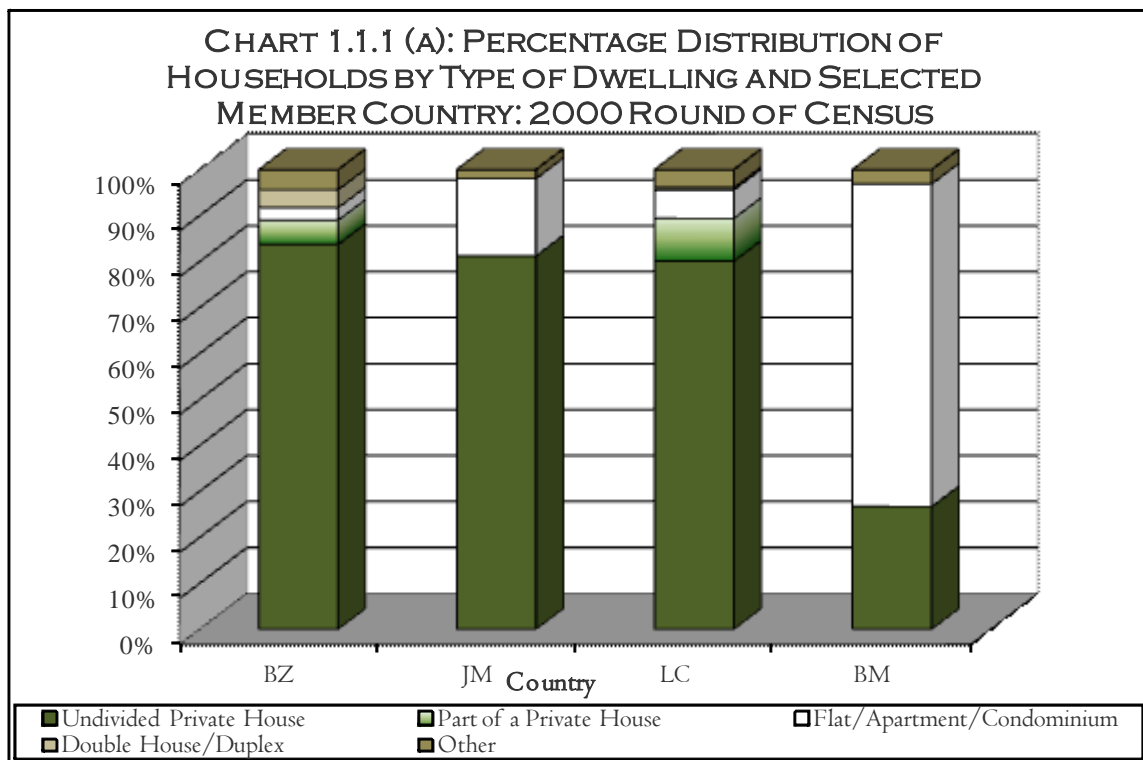
Barracks This is a room or division of a long building containing several independent private

dwellings with or without shared facilities.

Other This category is used for dwellings which do not fit into any of the categories listed above.

(Please refer to the Enumerator's Manual of the CARICOM Common Census Questionnaires of the 2010 Population and Housing Census)

CHAPTER 1: POPULATION AND HOUSEHOLDS



N.B Jamaica's data refers to 2009 Survey data

CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.2 (a) Number of Households by Type of Tenure: 2000 and 2010 Round of Censuses

Country	Year	Owned	Squatted	Rented-Private/ Government	Leased	Rent- Free	Other	Not Stated	Total all H/holds
AG	2001	12,891		6,709		556	281		20,437
BS	2000	48,660		32,126		6,738	218		87,742
	2010	60,543		35,844	444	5,665	262		102,758
BB	2000	61,904		18,286		2,203	633		83,026
BZ	2000	32,519		12,490		6,353	583		51,945
	2010	51,066		17,734	1,393	8,795	273	230	79,491
DM	2001	15,918		4,232		1,880	329		22,359
GD	2001	27,383	142	3,737	42	42	543		31,889
GY	2002	116,497	4,218	26,977	965	31,797	386	1,769	182,609
JM	2001	426,445		173,860		118,454	29,567		748,326
MS	2001	849	11	1,046	16	268	90	49	2,329
KN	2001	9,677	101	4,215	13	1,161	129	384	15,680
LC	2001	35,202		8,529		2,545	848		47,124
	2010	43,763		10,894		3,118	1,145		58,920
VC	2001	22,906	131	3,899	27	2,733	482	84	30,262
SR	2004	78,748		18,321	794		18,901	3,393	120,157
TT	2000	230,291	1,454	46,145	1,752	20,994	1,391	1,844	303,871
AI	2001	2,504	...	1,120	...	85	21	...	3,730
BM	2000	10,863	...	12,854	...	1,006	425	...	25,148
	2010	12,238	...	11,719	...	1,004	856	...	25,817
KY	2010	4,343		11,133		702		75	16,253
VG	2001	2,944	2	4,879	15	386	57	103	8,386
TC	2001	2,583	7	4,178	13	464	9	...	7,254

Types of Tenure

Owned: The category applies when the head or **any other member** of the household owns the dwelling outright or is in the process of buying the dwelling.

Squatted This applies when the household is found occupying a dwelling unit without the permission of the owner or without any legal rights to the property.

Rented – Private/Government This applies when a member

of the household rents the dwelling from an individual or a private company or from the Government or a Government Agency.

Leased A lease differs from a rental since it occurs by agreed contract that stipulates, in advance, the total rental sum for a fixed duration. This total sum may be paid in advance or by installments.

Rent-free occurs when no member of the household pays rent for the occupancy of the dwelling. This situation may

(continued on page 6)

CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.2 (b) Percentage Distribution of Households by Type of Tenure: 2000 and 2010 Round of Censuses*

Country	Year	Owned	Squatted	Rented-Private/ Government	Leased	Rent- Free	Other	Not Stated	Total all H/holds
AG	2001	63.1		32.8		2.7	1.4		100
BS	2000	55.5		36.6		7.7	0.2		100
	2010	58.9		34.9	0.4	5.5	0.3		100
BB	2000	74.6		22.0		2.7	0.8		100
BZ	2000	62.6		24.0		12.2	1.1		100
	2010	64.2		22.3	1.8	11.1	0.3	0.3	100
DM	2001	71.2		18.9		8.4	1.5		100
GD	2001	85.9	0.4	11.7	0.1	0.1	1.7		100
	2005	82.7		10.9		5.8	0.6		100
GY	2002	63.8	2.3	14.8	0.5	17.4	0.2	1	100
JM	2001	57.0		23.2		15.8	4.0		100
	2006	60.5		20.7		17.6	1.2		100
	2007	59.8		20.7		19.0	0.5		100
	2008	62.7		19.1		17.1	1.1		100
	2009	63.0		17.5		18.7	0.7		100
MS	2001	36.5	0.5	44.9	0.7	11.5	3.9	2.1	100
KN	2001	61.7	0.6	26.9	0.1	7.4	0.8	2.4	100
LC	2001	74.7		18.1		5.4	1.8		100
	2010	74.3		18.5		5.3	1.9		100
VC	2001	75.7	0.4	12.9	0.1	9.0	1.6	0.3	100
SR	2004	65.5		15.2	0.7		15.7	2.8	100
	2008	66.0	...	15.1	...	...	...	18.9	100
TT	2000	75.8	0.5	15.2	0.6	6.9	0.5	0.6	100
AI	2001	67.1	...	30.0	...	2.3	0.6	...	100
BM	2000	43.2	...	51.1	...	4.0	1.7	...	100
	2010	47.4		45.4		3.9	3.3		100
KY	2010	26.7		68.5		4.3		0.5	100
VG	2001	35.1	0.0	58.2	0.2	4.6	0.7	1.2	100
TC	2001	35.6	0.1	57.6	0.2	6.4	0.1	...	100

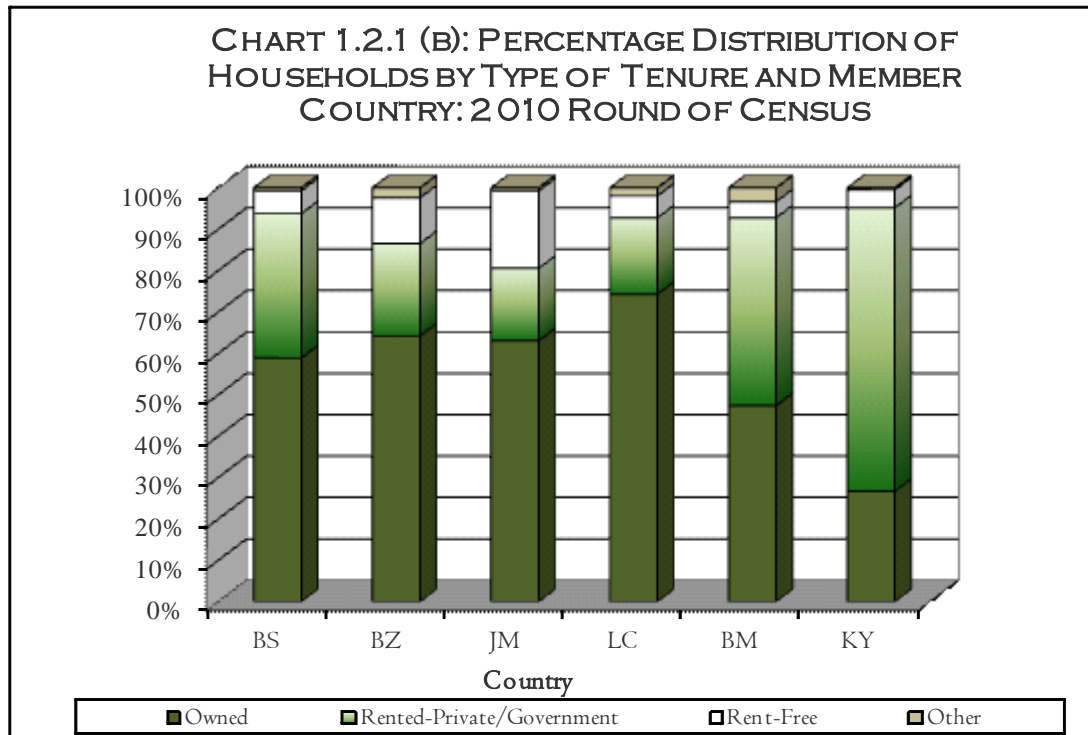
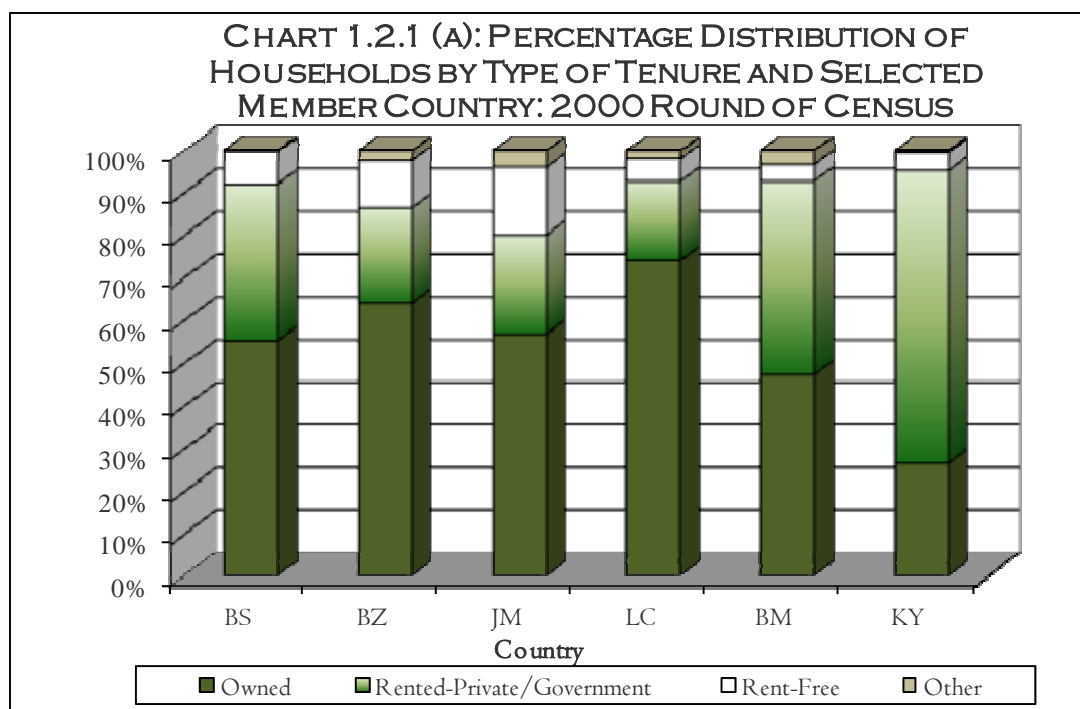
*Table includes survey data for Grenada, Jamaica and Suriname for which no values are available.

apply to households occupying dwellings rent free, which are owned by relatives or even friends who are not members of the household. Other rent-free arrangements include government and private employees who occupy dwellings owned by their employers and pay no rent.

Other When conditions of occupancy are different from all the categories stated above.

(Please refer to the Enumerator's Manual of the CARICOM Common Census Questionnaires of the 2010 Population and Housing Census)

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N.B Jamaica's data refers to 2009 Survey data

Other includes Double House/Duplex, Combined Business & Dwelling, Barracks, Other and Not Stated

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Table 1.3 (a) Number of Households by Type of Materials of Outer Walls: 2000 and 2010 Round of Censuses

Country	Year	Wood	Concrete	Wood & Concrete	Stone	Brick/Concrete block	Adobe	Wood/Concrete block/Galvanize/Stucco	Make-shift	Other	Not stated/Don't Know	Total all H/holds
AG	2001	9,025	6,735	4,445	36	24				172		20,437
BS	2000	13,375	66,710	2,537	1,772	65	2,952	...	...	331		87,742
BB	2000	22,358	1,554	1,797	1,518	36,819		18,842	...	138		83,026
BZ	2000	22,923	20,924	2,231	...	29	...		33	5,805		51,945
	2010	30,532	40,170	2,225	...	204		2,605	228	3,375	153	79,492
DM	2001	8,026	10,754	3,300	29	19	1		185	45		22,359
GD	2001	13,762	13,696	5,851	22	36	0		110			33,477
GY	2002	112,557	27,067	34,666	510	761	3,325		51	3,477	195	182,609
JM	2001	140,309	515,013	56,764	5,431	11,815	2,823	4,102		12,069		748,326
MS	2001	591	1,286	217	0	3	0		1	228	3	2,329
KN	2001	2,890	10,349	2,134	53	3			75	176		15,680
LC	2001	18,802	19,321	8,247	47	141	94		0	472		47,124
	2010	11,324	30,069	6,917	37	32	1		80	10,461		58,921
VC	2001	5,820	21,667	2,318	94	17	91		205	50		30,262
TT	2000	36,292		54,936		203,505	1,279	6,013		686	1,160	303,871
AI	2001	101	3,482	98	20		...		...	29		3,730
BM	2010					26,896				27		26,923
VG	2001	732	6,947	509	12	5	...		36	145		8,386
TC	2001	1,909	3,990	819	68		...	367	8	93		7,254

Concept and Definition

The number of households by type of materials of outer walls refers to the construction material of external (outer) walls of the building in which the sets of living quarters are located. If the walls are constructed of more than one type of material, the predominant type of material should be reported. The types distinguished (brick, concrete, wood, adobe and so on) will depend upon the materials most frequently used in the country concerned and on their significance from the point of view of permanency of construction or assessment of durability. *(Please refer to the United Nations Principles and Recommendations for Population and Housing Censuses, Revision 2 (2008) para. 5.525)*

Types of Materials

Wood: This is applicable where major portion of the outside walls is of wood, wood boards, plywood, etc

Concrete: This is applicable if the major portion of the outside walls is of poured concrete.

Wood & Concrete: if the major portions of the outside walls are of wood, wood boards, plywood, etc. *and* approximately equally of poured concrete .

Stone: This applies to buildings where the major portion of the outside walls is of stones, either cut or in their natural state.

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Table 1.3 (b) Percentage Distribution of Households by Type of Materials of Outer Walls: 2000 and 2010 Round of Censuses*

Country	Year	Wood	Concrete	Wood & Concrete	Stone	Brick/Concrete block	Adobe	Wood/Concrete block/Galvanize/Stucco	Make-shift	Other	Not stated/Don't Know	Total all H/holds
AG	2001	44.2	33.0	21.7	0.2	0.1				0.8		100.0
BS	2000	15.2	76.0	2.9	2.0	0.1	3.4	...	...	0.4		100.0
BB	2000	26.9	1.9	2.2	1.8	44.3		22.7	...	0.2		100.0
BZ	2000	44.1	40.3	4.3	...	0.1	...		0.1	11.2		100.0
	2010	38.4	50.5	2.8	...	0.3	...	3.3	0.3	4.2	0.2	100.0
DM	2001	35.9	48.1	14.8	0.1	0.1	0.0		0.8	0.2		100.0
GD	2001	41.1	40.9	17.5	0.1	0.1	0.0		0.3			100.0
	2005	35.5	32.1	15.0		10.0		0.5	0.1	6.8		100.0
GY	2002	61.6	14.8	19.0	0.3	0.4	1.8		0.0	1.9	0.1	100.0
JM	2001	18.7	68.8	7.6	0.7	1.6	0.4	0.5		1.6		100.0
	2006	23.9	65.0	9.1	0.8	0.4	0.3	...	...	...	0.5	100.0
	2007	22.8	66.5	8.5	0.4	0.4	0.4	...	...	...	1.0	100.0
	2008	20.8	72.0	3.8	1.1	0.3	0.1	...	...	...	1.9	100.0
	2009	21.8	70.8	5.6	0.6	0.3	0.3	...	...	...	0.6	100.0
MS	2001	25.4	55.2	9.3	0.0	0.1	0.0		0.0	9.8	0.1	100.0
KN	2001	18.4	66.0	13.6	0.3	0.0			0.5	1.1		100.0
LC	2001	39.9	41.0	17.5	0.1	0.3	0.2		0.0	1.0		100.0
	2010	31.5	51.0	16.2	0.1	0.1	0.0		0.1	1.0		100.0
VC	2001	19.2	71.6	7.7	0.3	0.1	0.3		0.7	0.2		100.0
SR	2008	22.9	...	35.7	...	...	...	38.5	...	3.0	...	100.0
TT	2000	11.9		18.1		67.0	0.4	2.0		0.2	0.4	100.0
AI	2001	2.7	93.4	2.6	0.5		...		...	0.8		100.0
BM	2010					99.9				0.1		100.0
VG	2001	8.7	82.8	6.1	0.1	0.1	...		0.4	1.7		100.0
TC	2001	26.3	55.0	11.3	0.9		...	5.1	0.1	1.3		100.0

* Table includes survey data for Grenada and Jamaica for which no values are available.

Brick/Concrete Block: This applies to buildings where the major portion of the outside walls is of concrete blocks. The walls may be covered with plaster cement.

Adobe is unburnt sun-dried bricks or the clay from which such bricks are made.

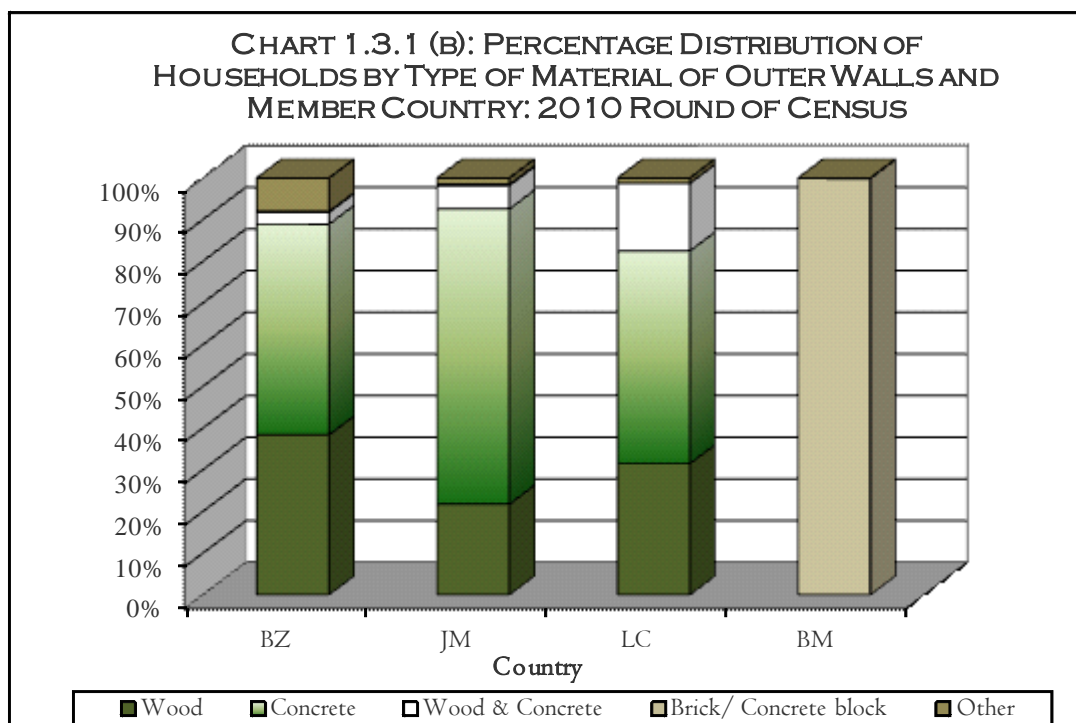
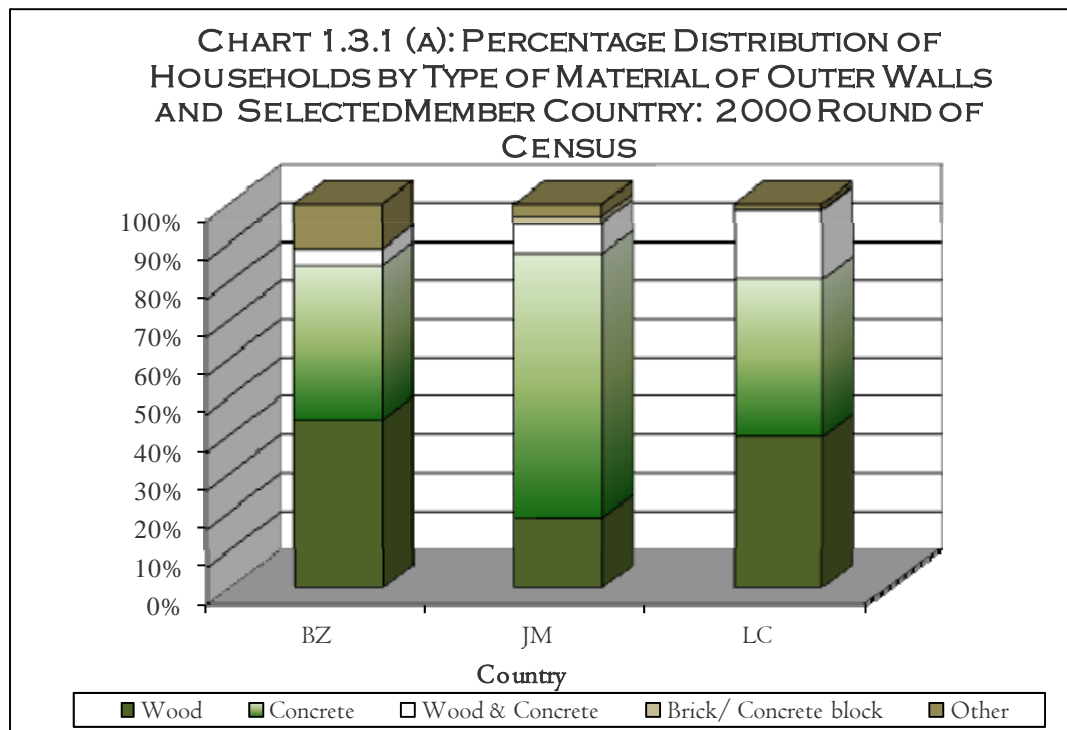
Wood/Concrete Block/Galvanize/Stucco: This applies where the walls are made of wood, concrete block, galvanize and Stucco.

Makeshift includes any material that is not normally used for housing e.g. galvanize, cardboard, etc. Some persons may use an old car/truck, for example, to provide shelter or live under a bridge or other unconventional dwelling structure.

Other: This includes types of material of construction of outer walls not previously described.

(Please refer to the Enumerator's Manual of the CARICOM Common Census Questionnaires of the 2010 Population and Housing Census)

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N.B Jamaica's data refers to 2009 Survey data

Other includes Stone, Adobe, Wood/ Concrete block/ Galvanize/ Stucco, Make-shift, Other and Not stated/Don't Know

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Table 1.4 (a) Number of Households by Type of Material used for Roofing: 2000 and 2010 Round of Censuses

Country	Year	Sheet metal (Zinc)	Shingle - Asphalt	Shingle - Wood	Shingle - other	Tile	Concrete	Make-shift	Thatched/Troole Palm	Other	Not stated	Total all H/holds
AG	2001	14,608	5,146	101	61	98	223	...		200		20,437
BB	2000	73,539	4,997	464	...	1,124	1,121	...		1,781		83,026
BZ	2000	41,617	...	...	204	...	4,297	...		5,827		51,945
	2010	64,381	651	264	0	192	9,960	46	3,110	708	180	79,492
DM	2001	20,097	554	84	40	25	1,468	10		81		22,359
GD	2001	32,278	578	116	85	135	235	12		38		33,477
GY	2002	164,873	1,104	1,755	1,839	1,953	325	2,522	7,014	1,199	25	182,609
JM	2001	583,434	...	10,054	7,902	2,626	128,535	...		15,775		748,326
MS	2001	1,297	594	64	6	0	299	0		63	6	2,329
KN	2001	10,818	3,400	201	40	40	928	14		80	159	15,680
LC	2001	44,155	1,272	188	47	47	895	47		473		47,124
	2010	55,541	688	219	46	74	1,661	11		681		58,921
VC	2001	27,175	975	150	67	69	1,550	31		192	53	30,262
AI	2001	716	25	...	63	10	2,806	8		70	32	3,730
BM	2010						26,896			27		26,923
VG	2001	3,928	182	319	23	53	3,600	1		258	22	8,386
TC	2001	1,875	3,830	740	282	198	284	45		0.0		7,254

Types of Materials

The type of material used for roofing refers to the construction material of the roof.

Sheet metal (zinc, aluminum, galvanized): the major portion of the roof is of metal such as zinc, steel, tin, etc

Shingle (asphalt): the major portion of the roof is of metal such as zinc, steel, tin, etc

Shingle (wood): the major portion of the roof is of wood, wood boards, plywood, etc

Shingle – other: This includes any other type of shingle.

Tile: the major portion of the roof is of tile.

Concrete: the major portion of the roof is of poured concrete.

Thatch/Troole Palm: the major portion of the roof is of palm or pandanus thatch, palm leaves, straw, etc.

Makeshift

Other: Any other material used not mentioned above.

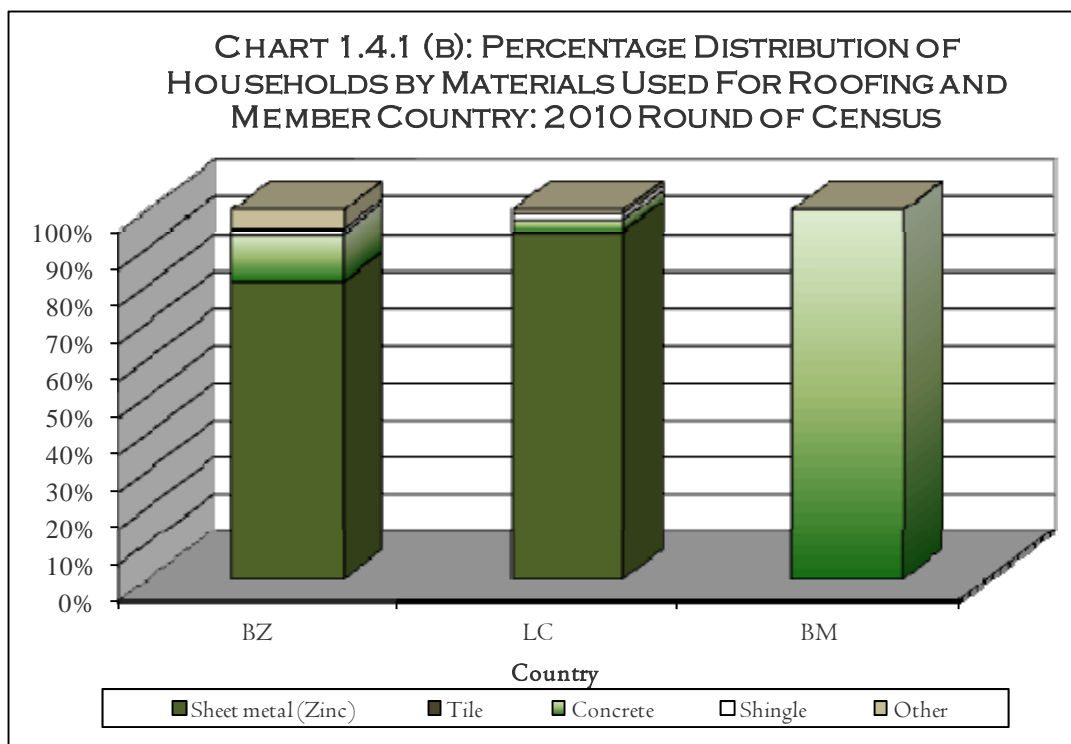
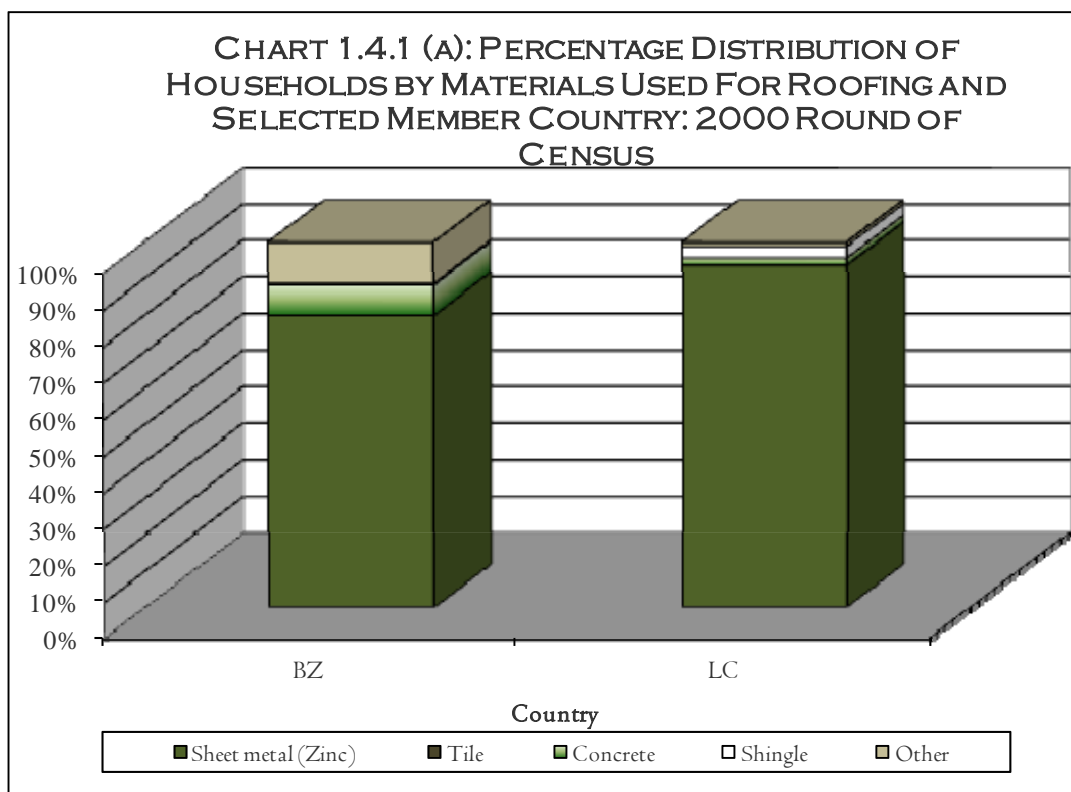
(Please refer to the Enumerator's Manual of the CARICOM Common Census Questionnaires of the 2010 Population and Housing Census)

CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.4 (b) Percentage Distribution of Households by Type of Material used for Roofing: 2000 and 2010 Round of Censuses

Country	Year	Sheet metal (Zinc)	Shingle - Asphalt	Shingle - Wood	Shingle - other	Tile	Concrete	Make-shift	Thatched/ Troole Palm	Other	Not stated	Total all H/holds
AG	2001	71.5	25.2	0.5	0.3	0.5	1.1	...		1.0		100.0
BB	2000	88.6	6.0	0.6	...	1.4	1.4	...		2.1		100.0
BZ	2000	80.1	...	...	0.4	...	8.3	...		11.2		100.0
	2010	81.0	0.8	0.3	0.0	0.2	12.5	0.1	3.9	0.9	0.2	100.0
DM	2001	89.9	2.5	0.4	0.2	0.1	6.6	0.0		0.4		100.0
GD	2001	96.4	1.7	0.3	0.3	0.4	0.7	0.0		0.1		100.0
	2005	94.7		1.3		0.2	1.6		0.0	2.2		100.0
GY	2002	90.3	0.6	1.0	1.0	1.1	0.2	1.4	3.8	0.7	0.0	100.0
JM	2001	78.0	...	1.3	1.1	0.4	17.2	...		2.1		100.0
MS	2001	55.7	25.5	2.7	0.3	0.0	12.8	0.0		2.7	0.3	100.0
KN	2001	69.0	21.7	1.3	0.3	0.3	5.9	0.1		0.5	1.0	100.0
LC	2001	93.7	2.7	0.4	0.1	0.1	1.9	0.1		1.0		100.0
	2010	94.3	1.2	0.4	0.1	0.1	2.8	0.0		1.2		100.0
VC	2001	89.8	3.2	0.5	0.2	0.2	5.1	0.1		0.6	0.2	100.0
AI	2001	19.2	0.7	...	1.7	0.3	75.2	0.2		1.9	0.9	100.0
BM	2010						99.9			0.1		100.0
VG	2001	46.8	2.2	3.8	0.3	0.6	42.9	0.0		3.1	0.3	100.0
TC	2001	25.8	52.8	10.2	3.9	2.7	3.9	0.6		0.0		100.0

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CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.5(a) - Households by Number of Bedrooms: 2000 and 2010 Round of Censuses

Country	Year	No bedroom	One bedroom	Two bedrooms	Three bedrooms	More than three bedrooms	Not Stated/ Don't Know	Total all H/holds	Average number of bedrooms per household	Average size of the household	Average number of persons per bedroom
AG	2001		2,888	7,752	7,175	2,393	229	20,437	...	...	...
BS	2000	...	5,525	12,188	23,109	46,920	...	87,742	...	...	...
	2010	5,161	13,591	34,666	34,849	14,491	0	102,758	...	...	...
BB	2000	...	9,300	24,998	39,929	8,799	...	83,026	...	3.2	...
BZ	2000	2,451	12,223	18,969	12,920	5,382	...	51,945	...	4.5	...
	2010	280	21,633	27,941	21,049	8,379	207	79,489	...	...	...
DM	2001	...	1,233	5,396	6,150	9,580	...	22,359	...	3.1	...
GD	2001	1,069	5,448	14,526	9,687	2,747	...	33,477	2.0	3.3	1.7
GY	2002	...	54,033	68,600	46,291	13,685		182,609			
JM	2001	...	266,843	262,486	132,374	86,623		748,326	2.1	3.5	1.5
MS	2001	...	446	929	579	173	202	2,329	...	...	...
KN	2001	...	991	2,831	3,930	7,928		15,680			
LC	2001	1,367	13,195	16,493	10,085	5,984	...	47,124	2.0	3.2	1.6
	2010		11,488	20,908	18,276	8,239	...	58,911		2.8	1.1
VC	2001		1,855	5,548	8,718	14,141	...	30,262	2.7	3.5	1.3
SR	2004		5,472	10,247	12,583	87,973	3,882	120,157		3.9	
TT	2000	3,699	43,447	96,685	111,525	45,009	3,506	303,871	...	3.7	...
AI	2001	...	594	1,156	1,151	623	206	3,730	...	3.1	...
BM	2000	1,188	6,385	8,964	6,866	1,319	41	24,763	2.0	2.5	1.2
	2010		6,891	8,944	7,473	1,645	141	25,094		2.4	
KY	2010		11,488	20,908	18,276	8,239		58,911			
VG	2001	0	997	2,033	2,645	2,711	0	8,386	...	...
TC	2001	791	2,724	1,722	1,137	880	...	7,254	1.9	2.7	1.5
CARICOM	2000 Round	10,565	433,599	561,523	436,854	342,870	8,066	1,793,477			

Concept and definition

A room is defined as a space in a dwelling unit enclosed by walls reaching from the floor to the ceiling or roof covering, or to a height of at least two meters, of an area large enough to hold a bed for an adult, that is, at least four square meters.

Bedrooms are rooms used **mainly** for sleeping. There must be some **permanency** about the walls enclosing the bedrooms. A room used for other activities by day and sleeping by night is not a bedroom except in the case of one-room dwelling units. In such cases it must be recorded as

having **ONE** room and **ONE** bedroom. A household can never have more bedrooms than rooms.

(Please refer to the Enumerator's Manual of the CARICOM Common Census Questionnaires of the 2010 Population and Housing Census)

Average Household Size is the estimated number of persons forming a household. It is the ratio of the total population to the total number of households.

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Table 1.5(b) - Percentage distribution of Households by Number of Bedrooms: 2000 and 2010 Round of Censuses

Country	Year	No bedroom	One bedroom	Two bedrooms	Three bedrooms	More than three bedrooms	Not Stated/ Don't Know	Total all H/holds	Average number of bedrooms per household	Average size of the household	Average number of persons per bedroom
AG	2001		14.1	37.9	35.1	11.7	1.1	100.0	...	...	...
BS	2000	...	6.3	13.9	26.3	53.5	...	100.0	...	...	...
	2010	5.0	13.2	33.7	33.9	14.1	...	100.0	...	...	...
BB	2000	...	11.2	30.1	48.1	10.6	...	100.0	...	3.2	...
BZ	2000	4.7	23.5	36.5	24.9	10.4	...	100.0	...	4.5	...
	2010	0.4	27.2	35.2	26.5	10.5	0.3	100.0	...	...	...
DM	2001	...	5.5	24.1	27.5	42.8	...	100.0	...	3.1	...
GD	2001	3.2	16.3	43.4	28.9	8.2	...	100.0	2.0	3.3	1.7
GY	2002	0.0	29.6	37.6	25.3	7.5	0.0	100.0	...	...	...
JM	2001	...	35.7	35.1	17.7	11.6	...	100.0	2.1	3.2	1.5
MS	2001	...	19.1	39.9	24.9	7.4	8.7	100.0	...	...	...
KN	2001	0.0	6.3	18.1	25.1	50.6	0.0	100.0	...	...	...
LC	2001	2.9	28.0	35.0	21.4	12.7	...	100.0	2.0	3.2	1.6
	2010		19.5	35.5	31.0	14.0	...	100.0	...	...	...
VC	2001		6.1	18.3	28.8	46.7	...	100.0	2.7	3.5	1.3
SR	2004		4.6	8.5	10.5	73.2	3.2	100.0	...	...	...
TT	2000	1.2	14.3	31.8	36.7	14.8	1.2	100.0	...	3.7	...
AI	2001	...	15.9	31.0	30.9	16.7	5.5	100.0	...	3.1	...
BM	2000	4.8	25.8	36.2	27.7	5.3	0.2	100.0	2.0	2.5	1.2
	2010		27.5	35.6	29.8	6.6	0.6	100.0	2.1	2.4	1.1
KY	2010		19.5	35.5	31.0	14.0	0.0	100.0	...	...	...
VG	2001	0.0	11.9	24.2	31.5	32.3	0.0	100.0	...	...	...
TC	2001	10.9	37.6	23.7	15.7	12.1	0.0	100.0	1.9	2.7	1.5
CARICOM	2000 Round	0.6	24.2	31.3	24.4	19.1	0.4	100.0	...	...	...

CHAPTER 1: POPULATION AND HOUSEHOLDS

CHART 1.5.1 (A): PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY NUMBER OF BEDROOMS AND SELECTED MEMBER COUNTRY: 2000 ROUND OF CENSUS

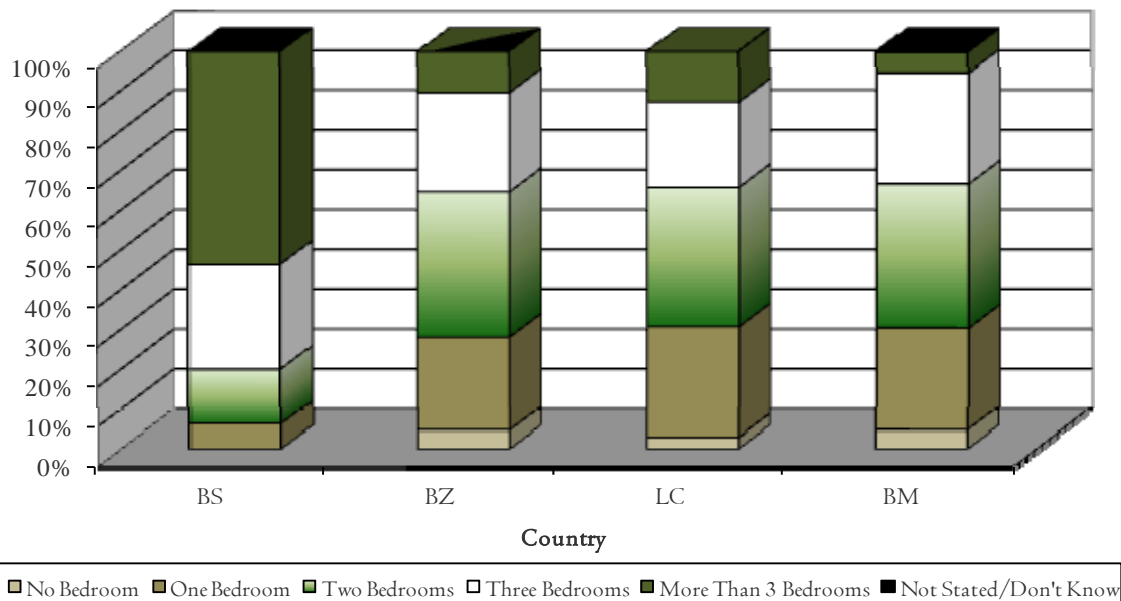
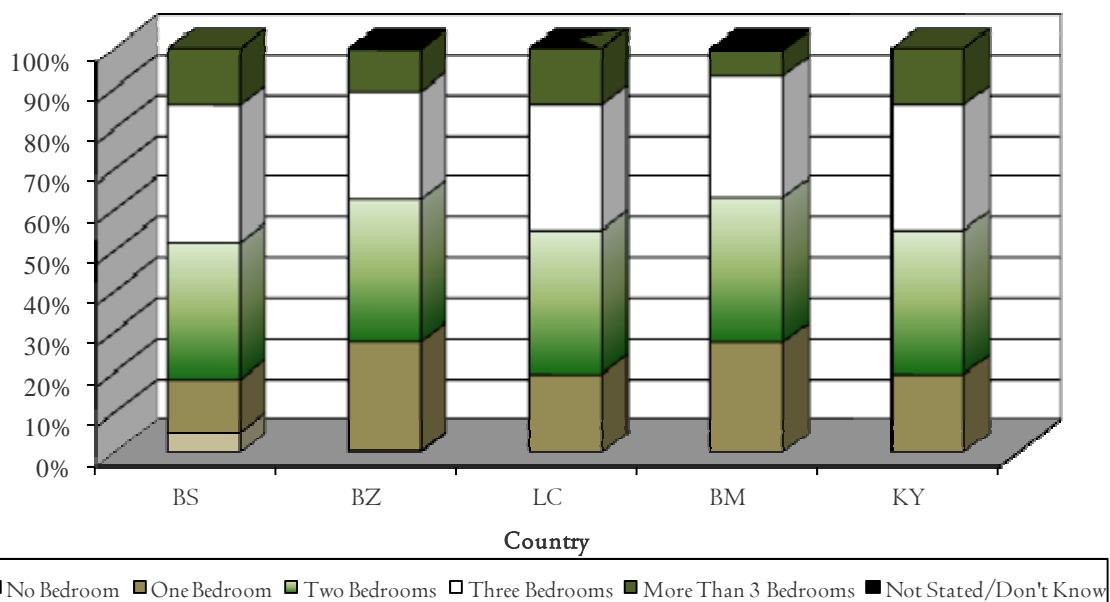


CHART 1.5.1 (B): PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY NUMBER OF BEDROOMS AND MEMBER COUNTRY: 2010 ROUND OF CENSUS



CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.6(a) Number of Households by Size of Household: 2000 and 2010 Round of Censuses

Country	Year	Size of household					Total H/holds	Average size of household
		One person	Two person	Three person	Four person	Five or more persons		
AG	2001	5,041	4,081	3,805	3,150	4,360	20,437	
BS	2000	18,407	17,543	14,769	13,846	23,177	87,742	...
	2010	18,220	19,772	21,668	19,504	23,594	102,758	...
BB	2000	20,512	19,065	15,375	13,104	14,970	83,026	3.2
BZ	2000	6,219	6,724	7,676	8,411	22,915	51,945	4.5
	2010	11,404	12,095	13,002	13,928	29,062	79,491	
DM	2001	6,483	4,388	3,398	3,045	5,045	22,359	3.1
GY	2002	22,409	26,491	30,743	34,871	68,095	182,609	
JM	2001	169,226	136,069	125,221	111,766	206,044	748,326	3.5
MS	2001	744	447	389	334	415	2,329	
KN	2001	5,214	2,917	2,287	2,039	3,223	15,680	
LC	2001	10,563	8,937	8,688	6,916	11,927	47,031	...
	2010	15,997	12,953	10,879	8,656	10,434	58,919	2.8
VC	2001	7,354	5,027	4,546	4,509	8,855	30,291	
SR	2004	18,479	20,032	20,429	22,353	42,170	123,463	3.9
TT	2000	46,259	52,478	54,734	59,495	90,905	303,871	3.7
AI	2001	1,009	792	598	546	785	3,730	3.1
BM	2000	7,358	7,539	4,489	3,683	2,079	25,148	2.5
	2010	7,341	7,902	4,498	3,536	1,817	25,094	2.4
KY	2010	7,366	6,927	3,648	2,763	2,056	22,760	
VG	2001	3,500	1,312	1,121	856	1,597	8,386	
TC	2001	2,153	1,854	1,281	818	1,148	7,254	2.7

In the context of household, size refers to the number of persons residing in private households.

$$\text{Average Household Size} = \frac{\text{Total Population}}{\text{Total Number of Households}}$$

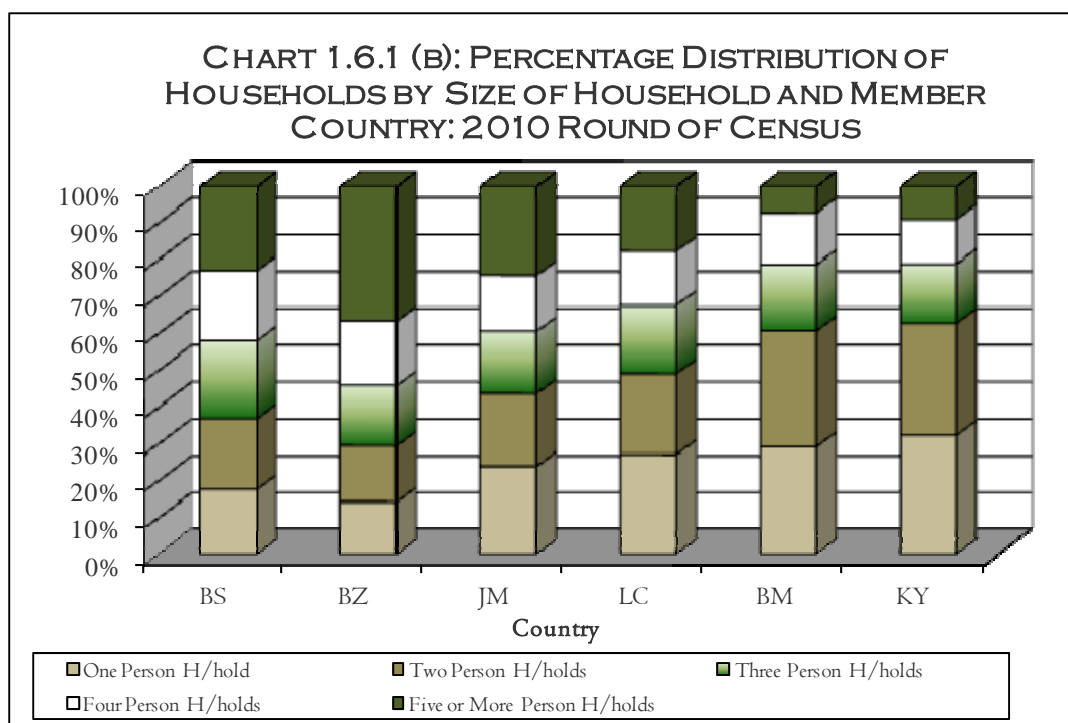
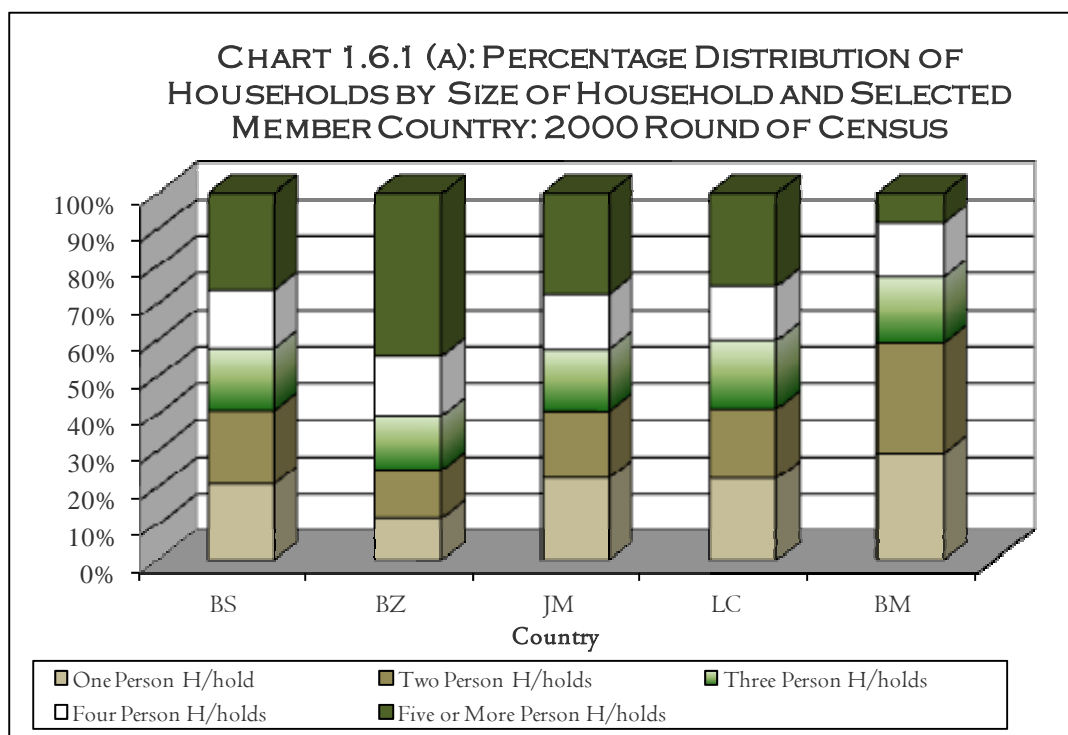
CHAPTER 1: POPULATION AND HOUSEHOLDS

Table 1.6(b) - Percentage distribution of Households by Size of Household: 2000 and 2010 Round of Censuses*

Country	Year	Size of household					Total H/holds	Average size of household
		One person	Two person	Three person	Four person	Five or more persons		
AG	2001	24.7	20.0	18.6	15.4	21.3	100.0	
BS	2000	21.0	20.0	16.8	15.8	26.4	100.0	...
	2010	17.7	19.2	21.1	19.0	23.0	100.0	...
BB	2000	24.7	23.0	18.5	15.8	18.0	100.0	3.2
BZ	2000	12.0	12.9	14.8	16.2	44.1	100.0	4.5
	2010	14.3	15.2	16.4	17.5	36.6	100.0	
DM	2001	29.0	19.6	15.2	13.6	22.6	100.0	3.1
GY	2002	12.3	14.5	16.8	19.1	37.3	100.0	
JM	2001	22.6	18.2	16.7	14.9	27.5	100.0	3.5
	2005	24.2	20.9	16.6	13.6	24.7	100.0	3.3
	2006	24.1	19.7	18.1	13.7	24.4	100.0	3.3
	2007	23.8	18.4	18.3	13.5	26.0	100.0	3.3
	2008	24.6	20.7	17.0	15.0	22.7	100.0	3.2
	2009	24.0	19.7	16.9	15.2	24.2	100.0	3.2
MS	2001	31.9	19.2	16.7	14.3	17.8	100.0	
KN	2001	33.3	18.6	14.6	13.0	20.6	100.0	
LC	2001	22.5	19.0	18.5	14.7	25.4	100.0	3.2
	2010	27.2	22.0	18.5	14.7	17.7	100.0	2.8
VC	2001	24.3	16.6	15.0	14.9	29.2	100.0	
SR	2004	15.0	16.2	16.5	18.1	34.2	100.0	3.9
TT	2000	15.2	17.3	18.0	19.6	29.9	100.0	3.7
AI	2001	27.1	21.2	16.0	14.6	21.0	100.0	3.1
BM	2000	29.3	30.0	17.9	14.6	8.3	100.0	2.5
	2010	29.3	31.5	17.9	14.1	7.2	100.0	2.4
KY	2010	32.4	30.4	16.0	12.1	9.0	100.0	
VG	2001	41.7	15.6	13.4	10.2	19.0	100.0	
TC	2001	29.7	25.6	17.7	11.3	15.8	100.0	2.7

* Table includes survey data for Jamaica for which no values are available.

CHAPTER 1: POPULATION AND HOUSEHOLDS



N.B Jamaica's data refers to 2009 Survey data

CHAPTER 1: POPULATION AND HOUSEHOLDS

1.1.1 (a) Sources of Data for Tables 1.1(a) Number of Households by Type of Dwelling and Table 1.1(b) -Percentage distribution of Households by Type of Dwelling

Country	Year	Data Source
ALL COUNTRIES	2000 2010	2000 Round of Population and Housing Census data 2010 Round of Population and Housing Census data (where available)
<i>ADDITIONAL SOURCES:</i>		
GRENADA	2005	Grenada Core Welfare Indicators Survey (CWIQ) 2005
JAMAICA	2006-2009	Jamaica Survey of Living Conditions

1.1.1 (b) Notes for Table 1.1(a) Number of Households by Type of Dwelling and Table 1.1(b) - Percentage distribution of Households by Type of Dwelling

Country	Notes
GUYANA	Not Stated includes Don't Know
JAMAICA	(1) Part of a private house included in Undivided private house; (2) Townhouse and Double house/duplex included in Flat/apartment / condominium
MONTSERRAT	Other includes Not Stated. Other types of dwelling include shelters.
SURINAME	Undivided private house refers to Single dwelling Unit or Separate, detached House Double house/duplex refers to Two unit dwellings Other includes One room dwelling and Part of a multi dwelling
TRINIDAD AND TOBAGO	Undivided private house refers to separate house. Out-room, Wafda and Group Dwelling are included in Other. Other private dwelling is included in Part of a private house Out-Room, Wafda and Group Dwelling are included in Other Other Private Dwelling is included in Part of a Private House
BERMUDA	2000 Other refers to Not Stated and includes Group Dwellings. 2000 Combined business & dwelling refers to residential/commercial premises. 2010 Flat/apartment / condominium Includes 8,870 two-apartments, 4,639 three-apartments and 5,024 four or more apartments. 2010 Total Includes 1,106 households for which there is no data. Also, 696 group dwellings and 27 boats.
TURKS AND CAICOS	Other includes Not Stated. Outroom, Wafda, Other Private Dwelling and Group dwelling are included in Other. Townhouse = townhouse/condominium. Flat/apartment/ condominium = apartment. Out-Room, Wafda, Other Private Dwelling and Group Dwellings are included in Other Townhouse = townhouse/condominium Flat/apartment/condominium = apartment
ALL OTHER COUNTRIES	Other includes Not Stated

CHAPTER 1: POPULATION AND HOUSEHOLDS

1.1.2 (a): Sources of Data for Table 1.2(a) - Number of Households by Type of Tenure and Table 1.2 (b) - Percentage Distribution of Households by Type of Tenure

Country	Year	Data Source
ALL COUNTRIES	2000 2010	2000 Round of Population and Housing Census data 2010 Round of Population and Housing Census
<i>ADDITIONAL SOURCES:</i>		
GRENADA	2005	Grenada Core Welfare Indicators Survey (CWIQ) 2005
JAMAICA	2006-2009	Jamaica Survey of Living Conditions
SURINAME	2008	Household Budget Survey_2008

1.1.2 (b): Notes for Table 1.2(a) - Number of Households by Type of Tenure and Table 1.2 (b) Percentage Distribution of Households by Type of Tenure

Country	Notes
DOMINICA	Other includes Not Stated
GRENADA	Other refers to Temporary Dwelling
GUYANA	Not Stated includes Don't Know
MONTSERRAT	Other types of tenure include shelters.
ST VINCENT AND THE GRENADINES	Not Stated includes Don't Know
SURINAME	The HBS_2008 was held in 6 of the 10 districts of Suriname; Not Stated includes "Other"
TRINIDAD AND TOBAGO	Not Stated includes Don't Know
ANGUILLA	Other includes Not Stated
BERMUDA	Other Includes 385 Group Dwellings
BRITISH VIRGIN ISLANDS	Not Stated includes Don't Know
TURKS AND CAICOS	Lease includes Lease-Private and Lease-Government. Rent = rented private + rented government

CHAPTER 1: POPULATION AND HOUSEHOLDS

1.1.3 (a): Sources of Data for Table 1.3(a) - Number of Households by Type of Materials of Outer Walls and Table 1.3(b) - Percentage Distribution of Households by Type of Materials of Outer Walls

Country	Year	Data Source
ALL COUNTRIES	2000	2000 Round of Population and Housing Census data
	2010	2010 Round of Population and Housing Census (where available)
<i>ADDITIONAL SOURCES:</i>		
GRENADA	2005	Grenada Core Welfare Indicators Survey (CWIQ) 2005
JAMAICA	2006-2009	Jamaica Survey of Living Conditions
SURINAME	2008	Household Budget Survey_2008

1.1.3 (b): Notes for Table 1.3(a) - Number of Households by Type of Materials of Outer Walls and Table 1.3(b) - Percentage Distribution of Households by Type of Materials of Outer Walls

Country	Data Source
ANTIGUA AND BARBUDA	Other includes Don't know.
THE BAHAMAS	Other includes Not Stated
BARBADOS	Other includes Not Stated
BELIZE	2000 - Other includes Not Stated 2010 - Other includes Plycem and Sticks/palmetto
DOMINICA	Other includes Not Stated
GRENADA	Other includes Not Stated
GUYANA	Wood/ concrete block refers to Clay Brick
JAMAICA	Other includes Not Stated
MONTserrat	Other includes Not Stated
SAINT LUCIA	2001 - Other includes Not Stated. 2010 - Other includes Not Stated, Plywood and Plywood/concrete

CHAPTER 1: POPULATION AND HOUSEHOLDS

1.1.3 (b): Notes for Table 1.3(a) - Number of Households by Type of Materials of Outer Walls and Table 1.3(b) - Percentage Distribution of Households by Type of Materials of Outer Walls (cont'd)

Country	Data Source
ST VINCENT AND THE GRENADINES	Other includes Not Stated.
TRINIDAD AND TOBAGO	Wood/galvanize refers to Wood/ concrete block/ galvanize/Stucco Abode refers to Wattle/Adobe/Tapia
ANGUILLA	Other includes Not Stated.
BERMUDA	2000 - Other includes Not Stated. 2010 - 1. Bermuda has a building code whereas all houses have to sustain a category 1 hurricane. Therefore all houses are made from concrete block, stone block with concrete poured over the top of a combination of both. This is not part of the Census questionnaire. 2. Other includes 27 boats 3. Total includes 1,106 households for which there is no data by type of tenure.
BRITISH VIRGIN ISLANDS	Other includes Not Stated.
TURKS AND CAICOS	Wood/ concrete block/ galvanize/Stucco refers to Wood/stucco

1.1.4 (a): Sources of Data for Table 1.4(a) - Number of Households by Type of Material used for Roofing and Table 1.4(b) - Percentage Distribution of Households by Type of Material used for Roofing

Country	Year	Data Source
ALL COUNTRIES	2000 2010	2000 Round of Population and Housing Census 2010 Round of Population and Housing Census
<i>ADDITIONAL SOURCES:</i>		
GRENADA	2005	Grenada Core Welfare Indicators Survey (CWIQ) 2005
JAMAICA	2006-2009	Jamaica Survey of Living Conditions

CHAPTER 1: POPULATION AND HOUSEHOLDS

1.1.4 (b): Notes for Table 1.4(a) - Number of Households by Type of Materials of Outer Walls and Table 1.4(b) - Percentage Distribution of Households by Type of Materials of Outer Walls

Country	Notes
ANTIGUA AND BARBUDA	Other includes Don't Know
DOMINICA	Other includes Don't Know
GUYANA	Not Stated includes Don't Know
JAMAICA	Other includes Not Reported
MONTserrat	Not Stated includes Don't Know
ST VINCENT AND THE GRENADINES	Other includes Don't Know
ANGUILLA	Make-shift includes Thatched
BERMUDA	Bermuda has a building code whereas all houses have to sustain a category 1 hurricane. Therefore each roof is made from stone slate with concrete poured over the top or a fiberglass tile with concrete poured over the top. This question is not part of our Census questionnaire Other Includes 27 boats Total Includes 1,106 households for which there is no data by type of tenure.
BRITISH VIRGIN ISLANDS	Other refers to Other/Don't Know/Not Stated

1.1.5 (a): Sources of Data for Table 1.5(a) - Households by Number of Bedrooms and Table 1.5(b) - Percentage Distribution of Households by Number of Bedrooms

Country	Year	Data Source
ALL COUNTRIES	2000	2000 Round of Population and Housing Census
	2010	2010 Round of Population and Housing Census

CHAPTER 1: POPULATION AND HOUSEHOLDS

**1.1.5 (b): Notes for Table 1.5(a) - Households by Number of Bedrooms
and Table 1.5(b) - Percentage Distribution of Households by Number of Bedrooms**

Country	Notes
JAMAICA	Other includes Not Reported
MONTSERRAT	Not Stated/ Don't Know includes Not Stated and Undefined
BERMUDA	No bedroom refers to Studio dwelling (0 bedrooms) Total number of households. Excludes 385 Group dwelling households

**1.1.6 (a): Sources of Data for Table 1.6(a) - Number of Households by Size of Household
and Table 1.6(b) - Percentage Distribution of Households by Size of Household**

Country	Year	Data Source
ALL COUNTRIES	2000	2000 Round of Population and Housing Census data
	2010	2010 Round of Population and Housing Census
<i>ADDITIONAL SOURCE:</i>		
JAMAICA	2006-2009	Jamaica Survey of Living Conditions

**1.1.6 (b): Notes for Table 1.6(a) - Number of Households by Size of Household
and Table 1.6(b) - Percentage Distribution of Households by Size of Household**

Country	Notes
BERMUDA	Group dwellings represent 385 households are dispersed throughout the table.

CHAPTER 2 - TOURISM



Tourism is one of the most important activities in many of the CARICOM Member States contributing significantly to the economies through direct earnings from the sector as well as indirectly through infrastructure development and the development of the hotel industry and craft industry among others. Tourism has also benefitted these small states through the creating of jobs in tourist related sectors such as security, construction and transportation. However, this key sector also exerts significant pressure on scarce resources such as land, water and energy. In addition, it also generates a large amount of waste.

The indicators under this theme seek to measure and quantify the environmental and social implications such as accommodation, transportation, employment and catering as well as the country's capacity to cater to and meet these demands.

There are six (6) Indicators covered in this section:

- Tourist Arrivals by Type of Arrival and Number of Tourist Nights Spent
- Tourism Density and Tourist Penetration Ratio
- Number of Hotels Classified by Number of Rooms, Beds and Rooms occupied by Year
- Visitor Expenditure and Number Employed in Tourism
- Tourist Arrivals by Type of Accommodation
- Tourist Arrivals by Country of Origin

The data were compiled from National Statistical Offices of the Member States and National Tourism Agencies. It should be noted that the Caribbean Tourism Organisation (CTO) provided a significant amount of data which allowed most of the data gaps in this area to be filled.

CHAPTER 2 - TOURISM

Table 2.1 (a) Tourists, Cruise Ship Arrivals and Average Tourist Nights Spent by Year: 2005-2009

Country	Year	Visitor arrivals			Cruise ship arrivals	Average tourist nights spent
		Stop over (Tourists)	Cruise passengers	Other		
AG	2005	245,384	445,223	...	277	9.3
	2006	253,669	452,962	...	290	9.5
	2007	261,756	619,187	...	334	10.0
	2008	265,841	591,582	...	298	10.0
	2009	234,410	711,431	...	353	10.1
BS	2005	1,608,153	3,078,709	...	1,841	6.4
	2006	1,600,862	3,078,534	...	1,721	6.4
	2007	1,527,727	2,970,659	...	1,721	6.6
	2008	1,463,006	2,861,140	...	1,546	6.6
	2009	1,327,006	3,255,780	...	1,643	6.8
BB	2005	547,534	563,588	...	395	...
	2006	562,541	539,092	...	440	...
	2007	573,937	616,354	...	485	...
	2008	567,667	597,523	...	425	...
	2009	518,564	635,212	...	460	...
BZ	2005	236,573	800,331	...	370	6.8
	2006	247,309	655,931	...	295	8.2
	2007	251,423	624,182	...	278	7.7
	2008	245,008	597,370	...	274	8.1
	2009	232,249	705,219	...	284	7.7
DM	2005	79,257	301,511	...	234	8.7
	2006	84,041	379,643	...	314	9.2
	2007	76,515	354,515	...	252	12.0
	2008	79,534	386,414	...	213	14.4
	2009	74,923	530,333	...	273	12.5

A **visitor** is a traveler taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited. These trips taken by visitors qualify as tourism trips. Tourism refers to the activity of visitors.

Tourist (or overnight visitor): A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor), if his/her trip includes an overnight stay, or as a **same-day visitor** (or excursionist) otherwise.

Cruise passengers are regarded as a special type of same-day visitor (even if the ship overnights at the port) who stay less than twenty-four hours in the country visited.

Cruise ship arrivals refer to the number of times cruise ships enter the country. A cruise ship can be counted multiple times if it leaves the country, then returns with new passengers within the same month.

The **average length of stay** for a number of holiday trips is calculated by dividing the total number of nights spent by the total number of tourism trips. Tourism trips are trips taken by visitors (*see*

definition of visitors). A domestic or an outbound tourism trip refers to the travel of a visitor from the time of leaving his/her usual residence until he/she returns. An inbound tourism trip refers to the travel of a visitor from the time of arriving in a country to the time of leaving. The term tourism visit refers to a stay in a place visited during a tourism trip.

Observing tourism trips and visits is not the same as observing visitors, as an individual might make more than one trip or visit during the period of observing visitors, as an individual might make more than one trip or visit during the period of observation.

(*International Recommendations for Tourism Statistics 2008*)

CHAPTER 2 - TOURISM

Table 2.1 (a) Tourists, Cruise Ship Arrivals and Average Tourist Nights spent by Year: 2005-2009 (cont'd)

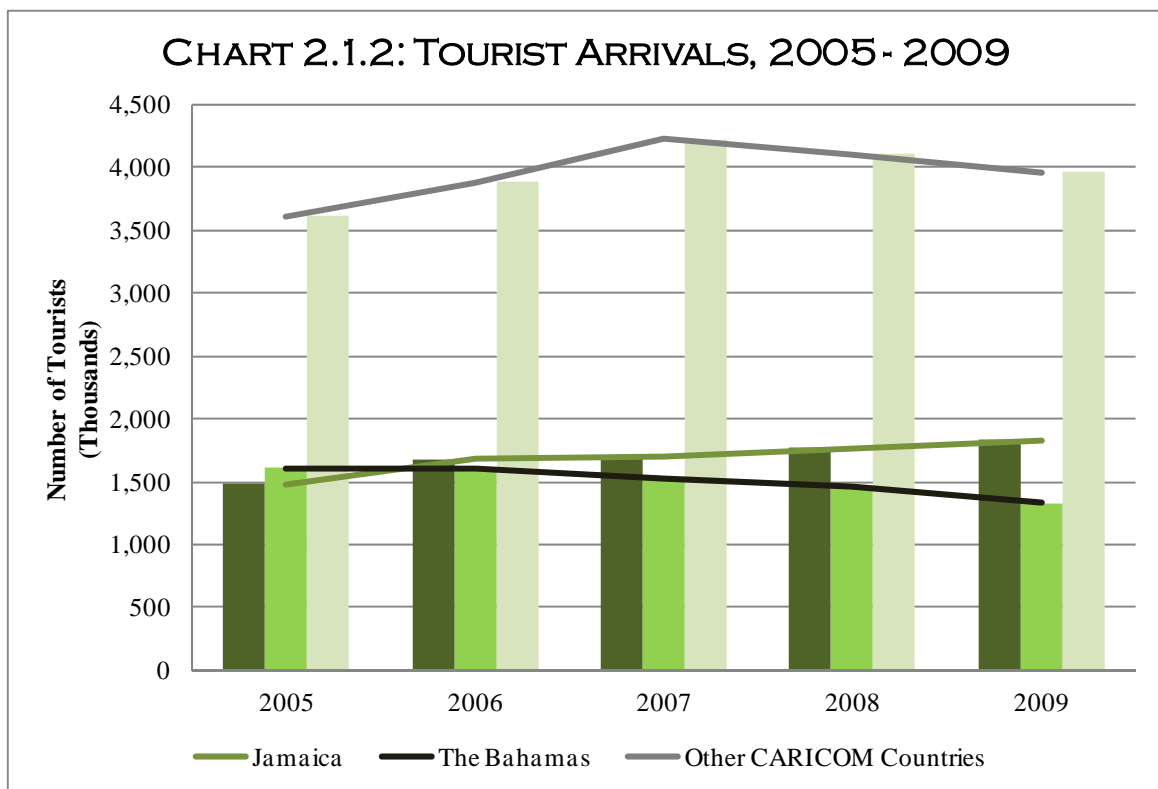
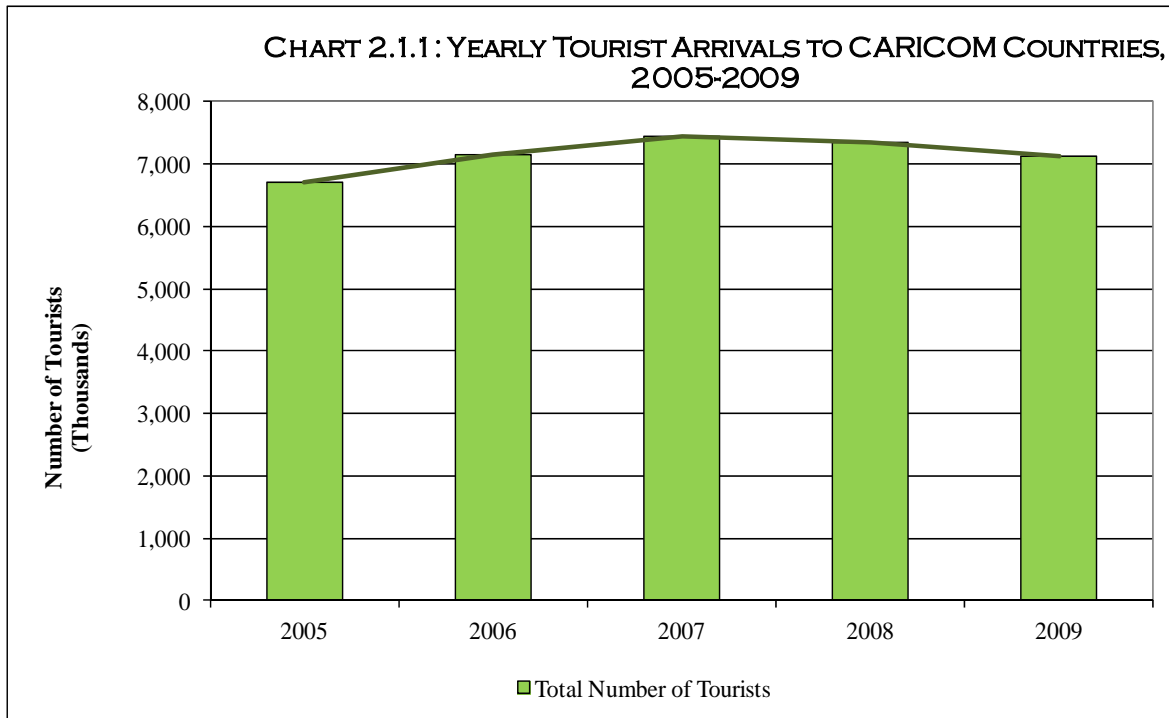
Country	Year	Visitor arrivals			Cruise ship arrivals	Average tourist nights spent
		Stop over (Tourists)	Cruise passengers	Other		
GD	2005	98,549	275,085	...	260	7.4
	2006	118,654	218,647	...	221	7.6
	2007	129,147	270,323	...	259	8.7
	2008	130,363	292,712	...	221	8.4
	2009	113,370	339,752	...	244	n.a
GY	2005	116,596	...	...	...	...
	2006	113,474	...	...	...	...
	2007	134,057	...	...	...	...
	2008	129,595	...	...	...	...
	2009	141,281	...	...	...	...
JM	2005	1,478,663	1,135,843	...	499	9.8
	2006	1,678,905	1,336,994	...	546	9.8
	2007	1,700,785	1,179,504	...	427	9.6
	2008	1,767,271	1,092,263	...	385	9.3
	2009	1,831,097	922,349	...	325	9.2
HT	2005	112,267	368,018	...	...	3.0
	2006	107,783	449,921	...	...	3.0
	2007	386,060	482,077	...	...	3.0
	2008	258,070	499,741	...	...	...
	2009	387,220	439,055	...	...	...
LC	2005	317,939	394,364	7,541	258	10.0
	2006	302,510	359,593	7,051	267	10.5
	2007	287,407	610,345	7,777	314	9.1
	2008	295,761	619,680	8,880	315	8.9
	2009	278,491	699,306	4,967	397	9.2
KN	2005	126,927	216,832	...	263	...
	2006	132,970	203,075	...	264	...
	2007	123,161	249,323	...	242	...
	2008	127,705	400,916	...	232	...
	2009	93,081	450,553	...	235	...
VC	2005	95,504	69,753	...	183	12.5
	2006	97,432	106,474	...	262	12.3
	2007	89,637	144,555	...	281	12.0
	2008	84,101	116,709	...	172	11.7
	2009	75,446	149,464	...	164	11.7
SR	2005	159,770	...	...	...	...
	2006	154,060	...	338	...	...
	2007	162,509	...	393	...	...
	2008	150,711	...	266	...	...
	2009	150,628	...	300	...	...

CHAPTER 2 - TOURISM

Table 2.1 (a) Tourists, Cruise Ship Arrivals and Average Tourist Nights Spent by Year: 2005-2009 (cont'd)

Country	Year	Visitor arrivals			Cruise ship arrivals	Average tourist nights spent
		Stop over (Tourists)	Cruise passengers	Other		
TT	2005	463,192	67,286	...	83	14.3
	2006	457,435	85,859	...	94	14.9
	2007	449,453	76,741	...	86	15.7
	2008	432,551	48,666	...	65	16.1
	2009	430,631	119,600	...	101	15.7
AI	2005	62,084		81,102		8.1
	2006	72,962		94,283		8.0
	2007	77,652		86,415		8.5
	2008	68,284		59,577		8.1
	2009	57,891		54,224		8.3
BM	2005	269,568	247,259	...	161	6.4
	2006	298,973	336,299	...	185	6.5
	2007	305,548	354,024	...	195	6.2
	2008	263,613	286,408	...	134	6.4
	2009	235,866	318,528	...	135	6.1
KY	2005	167,800	1,799,000	...	784	7.6
	2006	267,300	1,930,100	...	802	6.6
	2007	291,500	1,715,700	...	657	6.6
	2008	302,900	1,553,100	...	570	6.4
	2009	272,000	1,520,400	...	547	...
TC	2005	176,130	...	...	...	...
	2006	248,343	294,617	...	136	7.0
	2007	264,887	379,936	...	185	...
	2008	352,271	386,942	...	182	...
	2009	351,498	513,928	...	215	...
VG	2005	337,135	...	...	...	...
	2006	356,271	...	...	...	...
	2007	358,056	...	...	...	...
	2008	346,034	...	...	...	...
	2009	308,793	...	...	...	...
ALL CARICOM COUNTRIES	2005	6,699,025	...	...	...	...
	2006	7,155,494	...	...	...	...
	2007	7,451,217	...	...	...	...
	2008	7,330,286	...	...	...	...
	2009	7,114,445	...	...	...	...

CHAPTER 2 - TOURISM



CHAPTER 2 - TOURISM

CHART 2.1.3(A): PERCENTAGE DISTRIBUTION OF
TOURIST ARRIVALS: 2005

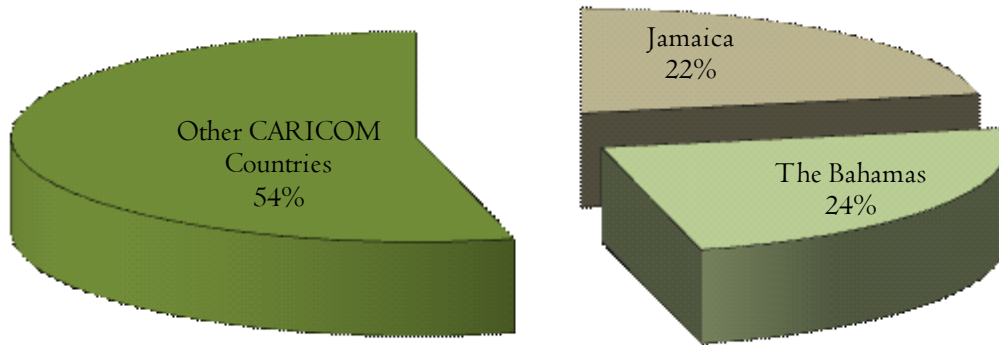


CHART 2.1.3(B): PERCENTAGE DISTRIBUTION OF
TOURIST ARRIVALS: 2009



CHAPTER 2 - TOURISM

Table 2.1 (b) Tourism intensity rate*, Tourism Density Ratio and Tourist penetration ratio: 2005-2009

Country	Year	Tourism Density Ratio	Tourist penetration ratio
AG	2005	15.1	75.5
	2006	17.6	78.2
	2007	18.0	83.4
	2008	16.2	83.2
	2009	13.9	72.7
BS	2005	2.0	86.6
	2006	2.0	85.1
	2007	2.0	82.7
	2008	1.9	78.1
	2009	1.8	72.2
BB	2005	34.0	53.7
	2006	25.7	40.5
	2007	26.9	42.4
	2008	-	-
	2009	-	-
BZ	2005	0.2	15.1
	2006	0.2	18.3
	2007	0.2	17.1
	2008	0.2	16.9
	2009	0.2	14.7
DM	2005	2.5	26.7
	2006	2.8	29.8
	2007	3.4	35.8
	2008	4.3	44.5
	2009	3.4	35.5
GD	2005	5.8	18.7
	2006	7.2	22.9
	2007	8.9	28.2
	2008	8.7	27.3
	2009	-	-
GY	2007	-	4.4
	2008	-	4.3
	2009	-	4.6
JM	2005	3.5	4.2
	2006	3.9	5.6
	2007	3.9	4.9
	2008	3.9	4.6
	2009	4.0	3.9

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Table 2.1 (b) Tourism intensity rate*, Tourism Density Ratio and Tourist penetration ratio: 2005-2009 (cont'd)

Country	Year	Tourism Density Ratio	Tourist penetration ratio
HT	2005	-	-
	2006	-	-
	2007	-	-
	2008	-	-
	2009	-	-
KN	2005	-	-
	2006	-	-
	2007	-	-
	2008	-	-
	2009	-	-
LC	2005	14.1	52.9
	2006	14.1	52.1
	2007	11.6	42.5
	2008	11.7	42.3
	2009	11.4	40.7
VC	2005	8.4	31.1
	2006	8.4	32.4
	2007	7.6	29.4
	2008	6.9	26.8
	2009	6.2	24.0
SR	2005	-	-
	2006	-	-
	2007	-	-
	2008	-	-
	2009	-	-
TT	2005	3.5	14.0
	2006	3.6	14.4
	2007	3.8	14.8
	2008	3.7	14.6
	2009	3.6	14.1
AI	2005	15.1	101.0
	2006	17.6	112.1
	2007	18.0	110.0
	2008	16.2	94.9
	2009	13.9	79.4

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Table 2.1 (b) Tourism intensity rate*, Tourism Density Ratio and Tourist penetration ratio: 2005-2009 (cont'd)

Country	Year	Tourism Density Ratio	Tourist penetration ratio
BM	2005	89.1	73.4
	2006	100.4	82.3
	2007	98.0	79.7
	2008	86.7	70.6
	2009	74.3	59.8
VG	2005	64.6	375.6
	2006	68.3	383.2
	2007	68.6	374.1
	2008	66.3	352.5
	2009	56.4	292.7
KY	2005	13.4	72.1
	2006	18.6	92.9
	2007	20.3	97.4
	2008	20.4	94.8
	2009	-	-
TC	2005	-	-
	2006	11.4	143.3
	2007	-	-
	2008	-	-
	2009	-	-

Tourism Intensity Rate (TIR) measures the level of tourist arrivals in relation to the country's area and population size. It serves to show countries with particularly high tourism concentration, and consequently potential impact both for the economy as well as the socio-cultural and natural environment. (*Harrison, D. (ed) (1992) 'Tourism and the Less Developed Countries', Wiley: UK*)

Tourism Density Ratio: This ratio attempts to show the density of tourists in the country at any one time on average. Its value is limited by the fact that tourists flows are seasonal and tourism activity tends to be concentrated in specific geographic areas (tourist zones). (*Caribbean Tourism Organization*)

Tourist Penetration Ratio: The penetration ratio quantifies the average number of tourists, per thousand local inhabitants, in the country at any one time. The value of this ratio is constrained by the fact that tourist flows are seasonal and cruise passengers are not. (*Caribbean Tourism Organization*)

$$\text{Tourist Penetration Ratio} = \frac{\text{Average Length of stay} * \text{number of visitors}}{365 * \text{mid year population estimates}}$$

$$\text{Tourism Density Ratio} = \frac{\text{Average Length of stay} * \text{number of visitors}}{365 * \text{area in square kilometers}}$$

$$\text{Tourism Intensity Rate} = \text{Number of visitors}/1,000 \text{ population}/\text{km}^2$$

* Data on Tourism Intensity Rate was excluded from the table due to differences in calculation across countries.

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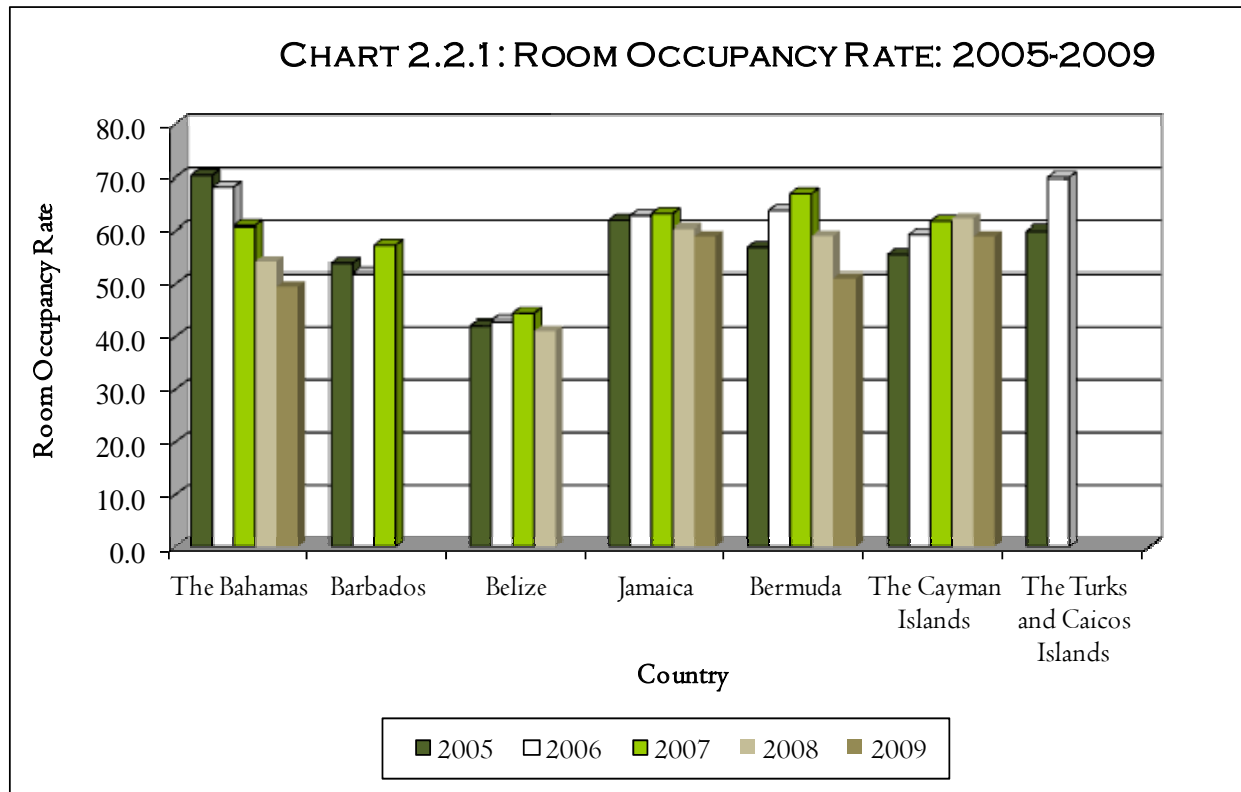
Table 2.2 - Number of Hotels classified by Number of Rooms, Beds and Rooms Occupied by Year: 2005-2009

Country	Year	Hotels by Number of Rooms					Number of beds	Total number of rooms occupied	Room occupancy rate
		5 to 9	10 to 24	25 to 49	50+	Total			
BS	2005	...	...	...	...	...	...	...	70.4
	2006	...	...	...	...	283	...	...	68.4
	2007	...	...	...	...	285	...	...	60.9
	2008	...	...	...	...	281	...	...	54.1
	2009	...	...	...	...	280	...	...	49.5
BB	2005	...	...	...	...	291	12,417	...	53.8
	2006	...	...	...	...	283	11,991	...	51.9
	2007	...	...	...	...	285	11,286	...	57.3
BZ	2005	...	...	...	...	557	9,327	2,355	42.1
	2006	...	...	...	...	561	9,651	2,484	42.9
	2007	404	127	52	8	591	10,502	2,747	44.3
	2008	...	...	...	...	620	11,013	2,688	41.1
JM	2005	...	...	2,061	89	2,150	53,940	26,039	61.9
	2006	...	...	2,060	90	2,150	55,183	26,675	62.8
	2007	...	...	2,061	92	2,153	56,980	27,580	63.2
	2008	...	...	2,024	95	2,119	60,871	29,794	60.4
	2009	...	...	1,972	98	2,070	62,613	30,347	59.0
BM	2005	...	...	...	...	56	6,167	3,031	56.9
	2006	...	...	...	...	57	6,065	3,011	63.8
	2007	...	...	...	...	55	5,590	2,766	67.1
	2008	...	...	...	...	54	5,538	2,736	59.1
	2009	...	...	...	...	52	5,814	2,830	51.1
KY	2005	...	...	...	...	...	...	...	55.5
	2006	...	...	...	...	20	...	2,205	59.4
	2007	...	...	...	...	21	...	2,197	61.7
	2008	...	...	...	...	16	...	1,959	62.2
	2009	...	...	...	...	22	...	2,017	59.0
TC	2005	...	...	...	...	49	...	...	60.0
	2006	...	...	...	...	54	...	...	70.0
	2007	...	...	...	...	60	...	...	...
	2008	...	...	...	...	64	...	...	...
	2009	...	...	...	...	70	...	...	...

Occupancy Rate: Provides information on differences in the use between various types of accommodation and when measured on a monthly basis measured the seasonal patterns in occupancy can be divided into Bed occupancy and Room occupancy rate.

Room Occupancy Rate: For Hotels and similar establishments the net rate of room occupancy is a measure of capacity utilization. It is calculated by dividing the monthly or yearly sum of occupied rooms by the number of rooms available for use, then multiplying the quotient by 100 to express as a percentage. (*Caribbean Tourism Organisation Statistical Report*)

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Table 2.3 Visitor expenditure and Number Employed in Tourism: 2005-2009

Country	Year	Visitor expenditure ('000US\$)	Expenditure on same-day visits (US\$)	Expenditure on accommodation, meals and drinks, shopping, entertainment etc. (US\$)	Total directly employed in tourism		
					Women	Men	Total
AG	2005	309,456	...	...	...	...	...
	2006	326,748	...	...	...	...	...
	2007	337,846	...	...	...	...	...
	2008	333,962	...	...	...	...	...
	2009	305,115	...	...	...	...	...
BS	2005	2,068,859	...	...	...	...	...
	2006	2,057,351	...	...	...	...	...
	2007	2,191,721	...	...	...	...	...
	2008	2,501,100	...	...	...	...	...
	2009	2,014,200	...	...	...	...	...
BB	2005	851,338			7,900	5,000	12,900
	2006	921,687			8,600	5,000	13,600
	2007	1,147,790			8,100	5,900	14,000
	2008	1,142,132			7,700	6,300	14,000
	2009	1,023,172			7,200	6,100	13,300
	2010	1,004,200			7,900	4,800	12,700
BZ	2005	174,700	...	...	...	...	...
	2006	252,850	...	...	...	...	...
	2007	292,900	...	...	...	...	...
	2008	281,500	...	...	...	...	...
	2009	256,250	...	...	...	...	...
DM	2005	55,918	...	...	...	...	...
	2006	68,217	...	...	...	...	...
	2007	64,691	...	...	...	...	...
	2008	87,213	...	...	...	...	...
	2009	83,608	...	...	...	...	...
GD	2005	94,420	...	...	...	...	...
	2006	114,707	...	...	...	...	...
	2007	126,586	...	...	...	...	...
	2008	106,254	...	...	...	...	...
	2009	96,212	...	...	...	...	...
JM	2005	1,545,055	a	a			31,227
	2006	1,870,560	US\$85.21	US\$103.51			33,598
	2007	1,910,105	US\$88.92	US\$110.64			34,834
	2008	1,975,519	...	...			32,257
	2009	1,925,423	US\$94.19	US\$119.47			36,354
MS	2005	8,983	US\$83.63	US\$113.98			
	2006	7,745
	2007	7,444
	2008	7,045
	2009	6,067

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Table 2.3: Visitor expenditure and Number Employed in Tourism: 2005-2009 (cont'd)

Country	Year	Visitor expenditure ('000US\$)	Expenditure on same-day visits ('000US\$)	Expenditure on accommodation, meals and drinks, shopping, entertainment etc. ('000US\$)	Total directly employed in tourism		
					Women	Men	Total
KN	2005	121,156	...	...	...	...	...
	2006	131,646	...	...	...	...	...
	2007	124,785	...	...	...	...	...
	2008	110,063	...	...	...	...	...
	2009	83,485	...	...	...	...	...
LC	2005	381,662	...	...	...	...	...
	2006	293,952	...	...	...	...	...
	2007	301,684	...	...	...	...	...
	2008	310,997	...	...	...	...	...
	2009	296,196	...	...	...	...	...
VC	2005	103,893	...	...	...	...	...
	2006	113,259	...	...	...	...	...
	2007	110,011	...	...	...	...	...
	2008	96,037	...	...	...	...	...
	2009	87,537	...	...	...	...	...
SR	2005	44,600	...	...	...	...	...
	2006	94,800	...	...	...	...	...
	2007	66,600	...	...	...	...	...
	2008	77,400	...	...	...	...	...
	2009	64,000	...	...	...	...	...
VC	2005	453,000	...	...	...	...	...
	2006	382,200	...	...	...	...	...
	2007	463,100	...	...	...	...	...
	2008	396,900	...	...	...	...	...
	2009	366,600	...	...	...	...	...
AI	2005	85,900	...	...	...	...	...
	2006	107,100	...	...	...	...	...
	2007	115,000	...	...	...	...	...
	2008	109,000	...	...	...	...	...
	2009	93,800	...	...	...	...	...
BM	2005	394,200	53,700	340,500	2,196	2,873	5,069
	2006	454,200	65,300	388,900	2,080	2,821	4,901
	2007	513,200	70,500	442,700	2,042	2,768	4,810
	2008	401,800	57,700	344,100	1,966	2,903	4,869
	2009	421,300	44,200	377,100	2,310	2,970	5,280

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Table 2.3: Visitor expenditure and Number Employed in Tourism: 2005-2009 (cont'd)

Country	Year	Visitor expenditure ('000US\$)	Expenditure on same-day visits ('000US\$)	Expenditure on accommodation, meals and drinks, shopping, entertainment etc. ('000US\$)	Total directly employed in tourism		
					Women	Men	Total
VG	2005	412,659	...	...	...	...	...
	2006	438,696	...	...	...	...	...
	2007	451,028	...	...	...	...	...
	2008	446,533	...	...	...	...	...
	2009	369,014	...	...	...	...	...
KY	2005	353,082	219,000	...	...	...	...
	2006	508,766	426,000	...	...	...	...
	2007	475,084	471,000	...	...	...	...
	2008	519,633	472,500	...	...	...	...
			
TC	2005						17,442

Concept and Definitions

Tourism Expenditure refers to the amount paid for the acquisition of consumption goods and services, as well as valuables, for own use or to give away, for and during tourism trips. It includes expenditures by visitors themselves, as well as expenses that are paid for or reimbursed by others.

It excludes the acquisition of certain items such as social transfers in kind that benefit visitors, the imputation of accommodation services from owned vacation homes and financial intermediation services indirectly measured.

Expenditures on same-day visits are defined as the expenditures of visitors who spend less than twenty-four hours in the country being visited.

Categories of Tourism Expenditures

Three categories of tourism expenditure based on the country of residence of the transactors involved, can be defined as follows:

Domestic tourism expenditure is the tourism expenditure of a resident visitor within the economy of reference;

Inbound tourism expenditure is the tourism expenditure of a non-resident visitor within the economy of reference;

Outbound tourism expenditure is the tourism expenditure of a resident visitor outside the economy of reference.

(Please refer to the International Recommendations for Tourism Statistics 2008 (IRTS 2008))

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CHART 2.3 (I): VISITOR EXPENDITURE IN ANTIGUA AND BARBUDA, 2005-2009

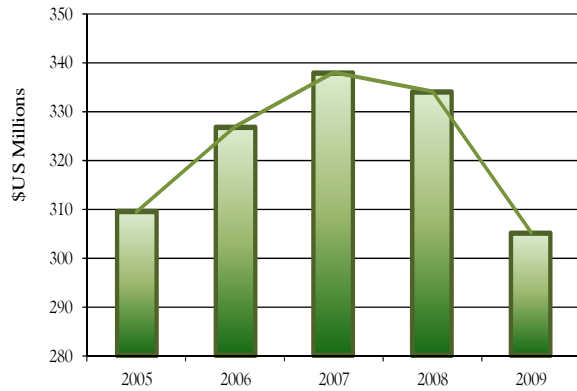


CHART 2.3 (II): VISITOR EXPENDITURE IN THE BAHAMAS, 2005-2009

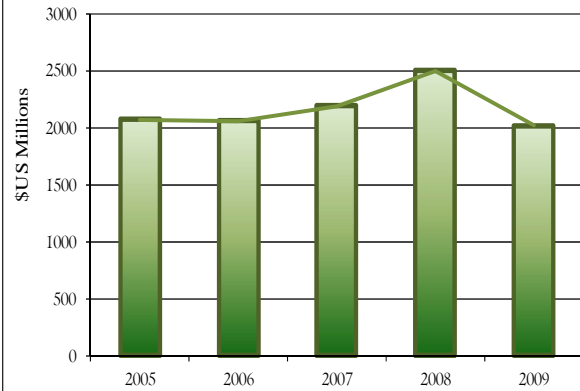


CHART 2.3 (III): VISITOR EXPENDITURE IN THE BARBADOS, 2005-2009

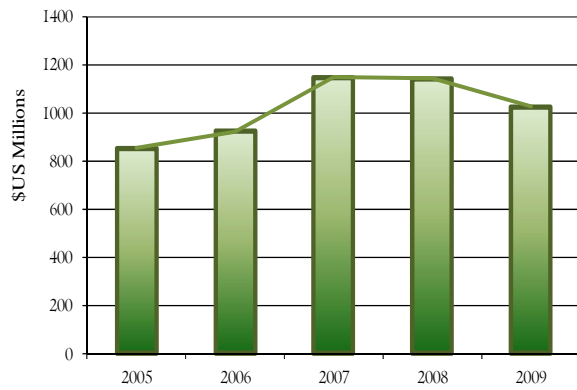


CHART 2.3 (IV): VISITOR EXPENDITURE IN THE BELIZE, 2005-2009

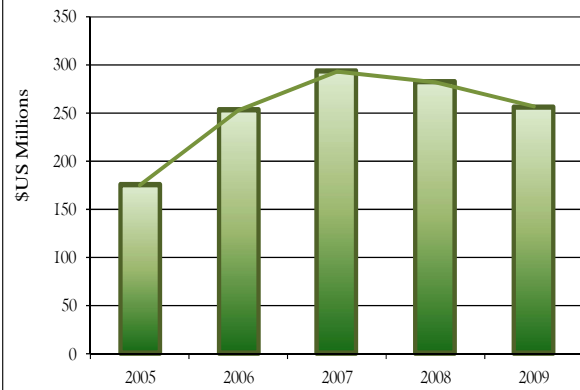


CHART 2.3 (V): VISITOR EXPENDITURE IN THE DOMINICA, 2005-2009

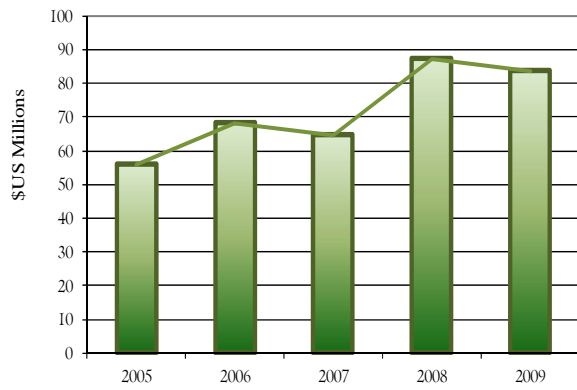
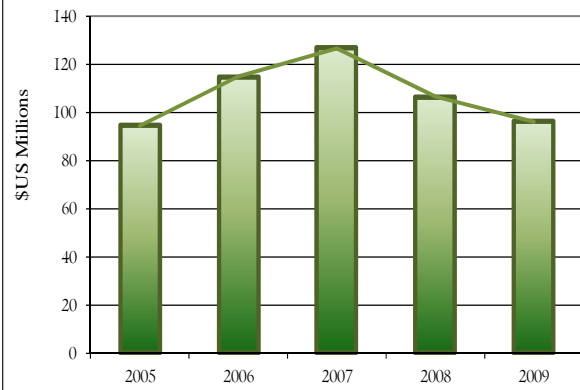


CHART 2.3 (VI): VISITOR EXPENDITURE IN THE GRENADA, 2005-2009



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CHART 2.3 (VII): VISITOR EXPENDITURE IN JAMAICA, 2005-2009

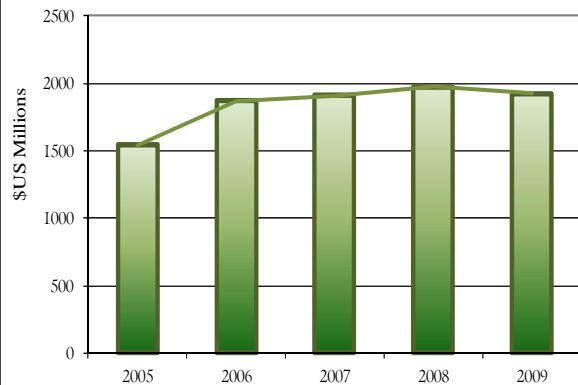


CHART 2.3 (VIII): VISITOR EXPENDITURE IN MONTSERRAT, 2005-2009

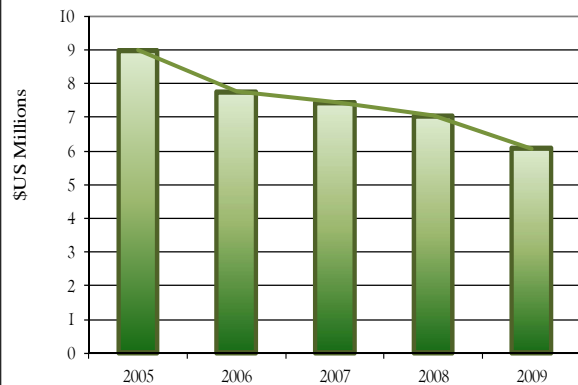


CHART 2.3 (IX): VISITOR EXPENDITURE IN ST. KITTS AND NEVIS, 2005-2009

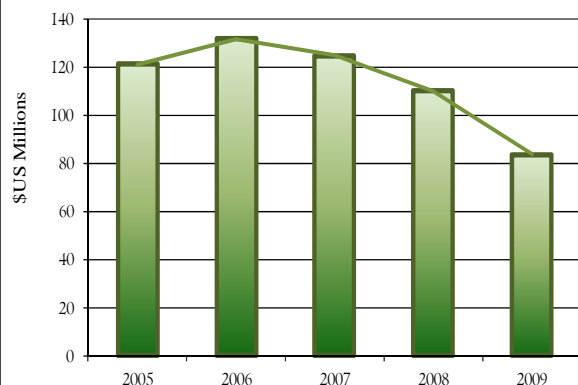


CHART 2.3 (X): VISITOR EXPENDITURE IN SAINT LUCIA, 2005-2009

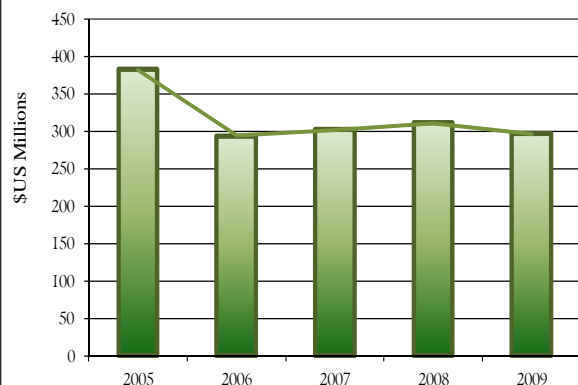


CHART 2.3 (XI) VISITOR EXPENDITURE IN ST. VINCENT AND THE GRENADINES, 2005-2009

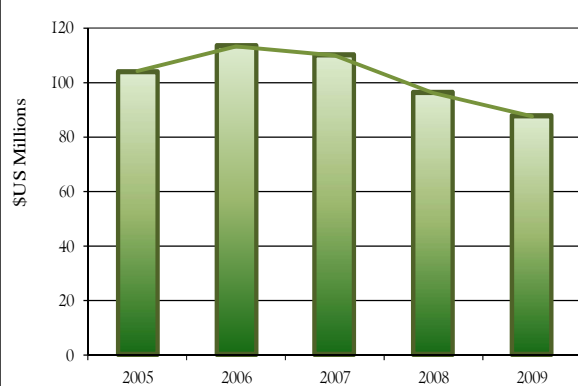
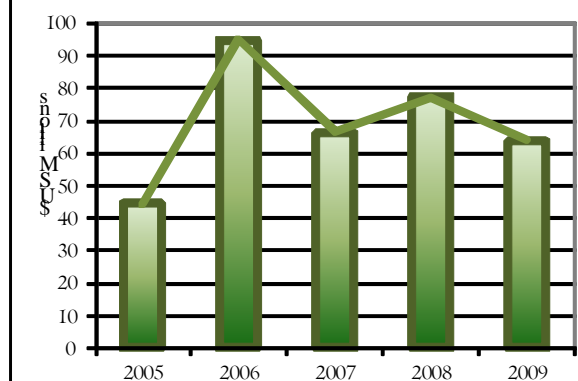
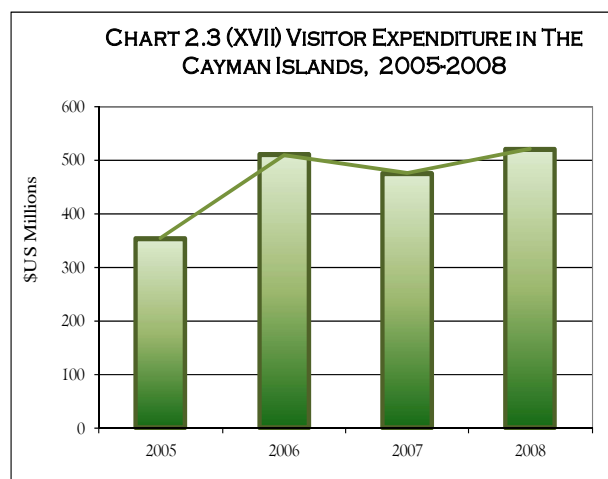
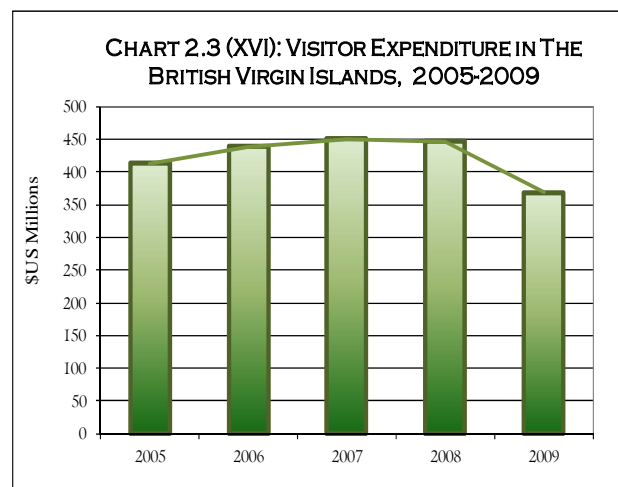
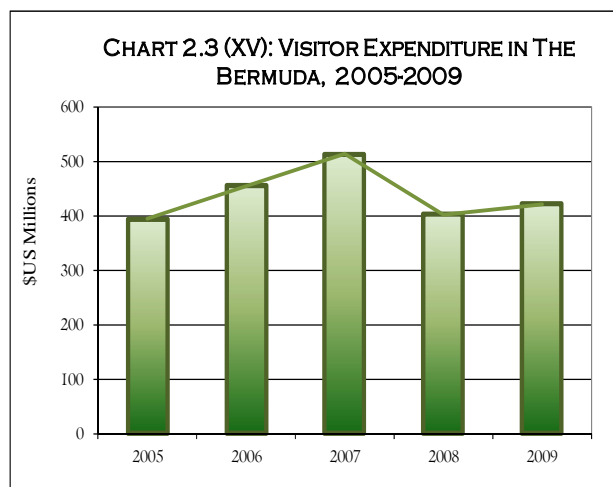
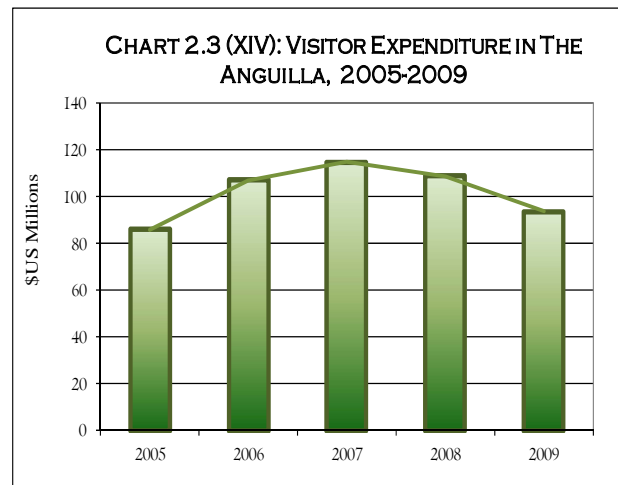
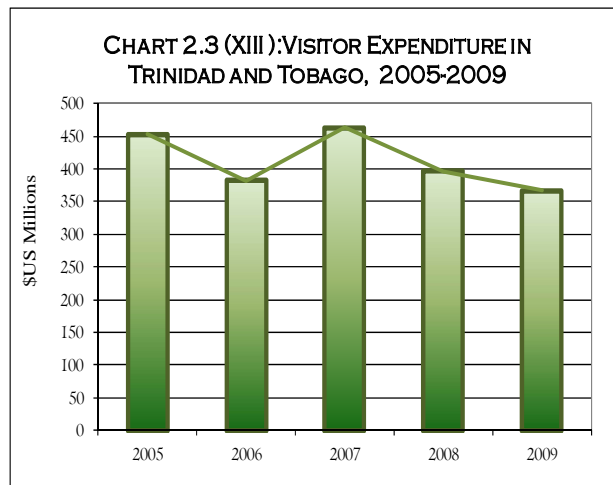


CHART 2.3 (XII): VISITOR EXPENDITURE IN SURINAME, 2005-2009



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Data not available for 2009.

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Table 2.4 (a) Number of Tourist Arrivals by Types of Accommodation: 2005-2009

Country	Year	Hotels	Apartments /Villas	Guest Houses	Cottages/ Yacht/ Private Home	Other	Total
AG	2005	165,021	13,237	565		66,472	245,295
	2006	168,209	13,607	567		71,232	253,615
	2007	175,339	12,096	334		73,976	261,745
	2008	182,415	13,287	697		69,388	265,787
BB	2005	143,632	172,702	8,209	136,088	86,903	547,534
	2006	149,553	167,911	7,095	167,306	70,676	562,541
	2007	163,189	168,891	9,609	117,971	112,277	571,937
BS	2008	1,060,722	63,564	n.a		12,715	1,137,001
	2009	940,397	58,591	n.a		11,854	1,010,842
GY	2008	19,398	922	301	106,952	2,022	129,595
	2009	18,923	866	203	120,766	523	141,280
VC	2006	13,537	16,729	975	41,079	25,112	97,432
	2007	13,574	17,411	791	35,608	22,253	89,637
	2008	12,499	17,696	723	43,604	9,579	84,101
	2009	12,077	15,642	1,034	39,878	6,815	75,446
TT	2005	117,169		20,074	274,752	51,197	463,192
	2006	115,184		20,207	270,942	51,102	457,435
	2007	101,554		13,896	293,004	40,999	449,453
	2008r	76,142		8,870	251,723	101,281	438,016
	2009p	73,855		7,097	206,840	126,587	414,379
BM	2005	190,817		2,270		76,481	269,568
	2006	207,486		2,345		89,142	298,973
	2007	207,401		2,722		95,425	305,548
	2008	171,203		2,291		90,119	263,613
	2009	159,739		1,894		74,233	235,866
KY	2005	67,791	28,358	36,245		35,574	167,968
	2006	107,455	49,985	39,026		71,050	267,515
	2007	107,272	59,758	45,474		78,960	291,463

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Table 2.4 (b) Percentage Distribution of Tourist Arrivals by Types of Accommodation: 2005-2009

Country	Year	Hotels	Apartments /Villas	Guest Houses	Cottages/ Yacht/ Private Home	Other	Total
AG	2005	67.3	5.4	0.2		27.1	100.0
	2006	66.3	5.4	0.2		28.1	100.0
	2007	67.0	4.6	0.1		28.3	100.0
	2008	68.6	5.0	0.3		26.1	100.0
BB	2005	26.2	31.5	1.5	24.9	15.9	100.0
	2006	26.6	29.8	1.3	29.7	12.6	100.0
	2007	28.5	29.5	1.7	20.6	19.6	100.0
BS	2008	93.3	5.6	n/a		1.1	100.0
	2009	93.0	5.8	n/a		1.2	100.0
GY	2008	15.0	0.7	0.2	82.5	1.6	100.0
	2009	13.4	0.6	0.1	85.5	0.4	100.0
VC	2005	13.9		1.0	42.2	25.8	82.8
	2006	15.1		0.9	39.7	24.8	80.6
	2007	14.9		0.9	51.8	11.4	79.0
	2008	16.0		1.4	52.9	9.0	79.3
TT	2005	25.3		4.3	59.3	11.1	100.0
	2006	25.2		4.4	59.2	11.2	100.0
	2007	22.6		3.1	65.2	9.1	100.0
	2008	17.4		2.0	57.5	23.1	100.0
	2009	17.8		1.7	49.9	30.5	100.0
BM	2005	70.8		0.8		28.4	100.0
	2006	69.4		0.8		29.8	100.0
	2007	67.9		0.9		31.2	100.0
	2008	64.9		0.9		34.2	100.0
	2009	67.7		0.8		31.5	100.0
KY	2005	40.4	16.9	21.6		21.2	100.0
	2006	40.2	18.7	14.6		26.6	100.0
	2007	36.8	20.5	15.6		27.1	100.0

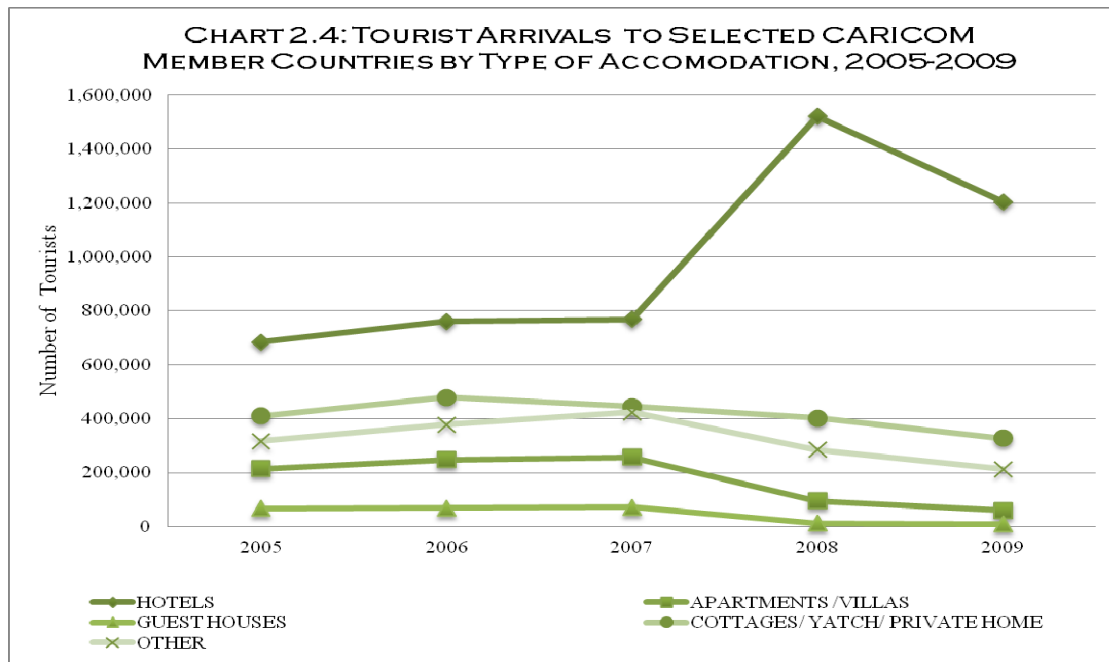
Concept and Definition

Tourist accommodation refers to any facility that regularly or occasionally provides overnight accommodation for tourists. There are two basic categories of tourist accommodations:

- **Collective accommodation establishments:** e.g. Hotels and similar establishments; and,
- **Private tourist accommodations:** e.g. owned dwellings, rented rooms in family homes, accommodation provided by friends and relatives.

(Please refer to the Caribbean Tourism Organisation Statistical Report)

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Table 2.5 (a) Tourist Arrivals by country of Origin: 2005-2009

Country	Year	United States	Canada	Europe	Caribbean	Rest of the World	Total
AG	2005	68,527	9,855	98,120	38,777	30,105	245,384
	2006	73,497	10,053	95,557	43,908	30,654	253,669
	2007	78,697	10,489	102,944	50,316	19,340	261,786
	2008	84,032	13,189	96,726	52,953	18,944	265,844
	2009	82,068	12,947	80,977	41,546	16,872	234,410
BB	2005	131,005	47,690	229,617	114,775	24,447	547,534
	2006	130,767	49,198	233,445	117,469	31,679	562,558
	2007	133,519	52,981	245,084	82,383	41,870	555,837
	2008	131,795	57,335	245,680	100,639	32,218	567,667
	2009	122,306	63,751	213,684	88,771	30,052	518,564
BS	2005	1,380,083	75,643	85,277	17,698	21,170	1,579,871
	2006	1,365,104	84,639	82,209	19,140	26,060	1,577,152
	2007	1,263,679	100,340	87,170	22,524	27,327	1,501,040
	2008	1,177,271	114,960	93,803	22,528	54,444	1,463,006
	2009	1,068,726	107,041	78,816	18,856	53,567	1,327,006
BZ	2005	145,977	13,580	33,468	9,791	33,759	236,575
	2006	151,510	15,553	34,374	10,684	35,189	247,310
	2007	152,569	16,655	34,174	11,755	36,268	251,421
	2008	147,654	17,695	34,270	11,086	34,323	245,028
DM	2005	18,492	1,977	10,258	34,127	14,403	79,257
	2006	22,011	2,552	11,303	36,617	11,558	84,041
	2007	21,477	2,670	10,743	31,819	9,806	76,515
	2008	20,492	3,328	13,549	32,400	9,765	79,534
	2009	18,193	2,618	11,591	33,512	9,009	74,923
GD	2005	25,181	4,341	22,384	26,786	19,856	98,548
	2006	27,332	6,387	32,697	31,127	21,111	118,654
	2007	27,219	6,038	41,805	28,958	25,127	129,147
	2008	22,011	6,377	44,372	29,349	28,254	130,363
	2009	21,111	6,295	35,650	25,500	24,814	113,370
GY	2005	60,071	15,876	8,704	26,810	5,135	116,596
	2006	57,193	14,580	8,390	28,437	4,874	113,474
	2007	69,823	19,785	9,978	28,376	6,094	134,056
	2008	66,350	21,470	8,937	27,860	4,978	129,595
	2009	76,955	23,812	8,277	28,026	4,211	141,281
JM	2005	1,058,317	116,862	197,705		105,779	1,478,663
	2006	1,190,721	153,569	215,719		118,896	1,678,905
	2007	1,132,532	190,650	226,533		151,070	1,700,785
	2008	1,150,942	236,193	225,877		154,259	1,767,271
	2009	1,172,844	290,307	223,099		144,847	1,831,097

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Table 2.5 (a): Tourist Arrivals by country of Origin: 2005-2009 (cont'd)

Country	Year	United States	Canada	Europe	Caribbean	Rest of the World	Total
MS	2005	2,034	404	3,196	3,987	69	9,690
	2006	2,153	393	2,501	2,868	76	7,991
	2007	2,109	388	2,366	2,796	87	7,746
	2008	1,922	395	2,333	2,658	52	7,360
	2009	1,606	367	2,031	2,267	40	6,311
KN	2005	77,300	9,052	11,609	24,961	4,005	126,927
	2006	78,800	7,555	12,030	32,605	1,980	132,970
	2007	68,586	7,076	14,623	28,885	1,952	121,122
	2008	76,455	7,805	n.a	28,982	14,463	127,705
	2009	54,410	6,413	n.a	22,410	9,848	93,081
LC	2005	112,557	16,506	100,085	84,729	4,062	317,939
	2006	117,450	17,491	85,565	78,464	3,540	302,510
	2007	113,433	18,640	89,649	59,049	7,459	288,230
	2008	108,596	26,279	96,871	59,757	4,414	295,917
	2009	98,685	28,563	86,819	60,183	4,214	278,464
VC	2005	27,153	6,187	19,928	39,944	2,292	95,504
	2006	28,598	6,542	21,961	38,219	2,112	97,432
	2007	26,642	6,745	23,454	29,959	2,837	89,637
	2008	24,042	6,882	22,302	28,475	2,400	84,101
	2009	20,159	6,820	19,097	26,835	2,535	75,446
SR	2005	4,673	...	99,508	22,540	33,301	160,022
	2006	4,378	...	99,173	23,119	27,390	154,060
	2007	4,573	...	108,134	22,922	26,880	162,509
	2008	4,973	...	95,299	22,290	28,149	150,711
	2009	4,964	...	87,791	29,250	28,623	150,628
TT	2005	167,985	47,702	91,436	117,762	38,306	463,191
	2006	170,893	49,242	84,259	111,693	51,253	467,340
	2007	180,557	51,411	82,511	90,533	44,441	449,453
	2008r	189,486	54,026	63,642	85,095	45,767	438,016
	2009e	194,763	48,263	59,558	68,206	43,389	414,179
AI	2005	41,733	1,792	8,113	8,529	1,917	62,084
	2006	44,489	1,977	9,218	15,280	1,998	72,962
	2007	45,974	2,393	10,795	15,425	3,065	77,652
	2008	40,202	2,074	8,943	14,748	2,317	68,284
	2009	34,073	2,032	7,457	12,924	1,405	57,891

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Table 2.5 (a): Tourist Arrivals by country of Origin: 2005-2009 (cont'd)

Country	Year	United States	Canada	Europe	Caribbean	Rest of the World	Total
BM	2005	203,997	28,665	22,440		14,466	269,568
	2006	227,725	27,675	27,008		16,565	298,973
	2007	229,498	27,844	30,386		17,820	305,548
	2008	189,388	27,207	29,255		17,763	263,613
	2009	172,651	24,866	23,906		14,443	235,866
KY	2005	118,843	10,480	12,716		25,762	167,801
	2006	217,400	14,900	17,400		17,600	267,300
	2007	231,900	17,300	20,300		21,900	291,400
	2008	240,462	18,544	21,271		22,602	302,879
	2009	215,037	17,254	19,117		20,550	271,958
TC	2005	123,346	21,136	17,613	12,192	1,843	176,130
	2006	169,992	29,802	24,834	21,908	2,137	248,673

Tourist Arrivals include all stay-over (or overnight) visitors. It does not, however, include same-day visitors such as cruise passengers and yacht arrivals.

Country of Origin: This is the place/country from which the trip originates. It is usually the same as the place and country of residence.

The trip may also start from the place of work or education. This is not relevant for tourism since the place of residence may still be considered as the origin. When people live in another place than their usual residence during the survey period (e.g. short-term migrants and seasonal workers), this place should be taken as the origin. For day trips the place of origin may be the second regular residence of the person although it is useful to distinguish them from trips originating from the first residence.

Country of Residence: A person is considered to be a resident in a country (place) if the person (i) has lived for most of the past year or 12 months in that country (place), or (ii) has lived in that country (place) for a shorter period and intends to return within 12 months to live in that country (place).

Please refer to Eurostat (1996). Applying the Eurostat Methodological Guidelines In Basic Tourism and Travel Statistics. [http://epp.eurostat.ec.europa.eu/portal/page/portal/tourism/documents /Applying%20 the%20methodological%20guidelines.pdf](http://epp.eurostat.ec.europa.eu/portal/page/portal/tourism/documents/ Applying%20 the%20methodological%20guidelines.pdf)

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Table 2.5 (b) Percentage Distribution of Tourist Arrivals by country of Origin: 2005-2009

Country	Year	United States	Canada	Europe	Caribbean	Rest of the World	Total
AG	2005	27.9	4.0	40.0	15.8	12.3	100.0
	2006	29.0	4.0	37.7	17.3	12.1	100.0
	2007	30.1	4.0	39.3	19.2	7.4	100.0
	2008	31.6	5.0	36.4	19.9	7.1	100.0
	2009	35.0	5.5	34.5	17.7	7.2	100.0
BB	2005	23.9	8.7	41.9	21.0	4.5	100.0
	2006	23.2	8.7	41.5	20.9	5.6	100.0
	2007	24.0	9.5	44.1	14.8	7.5	100.0
	2008	23.2	10.1	43.3	17.7	5.7	100.0
	2009	23.6	12.3	41.2	17.1	5.8	100.0
BS	2005	87.4	4.8	5.4	1.1	1.3	100.0
	2006	86.6	5.4	5.2	1.2	1.7	100.0
	2007	84.2	6.7	5.8	1.5	1.8	100.0
	2008	80.5	7.9	6.4	1.5	3.7	100.0
	2009	80.5	8.1	5.9	1.4	4.0	100.0
BZ	2005	61.7	5.7	14.1	4.1	14.3	100.0
	2006	61.3	6.3	13.9	4.3	14.2	100.0
	2007	60.7	6.6	13.6	4.7	14.4	100.0
	2008	60.3	7.2	14.0	4.5	14.0	100.0
DM	2005	23.3	2.5	12.9	43.1	18.2	100.0
	2006	26.2	3.0	13.4	43.6	13.8	100.0
	2007	28.1	3.5	14.0	41.6	12.8	100.0
	2008	25.8	4.2	17.0	40.7	12.3	100.0
	2009	24.3	3.5	15.5	44.7	12.0	100.0
GD	2005	25.6	4.4	22.7	27.2	20.1	100.0
	2006	23.0	5.4	27.6	26.2	17.8	100.0
	2007	21.1	4.7	32.4	22.4	19.5	100.0
	2008	16.9	4.9	34.0	22.5	21.7	100.0
	2009	18.6	5.6	31.4	22.5	21.9	100.0
GY	2005	51.5	13.6	7.5	23.0	4.4	100.0
	2006	50.4	12.8	7.4	25.1	4.3	100.0
	2007	52.1	14.8	7.4	21.2	4.5	100.0
	2008	51.2	16.6	6.9	21.5	3.8	100.0
	2009	54.5	16.9	5.9	19.8	3.0	100.0
JM	2005	71.6	7.9	13.4	0.0	7.2	100.0
	2006	70.9	9.1	12.8	0.0	7.1	100.0
	2007	66.6	11.2	13.3	0.0	8.9	100.0
	2008	65.1	13.4	12.8	0.0	8.7	100.0
	2009	64.1	15.9	12.2	0.0	7.9	100.0

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Table 2.5 (b): Percentage Distribution of Tourist Arrivals by country of Origin: 2005-2009 (cont'd)

Country	Year	United States	Canada	Europe	Caribbean	Rest of the World	Total
MS	2005	21.0	4.2	33.0	41.1	0.7	100.0
	2006	26.9	4.9	31.3	35.9	1.0	100.0
	2007	27.2	5.0	30.5	36.1	1.1	100.0
	2008	26.1	5.4	31.7	36.1	0.7	100.0
	2009	25.4	5.8	32.2	35.9	0.6	100.0
KN	2005	60.9	7.1	9.1	19.7	3.2	100.0
	2006	59.3	5.7	9.0	24.5	1.5	100.0
	2007	56.6	5.8	12.1	23.8	1.6	100.0
	2008	59.9	6.1	n.a	22.7	11.3	100.0
	2009	58.5	6.9	n.a	24.1	10.6	100.0
LC	2005	35.4	5.2	31.5	26.6	1.3	100.0
	2006	38.8	5.8	28.3	25.9	1.2	100.0
	2007	39.4	6.5	31.1	20.5	2.6	100.0
	2008	36.7	8.9	32.7	20.2	1.5	100.0
	2009	35.4	10.3	31.2	21.6	1.5	100.0
VC	2005	28.4	6.5	20.9	41.8	2.4	100.0
	2006	29.4	6.7	22.5	39.2	2.2	100.0
	2007	29.7	7.5	26.2	33.4	3.2	100.0
	2008	28.6	8.2	26.5	33.9	2.9	100.0
	2009	26.7	9.0	25.3	35.6	3.4	100.0
SR	2005	2.9	...	62.2	14.1	20.8	100.0
	2006	2.8	...	64.4	15.0	17.8	100.0
	2007	2.8	...	66.5	14.1	16.5	100.0
	2008	3.3	...	63.2	14.8	18.7	100.0
	2009	3.3	...	58.3	19.4	19.0	100.0
TT	2005	36.3	10.3	19.7	25.4	8.3	100.0
	2006	36.6	10.5	18.0	23.9	11.0	100.0
	2007	40.2	11.4	18.4	20.1	9.9	100.0
	2008	43.3	12.3	14.5	19.4	10.4	100.0
	2009	47.0	11.7	14.4	16.5	10.5	100.0
AI	2005	67.2	2.9	13.1	13.7	3.1	100.0
	2006	61.0	2.7	12.6	20.9	2.7	100.0
	2007	59.2	3.1	13.9	19.9	3.9	100.0
	2008	58.9	3.0	13.1	21.6	3.4	100.0
	2009	58.9	3.5	12.9	22.3	2.4	100.0

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Table 2.5 (b): Percentage Distribution of Tourist Arrivals by country of Origin: 2005-2009 (cont'd)

Country	Year	United States	Canada	Europe	Caribbean	Rest of the World	Total
BM							
	2005	75.7	10.6	8.3		5.4	100.0
	2006	76.2	9.3	9.0		5.5	100.0
	2007	75.1	9.1	9.9		5.8	100.0
	2008	71.8	10.3	11.1		6.7	100.0
	2009	73.2	10.5	10.1		6.1	100.0
KY							
	2005	70.8	6.2	7.6		15.4	100.0
	2006	81.3	5.6	6.5		6.6	100.0
	2007	79.6	5.9	7.0		7.5	100.0
	2008	79.4	6.1	7.0		7.5	100.0
	2009	79.1	6.3	7.0		7.6	100.0
TC							
	2005	70.0	12.0	10.0	6.9	1.0	100.0
	2006	68.4	12.0	10.0	8.8	0.9	100.0

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CHART 2.5.1: YEARLY PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS BY COUNTRY OF ORIGIN

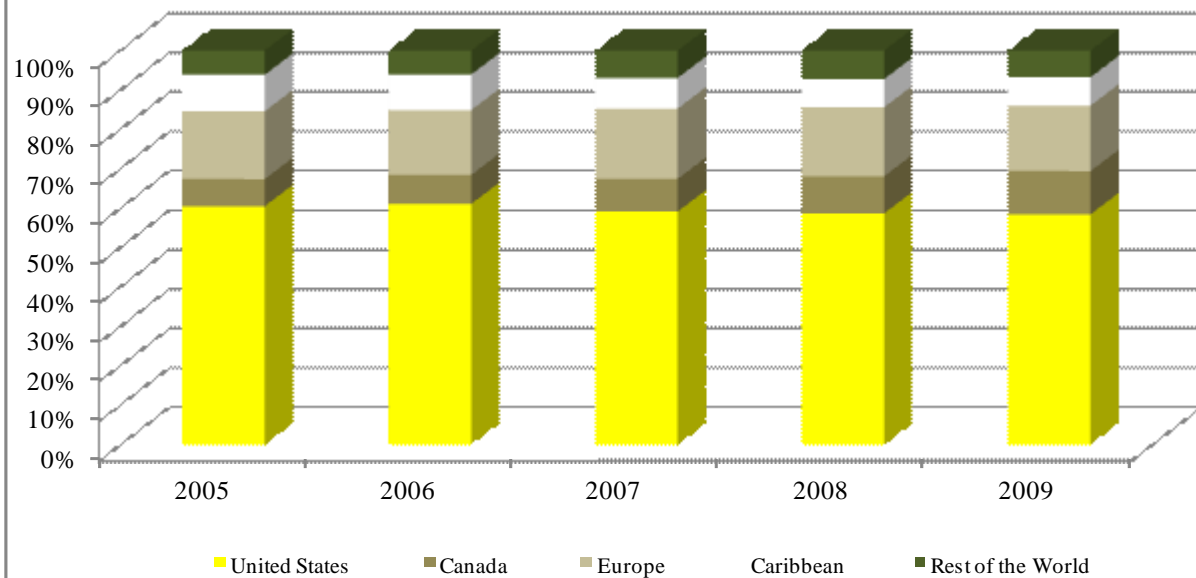


CHART 2.5.2 (i): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO ANTIGUA AND BARBUDA: 2009

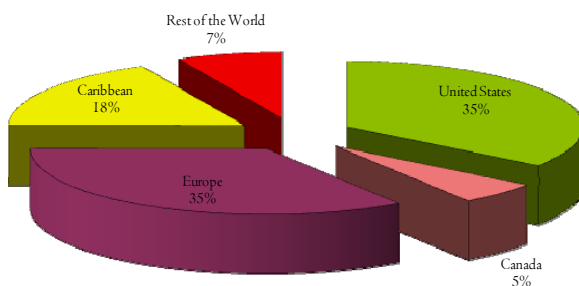
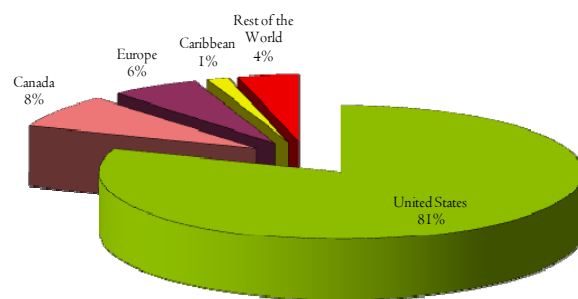


CHART 2.5.2 (ii): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO THE BAHAMAS: 2009



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CHART 2.5.2 (iii): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO BARBADOS: 2009

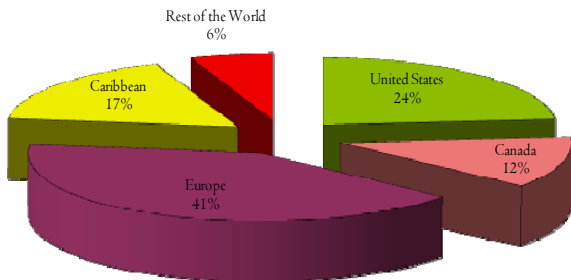


CHART 2.5.2 (iv): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO JAMAICA: 2009

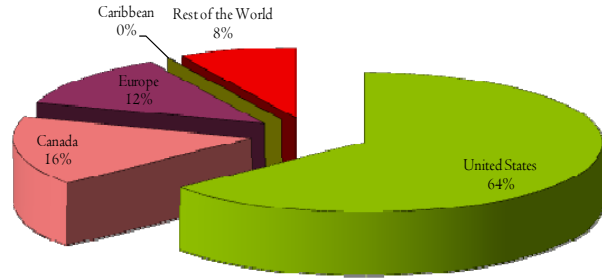


CHART 2.5.2 (v): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO SAINT LUCIA: 2009

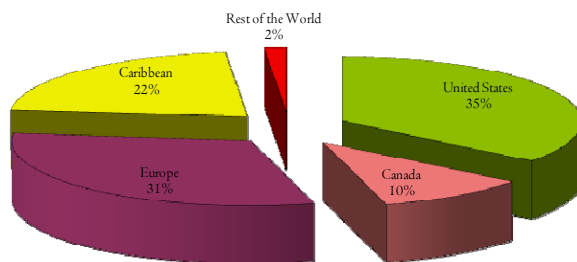


CHART 2.5.2 (vi): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO TRINIDAD AND TOBAGO: 2009

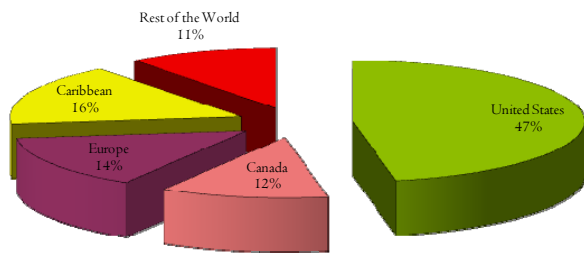


CHART 2.5.2 (vii): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO BERMUDA: 2009

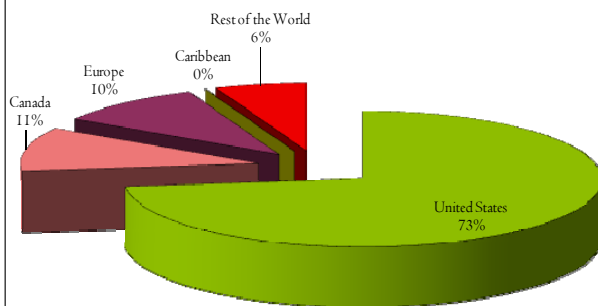
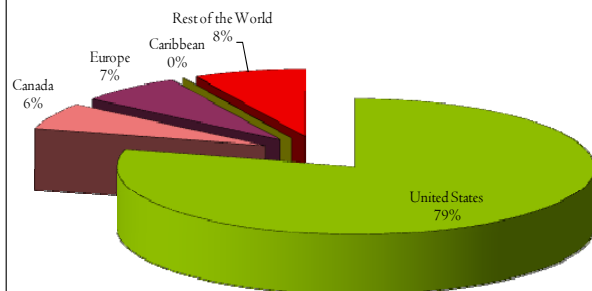


CHART 2.5.2 (viii): PERCENTAGE DISTRIBUTION OF TOURIST ARRIVALS TO THE CAYMAN ISLANDS: 2009



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Appendix 1.2
Table 1 - Tourist Arrivals by Country of Origin: 2005-2009

Country	Year	U.S.A	Canada	Italy	Germany	Holland	France	United Kingdom	Other Europe	Europe
AG	2005	68,527	9,855	5,602				92,518		
	2006	73,497	10,053	5,994				89,563		
	2007	78,697	10,489	6,147				96,797		
	2008	84,032	13,189	7,212				89,514		
	2009	82,068	12,947	7,726				73,251		
BS	2005	1,380,083	75,643						85,277	
	2006	1,365,104	84,639						82,209	
	2007	1,263,679	100,340						87,170	
	2008	1,177,271	114,960						93,803	
	2009	1,068,726	107,041						78,816	
BB	2005	131,005	47,690					202,765	26,852	
	2006	130,767	49,198					211,523	21,922	
	2007	133,519	52,981					223,575	21,509	
	2008	131,795	57,335					219,953	25,727	
	2009	122,306	63,751					190,632	23,052	
BZ	2005	145,977	13,580	3,080	3,966	3,617	3,805	9,989	9,011	
	2006	151,510	15,553	3,073	4,308	4,071	3,167	9,799	9,956	
	2007	152,569	16,655	2,702	4,054	3,496	3,126	10,180	10,616	
	2008	147,654	17,695	2,371	4,161	3,915	3,258	10,100	10,465	
	2009									
DM	2005	18,492	1,977				1,853	6,117	2,288	
	2006	22,011	2,552				2,239	6,503	2,561	
	2007	21,477	2,670				2,403	6,211	2,129	
	2008	20,492	3,328				3,624	7,212	2,713	
	2009	18,193	2,618				4,469	4,354	2,768	
GD	2005	25,181	4,341					15,605	6,779	
	2006	27,332	6,387					25,187	7,510	
	2007	27,219	6,038					33,893	7,912	
	2008	22,011	6,377					35,235	9,137	
	2009	21,111	6,295					27,512	8,138	
GY	2005	60,071	15,876							8,704
	2006	57,193	14,580							8,390
	2007	69,823	19,785							9,978
	2008	66,350	21,470							8,937
	2009	76,955	23,812							8,277
HT	2005	77,047	9,986				3,349		3,371	
	2006	79,247	8,733				2,787		3,995	
	2007	266,793	30,046				10,246		13,126	
JM	2005	1,058,317	116,862	24,424	19,860		3,648	149,773		
	2006	1,190,721	153,569	17,564	19,668		3,124	175,363		
	2007	1,132,532	190,650	17,394	19,895		3,587	185,657		
	2008	1,150,942	236,193	14,563	18,962		3,916	188,436		
	2009	1,172,844	290,307	14,588	20,220		3,779	184,512		

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Table 1 - Tourist Arrivals by Country of Origin: 2005-2009 (cont'd)

Country	Year	U.S.A	Canada	Italy	Germany	Holland	France	United Kingdom	Other Europe	Europe
LC	2005	108,589	16,311		3,338		6,366	84,196	5,231	
	2006	117,450	17,491		2,569		3,764	73,312	5,920	
	2007	113,433	18,640		1,592		3,642	79,180	5,235	
	2008	108,596	26,279		1,823		4,271	83,693	7,084	
	2009	98,685	28,563		2,416		5,356	71,853	7,194	
KN	2005	77,300	9,052					9,541	2,068	
	2006	78,800	7,555					9,890	2,140	
	2007	68,586	7,076					12,791	1,832	
VC	2005	27,153	6,187					13,941	5,987	
	2006	28,598	6,542					14,837	7,124	
	2007	26,642	6,745					16,742	6,712	
	2008	24,042	6,882					15,442	6,860	
	2009	20,159	6,820					13,347	5,750	
SR	2005	4,673				93,658			5,850	
	2006	4,378				92,333			6,840	
	2007	4,573				101,222			6,912	
	2008	4,973				88,380			6,919	
	2009	4,964				81,117			6,674	
TT	2005	167,985	47,702		8,666			63,523		
	2006	172,690	49,726		6,717			58,944		
	2007	184,795	51,411		5,422			59,660		
	2008	189,553	54,205		4,876			42,924		
	2009	195,438	49,514		4,893			38,400		
AI	2005	41,733	1,792	1,199	410			3,834	2,670	
	2006	44,489	1,977	1,301	461			4,344	3,112	
	2007	45,974	2,393	1,792	759			4,568	3,676	
	2008	40,202	2,074	1,583	449			3,816	3,095	
	2009	34,073	2,032	1,312	425			2,947	2,773	
BM	2005	203,997	28,665					22,440		
	2006	227,725	27,675					27,008		
	2007	229,498	27,844					30,386		
	2008	189,388	27,207					29,255		
TC	2005	123,346	21,136							17,613
	2006	169,992	29,802							24,834
KY	2006	217,400	14,900					12,800		4,600
	2007	231,900	17,300					15,200		5,100
	2008	240,500	18,500					15,400		5,800
	2009	215,000	17,300					14,100		5,100

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Table 1 - Tourist Arrivals by Country of Origin: 2005-2009 (cont'd)

Country	Year	OECS	Barbados	Guyana	Grenada	Jamaica	Trinidad and Tobago	French West Indies	Dutch West Indies	Caribbean /Other Caribbean/ CARICOM	Honduras
AG	2005									38,777	
	2006									43,908	
	2007									50,316	
	2008									52,953	
	2009									41,546	
BS	2005									17,698	
	2006									19,140	
	2007									22,524	
	2008									22,528	
	2009									18,856	
BB	2005						30,889			83,886	
	2006						34,480			82,989	
	2007						13,404			68,979	
	2008						28,385			72,254	
	2009						26,289			62,482	
BZ	2005					729				1,357	2,559
	2006					704				1,615	2,918
	2007					643				1,952	2,928
	2008					584				1,723	3,105
DM	2005	10,767						18,517		4,843	
	2006	10,899						19,475		6,243	
	2007	9,621						17,575		4,623	
	2008	9,076						18,975		4,349	
	2009	8,768						20,461		4,283	
GD	2005						13,055			13,731	
	2006						15,602			15,525	
	2007						14,552			14,406	
	2008						14,874			14,475	
	2009						12,584			12,916	
GY	2005									26,810	
	2006									28,437	
	2007									28,376	
	2008									27,860	
	2009									28,026	
HT	2005									7,796	
	2006									4,909	
	2007									15,426	
JM	2005						7,520				
	2006						8,382				
	2007						9,684				
	2008						10,621				
	2009						9,622				

CHAPTER 2 - TOURISM

Table 1 - Tourist Arrivals by Country of Origin: 2005-2009 (cont'd)

Country	Year	OECS	Barbados	Guyana	Grenada	Jamaica	Trinidad and Tobago	French West Indies	Dutch West Indies	Caribbean /Other Caribbean/ CARICOM	Honduras
LC	2005									68,521	
	2006									78,464	
	2007									59,049	
	2008									59,757	
	2009									60,183	
KN	2005									24,961	
	2006									32,605	
	2007									28,885	
VC	2005						11,683			28,261	
	2006						11,002			27,217	
	2007						8,610			21,349	
	2008						8,335			20,140	
	2009						7,346			19,489	
SR	2005			13,092						9,448	
	2006			15,298						7,821	
	2007			13,354						9,568	
	2008			13,445						8,845	
	2009			18,753						10,497	
TT	2005		35,319	22,208	19,501						
	2006		31,211	23,802	14,810						
	2007		21,491	25,504	10,169						
	2008		19,350	25,097	9,190						
	2009		15,672	20,679	7,339						
AI	2005							349	436	7,744	
	2006							2,313	2,747	10,220	
	2007							2,565	3,407	9,453	
	2008							2,792	3,350	8,606	
	2009							2,694	3,369	6,861	
BM	2005										
	2006										
	2007										
	2008										
TC	2005									12,192	
	2006									21,908	
KY	2006										
	2007										
	2008										
	2009										

CHAPTER 2 - TOURISM

Table 1 - Tourist Arrivals by Country of Origin: 2005-2009 (cont'd)

Country	Year	Guatemala	Mexico	Dominican Republic	Brazil	Venezuela	French Guiana	South America, Central America and Latin America	Residents Living Abroad	Other Countries	TOTAL ALL COUNTRIES
AG	2005									30,105	245,384
	2006									30,654	253,669
	2007									19,340	261,786
	2008									18,944	265,844
	2009									16,872	234,410
BS	2005									9,673	1,568,374
	2006									9,785	1,560,877
	2007									9,877	1,483,590
	2008									38,187	1,446,749
	2009									34,883	1,308,322
BB	2005									24,447	547,534
	2006									31,679	562,558
	2007									41,870	555,837
	2008									32,218	567,667
	2009									30,052	518,564
BZ	2005	13,907	5,893					6,299	7,705	5,101	236,575
	2006	13,616	5,855					7,544	8,365	5,256	247,310
	2007	14,130	5,752					7,050	9,160	6,408	251,421
	2008	11,674	5,763					7,447	8,779	6,334	245,028
DM	2005									14,403	79,257
	2006									11,558	84,041
	2007									9,806	76,515
	2008									9,765	79,534
	2009									9,009	74,923
GD	2005								15,907	3,949	98,548
	2006								17,775	3,336	118,654
	2007								19,165	5,962	129,147
	2008								17,104	11,150	130,363
	2009								13,876	10,938	113,370
GY	2005							2,376		2,759	116,596
	2006							2,087		2,787	113,474
	2007							2,620		3,474	134,056
	2008							2,684		2,294	129,595
	2009							2,186		2,025	141,281
HT	2005			5,543				2,856		2,319	112,267
	2006			2,785				3,224		2,103	107,783
	2007			8,819				10,902		30,702	386,060
JM	2005									98,259	1,478,663
	2006									110,514	1,678,905
	2007									141,386	1,700,785
	2008									143,638	1,767,271
	2009									135,225	1,831,097

CHAPTER 2 - TOURISM

Table 1 - Tourist Arrivals by Country of Origin: 2005-2009 (cont'd)

Country	Year	Guatemala	Mexico	Dominican Republic	Brazil	Venezuela	French Guiana	South America, Central America and Latin America	Residents Living Abroad	Other Countries	TOTAL ALL COUNTRIES
LC	2005									4,162	296,714
	2006									3,540	302,510
	2007									7,459	288,230
	2008									4,414	295,917
	2009									4,214	278,464
KN	2005									4,005	126,927
	2006									1,980	132,970
	2007									1,952	121,122
VC	2005									2,292	95,504
	2006									2,112	97,432
	2007									2,837	89,637
	2008									2,400	84,101
	2009									2,535	75,446
SR	2005				5,818		19,844	921		6,718	160,022
	2006				7,013		14,459	1,436		4,482	154,060
	2007				7,474		13,378	831		5,197	162,509
	2008				7,488		14,062	891		5,708	150,711
	2009				7,840		14,638	766		5,379	150,628
TT	2005					10,191				88,095	463,190
	2006					9,974				93,177	461,051
	2007					12,404				78,596	449,452
	2008					12,250				79,834	437,279
	2009					11,520				75,409	418,864
AI	2005									1,917	62,084
	2006									1,998	72,962
	2007									3,065	77,652
	2008									2,317	68,284
	2009									1,405	57,891
BM	2005									14,466	269,568
	2006									16,565	298,973
	2007									17,820	305,548
	2008									17,763	263,613
TC	2005									1,843	176,130
	2006									2,137	248,673
KY	2006									17,600	267,300
	2007									21,900	291,400
	2008									22,600	302,800
	2009									20,600	272,100

CHAPTER 2 - TOURISM

1.2.1 (i)(a): Sources of Data for Table 2.1(a) - Tourists, Cruise Ship Arrivals and Average/ Number of Tourist Nights Spent by Year

Country	Data Source
ANTIGUA AND BARBUDA	Ministry of Tourism
THE BAHAMAS	The Ministry of Tourism, Research Department
BARBADOS	Barbados Statistical Service
BELIZE	Statistical Institute of Belize
DOMINICA	Caribbean Tourism Organisation
GRENADA	Caribbean Tourism Organisation
GUYANA	Guyana Tourism Authority Caribbean Tourism Organisation
JAMAICA	Jamaica Tourist Board
HAITI	Ministère du Tourisme (MDT) Caribbean Tourism Organisation
ST KITTS AND NEVIS	Caribbean Tourism Organisation
SAINT LUCIA	Saint Lucia Tourist Board & Saint Lucia Air and Seaport Authority
ST VINCENT AND THE GRENADINES	Caribbean Tourism Organisation
SURINAME	Suriname Tourism Foundation
TRINIDAD AND TOBAGO	Caribbean Tourism Organisation
ANGUILLA	Statistics Department Tourism Statistics Summary 2012
BERMUDA	Department of Statistics and Department of Tourism
THE CAYMAN ISLANDS	Department of Tourism
TURKS AND CAICOS	Caribbean Tourism Organisation Tourist Board

CHAPTER 2 - TOURISM

1.2.1(i)(b): Notes for Table 2.1 (a) cont'd Tourists, Cruise Ship Arrivals and Average/Number of Tourist Nights Spent by Year: 2005-2009

Country	Notes
THE BAHAMAS	2005-2007 including first & second port of entry. 2008-2009 including first, second, & third port of entry.
JAMAICA	No. of tourist nights spent (average) refers only to non-Jamaican visitors; average nights spent by non-resident Jamaicans is much higher.
BERMUDA	¹ Does not include yacht passengers.

CHAPTER 2 - TOURISM

1.2.1(ii) (a): Sources of Data for Table 2.1 (b): Tourism intensity rate, Tourism Density Ratio and Tourist penetration ratio: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	Caribbean Tourism Organisation and Ministry of Tourism
THE BAHAMAS	The Ministry of Tourism, Research Department
BARBADOS	Caribbean Tourism Organisation
BELIZE	Caribbean Tourism Organisation
DOMINICA	Caribbean Tourism Organisation
GRENADA	Caribbean Tourism Organisation
GUYANA	Guyana Tourism Authority Caribbean Tourism Organisation
JAMAICA	Jamaica Tourist Board and Caribbean Tourism Organisation
HAITI	Caribbean Tourism Organisation
ST KITTS AND NEVIS	Caribbean Tourism Organisation
SAINT LUCIA	Caribbean Tourism Organisation
ST VINCENT AND THE GRENADINES	Caribbean Tourism Organisation
SURINAME	Caribbean Tourism Organisation
TRINIDAD AND TOBAGO	Caribbean Tourism Organisation
ANGUILLA	Caribbean Tourism Organisation
BERMUDA	Department of Statistics and Department of Tourism Caribbean Tourism Organisation
THE BRITISH VIRGIN ISLANDS	Caribbean Tourism Organisation
THE CAYMAN ISLANDS	Caribbean Tourism Organisation
TURKS AND CAICOS	Caribbean Tourism Organisation Tourist Board

CHAPTER 2 - TOURISM

1.2.1(ii) (b): Notes for Table 2.1 (b): Tourism intensity rate, Tourism Density Ratio and Tourist penetration ratio: 2005-2009

Country	Notes
JAMAICA	Tourist intensity/growth and Tourist penetration ratio are calculated from non-resident (stop-over visitors) only. It does not include cruise passengers.
ALL COUNTRIES	- means not calculated

1.2.2 (a): Sources of Data for Table 2.2: Number of Hotels Classified by Number of Rooms, Beds and Rooms occupied by Year

Country	Data Source
THE BAHAMAS	The Ministry of Tourism, Research Department
BARBADOS	Barbados Statistical Service
BELIZE	Statistical Institute of Belize
JAMAICA	Jamaica Tourist Board
BERMUDA	Department of Statistics and Department of Tourism
THE CAYMAN ISLANDS	The Economics and Statistics Office
TURKS AND CAICOS	Tourist Board

1.2.2 (b): Notes for Table 2.2: Number of Hotels Classified by Number of Rooms, Beds and Rooms occupied by Year

Country	Notes
BARBADOS	Data refers to Number of Establishments
BELIZE	Rooms 5 and more and less than 10 refers to hotels with 1-10 rooms Rooms 10 and more and less than 25 refers to hotels with 11-20 rooms
JAMAICA	Rooms are classified as less than or equal to 50 rooms, 51-100 rooms, 101-200 rooms and over 200 rooms; guest houses, resort villas and apartments.

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1.2.3(a): Sources of Data for Table 2.3: Visitor Expenditure and Number Employed in Tourism

Country	Data Source
ANTIGUA AND BARBUDA	Caribbean Tourism Organisation
THE BAHAMAS	The Ministry of Tourism, Research Department
BARBADOS	Barbados Statistical Service
BELIZE	Statistical Institute of Belize
DOMINICA	Caribbean Tourism Organisation
GRENADA	Caribbean Tourism Organisation
JAMAICA	Jamaica Tourist Board
HAITI	Caribbean Tourism Organisation
MONTSERRAT	Caribbean Tourism Organisation
ST KITTS AND NEVIS	Caribbean Tourism Organisation
SAINT LUCIA	Caribbean Tourism Organisation
ST VINCENT AND THE GRENADINES	Caribbean Tourism Organisation
SURINAME	Caribbean Tourism Organisation
TRINIDAD AND TOBAGO	Caribbean Tourism Organisation
ANGUILLA	Caribbean Tourism Organisation
BERMUDA	Department of Statistics and Department of Tourism
THE BRITISH VIRGIN ISLANDS	Caribbean Tourism Organisation
THE CAYMAN ISLANDS	The Economics and Statistics Office
TURKS AND CAICOS	Tourist Board

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1.2.3(b): Notes for Table 2.3: Visitor Expenditure and Number Employed in Tourism

Country	Notes
THE BAHAMAS	Data refers to International Visitor Expenditure 2008-2009- Break in series
JAMAICA	Expenditure on same-day visits and Expenditure on accommodation, meals and drinks, shopping, entertainment, etc., are average expenditure per person per night.
THE CAYMAN ISLANDS	Visitor Expenditure refers to estimated total spending

1.2.4 (a): Sources of Data for Table 2.4: Tourist Arrivals by Type of Accommodation

Country	Data Source
ANTIGUA AND BARBUDA	Ministry of Tourism
THE BAHAMAS	The Ministry of Tourism, Research Department
BARBADOS	Barbados Statistical Service
BELIZE	Statistical Institute of Belize
GUYANA	Guyana Tourism Authority
ST VINCENT AND THE GRENADINES	2010 Environmental Statistics Report
TRINIDAD AND TOBAGO	Ministry of Tourism
BERMUDA	Department of Statistics and Department of Tourism
THE CAYMAN ISLANDS	The Economics and Statistics Office

1.2.4(b): Notes for Table 2.4: Tourist Arrivals by Type of Accommodation

Country	Notes
THE BAHAMAS	N/A - Not Available Figures are stopover visitors by type of accommodation- All Bahamas

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1.2.5(a): Sources of Data for Table 2.5: Tourist Arrivals by country of Origin: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	Ministry of Tourism
THE BAHAMAS	The Ministry of Tourism, Research Department
BARBADOS	Barbados Statistical Service
BELIZE	Belize Tourism Board
DOMINICA	Caribbean Tourism Organisation
GRENADA	Caribbean Tourism Organisation
GUYANA	Guyana Tourism Authority Caribbean Tourism Organisation
JAMAICA	Jamaica Tourist Board
MONTSERRAT	Caribbean Tourism Organisation
ST KITTS AND NEVIS	Caribbean Tourism Organisation
SAINT LUCIA	St. Lucia Tourist Board & St. Lucia Air & Seaport Authority
ST VINCENT AND THE GRENADINES	Caribbean Tourism Organisation
SURINAME	Suriname Tourism Foundation
TRINIDAD AND TOBAGO	Central Statistical Office / Trade and Travel Statistics
ANGUILLA	Anguilla Statistics Department
BERMUDA	Department of Statistics and Department of Tourism
THE CAYMAN ISLANDS	The Economics and Statistics Office, Statistical Compendium 2011
TURKS AND CAICOS	Tourist Board

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1.2.5(b): Notes for Table 2.5: Tourist Arrivals by country of Origin: 2005-2009

Country	Data Source
TRINIDAD AND TOBAGO	2009 data refers to estimated data

CHAPTER 3: ENVIRONMENTAL HEALTH



The World Health Organisation (WHO) defines Environmental Health as the physical, chemical and biological factors external to a person, and all other related factors impacting behaviors. It also involves the assessment and control of these factors which can affect health, through the prevention of disease and creation of healthy environments. Health is one of the most fundamental requirements of human wellbeing, and as such environmental issues are a growing concern, not only to human health, but also to the health of plants and animals.

In the Caribbean region, one of our main sources of livelihood is water. Water is vital for life and good nutrition and contributes to healthy lifestyle in a significant way. However while clean and adequate water supply is vital for human health, this resource is often the main conduit of many environmentally related diseases such as Gastroenteritis, Typhoid and Diarrhoea.

The indicators under this theme are used to assess human health and enable decision makers to monitor the exposure of persons to environmental diseases that arise from inadequate access to clean water and basic sanitation facilities. There are three (3) Indicators covered in this section.

- Number of Reported Cases of Environmentally Related Diseases
- Number of Households by Type of Sanitation Facilities
- Number of Households by Type of Water Supply

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.1: Number of Reported Cases of Environmentally Related Diseases: 2005-2009

Country	Year	Gastroenteritis			Typhoid			Malaria		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
BS	2005	...	...	3,240	0	0	0	...	...	1
	2006	...	...	4,595	2	0	2	...	...	49
	2007	...	...	5,258	0	1	1	...	...	12
	2008	...	...	5,052	1	0	1	...	...	28
BZ	2005	1,880	1,857	3,737	3	1	4	650	899	1,549
	2006	1,992	2,000	3,992	2	1	3	392	452	844
	2007	1,656	1,651	3,307	...	...	0	370	475	845
	2008	2,619	2,527	5,146	1	0	1	232	308	540
	2009	2,778	2,682	5,460	1	0	1	10	12	22
DM	2005	...	...	592	...	...	0	...	...	0
	2006	...	...	762	...	...	2	...	...	0
GD	2005	...	...	1,332	...	...	...	...	...	...
	2006	...	...	1,914	...	...	...	...	...	...
	2007	...	...	1,155	...	...	...	...	...	...
	2008	...	...	1,509	...	...	...	...	...	...
	2009	...	...	2,819	...	...	...	...	...	...
JM	2005	...	...	2,891	...	...	3	...	...	88
	2006	...	...	3,772	...	...	0	...	...	194
	2007	...	...	11,573	...	...	1	...	...	199
	2008	...	...	10,228	...	...	0	...	...	22
LC	2005	...	...	1,510	...	...	2	...	...	2
	2006	...	...	3,893	...	...	0	...	...	0
	2007	...	...	2,239	...	...	0	...	...	0
SR	2005	...	...	...	...	...	...	...	...	8,517
	2006	...	...	...	...	...	...	...	...	3,507
	2007	...	...	...	...	...	...	...	...	1,809
	2008	...	...	...	...	...	...	...	...	2,134
BM	2005	33	27	60	...	...	...	1	0	1
	2006	43	31	74	...	...	...	0	0	0
	2007	40	33	73	...	...	...	0	2	2
	2008	33	23	56	...	...	...	0	0	1

Environmentally related diseases refer to diseases that cause an interruption, cessation or disorder of human bodily functions, systems or organs due to unfavorable environmental factors. According to the Dictionary of Epidemiology, edited for the International Epidemiological Association by John M. Last, a case in epidemiology is a person in the population or study group identified as having the particular disease, health disorder, or condition under investigation. A variety of criteria may be used to identify cases, e.g. individual physician's diagnoses, registries and notifications, abstracts of clinical records, surveys of the general population, and population screening, among others. The epidemiological definition of a case is not necessarily the same as the ordinary clinical definition. (<http://www.paho.org/English/SHA/be991norms.htm>)

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.1: Number of Reported Cases of Environmentally Related Diseases: 2005-2009 (cont'd)

Country	Year	Cholera			Poisoning			Dengue		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
BS	2005	0	0	0	...	...	...	0	0	0
	2006	0	0	0	...	...	...	0	0	0
	2007	0	0	0	...	...	...	0	0	0
	2008	0	0	0	...	...	...	0	0	0
BZ	2005	0	0	0	107	111	218	345	306	651
	2006	0	0	0	92	93	185	8	3	11
	2007	0	0	0	98	96	194	71	66	137
	2008	0	0	0	118	130	248	21	18	39
	2009	0	0	0	60	55	115	683	772	1,455
DM	2005	...	...	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...	...	...
GD	2005	...	...	...	...	...	...	...	...	2
	2006	...	...	...	...	...	...	...	...	14
	2007	...	...	...	...	...	...	...	...	7
	2008	...	...	...	...	...	...	...	...	7
	2009	...	...	...	...	...	...	...	...	28
JM	2005	...	...	0	...	...	625	...	...	27
	2006	...	...	0	...	...	538	...	...	71
	2007	...	...	0	...	...	526	...	...	1,521
	2008	...	...	0	...	...	639	...	...	428
LC	2005	...	...	0	...	...	...	...	...	4
	2006	...	...	0	...	...	...	...	...	18
	2007	...	...	0	...	...	...	...	...	53
SR	2005	...	...	...	...	...	...	717	853	1,570
	2006	...	...	...	...	...	...	263	367	630
	2007	...	...	...	...	...	...	148	152	300
	2008	...	...	...	...	...	...	185	233	418
BM	2005	...	...	...	21	15	36	0	0	0
	2006	...	...	...	13	13	26	1	0	1
	2007	...	...	...	23	15	38	0	0	0
	2008	...	...	...	14	9	23	0	0	0

Types of Environmentally Related Diseases

Gastroenteritis is an inflammation of the stomach and intestines with many possible causes, such as: bacteria (responsible for acute food poisoning), parasites, food intolerances, drugs (antibiotics in particular) or most common viral infections. (Please refer to the Center for Disease Control website at <http://www.cdc.gov/ncidod/dvrd/revb/gastro/faq.htm>.)

Typhoid: Typhoid fever is a bacterial

infection caused by ingesting contaminated food or water. Symptoms are characterized by headaches, nausea and loss of appetite.

Malaria is caused by a parasite called *Plasmodium*, which is transmitted via the bites of infected mosquitoes. In the human body, the parasites multiply in the liver, and then infect red blood cells. (Please refer to the World Health Organization's website at <http://www.who.int/topics/malaria/en/>)

Dengue is an acute, febrile illness, caused by one of four types of dengue virus. Viral

transmission is through the bite of an infected *Aedes aegypti* mosquito. Dengue fever is usually seasonal, with an increase in cases occurring after the onset of the rainy season.

Cholera is an acute intestinal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio cholerae*. It has a short incubation period, from less than one day to five days, and produces an enterotoxin that causes a copious, painless, watery diarrhoea that can (continued on page 71)

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.1 cont'd: Number of Reported Cases of Environmentally Related Diseases: 2005-2009

Country	Year	Accidental pesticide			Diarrhoea			Respiratory diseases		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
BS	2005	...	...	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...	...	...
BZ	2005	..	..	..	...	...	...	3,667	3,665	7,332
	2006	..	..	..	...	...	...	4,308	4,091	8,399
	2007	..	..	..	...	...	...	4,069	3,926	7,995
	2008	..	..	..	...	...	...	5,267	4,982	10,249
	2009	..	..	..	...	...	...	20,842	17,730	38,572
DM	2005	...	...	...	...	...	13	...	...	268
	2006	...	...	...	...	...	5	...	...	774
GD	2005	...	...	...	...	...	...	...	...	7,359
	2006	...	...	...	...	...	...	...	...	6,748
	2007	...	...	...	...	...	...	...	...	7,535
	2008	...	...	...	...	...	...	...	...	6,282
	2009	...	...	...	...	...	...	...	...	8,292
JM	2005	...	...	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...	...	...
LC	2005	...	...	...	...	...	0	...	...	391
	2006	...	...	...	...	...	0	...	...	668
	2007	...	...	...	...	...	0	...	...	789
SR	2005	...	...	...	55	94	149	...	...	...
	2006	...	...	...	69	127	196	...	...	...
	2007	...	...	...	50	63	113	...	...	...
	2008	...	...	...	60	100	160	...	...	...
BM	2005	0	1	1	0	3	3	282	298	580
	2006	0	0	0	5	3	8	227	263	490
	2007	0	2	2	4	4	8	257	237	494
	2008	0	0	0	0	1	1	245	238	483

quickly lead to severe dehydration and death if treatment is not promptly given. Vomiting also occurs in most patients. (Please refer to the World Health Organization's website at <http://www.who.int/topics/cholera/en/>)

Accidental Pesticide Poisoning: A case of Accidental Pesticide Poisoning is defined as any person who, after having been exposed to one or more pesticides, presents clinical manifestations of poisoning, or specific

laboratory test results compatible with poisoning, in the first 24 hours after contact. Accidental refers to the unintentional and unexpected exposure to pesticides. This includes food poisoning. (PAHO/WHO Epidemiological Bulletin, December 2000)

Poisoning: A poison is any substance that causes harm if it gets into the body. Harm can be mild (for example, headache or nausea) or severe (for example, fits or very

high fever), and severely poisoned people may die. When people are in contact with a poison they are said to be exposed to it.

Diarrhoea is the passage of three (3) or more loose or liquid stools per day, or more frequently than is normal for the individual. It is usually a symptom of gastrointestinal infection, which can be caused by a variety of bacterial, viral and parasitic organisms.

(continued on page 72)

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.1 cont'd: Number of Reported Cases of Environmentally Related Diseases: 2005-2009

Country	Year	Tuberculosis			Other			TOTAL CASES, all causes		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
BS	2005	...	...	...	...	...	968	...	...	4,209
	2006	...	...	...	...	...	879	...	...	5,525
	2007	...	...	...	...	...	673	...	...	5,944
	2008	...	...	...	...	...	802	...	...	5,883
	2009	...	...	...	...	...	...	...	...	...
BZ	2005	...	...	...	...	...	...	6,652	6,839	13,491
	2006	...	...	...	...	...	...	6,794	6,640	13,434
	2007	...	...	...	...	...	...	6,264	6,214	12,478
	2008	...	...	...	...	...	...	8,258	7,965	16,223
	2009	...	...	...	...	...	...	24,374	21,251	45,625
DM	2005	...	...	...	...	...	...	...	...	873
	2006	...	...	...	...	...	...	...	...	1,543
GD	2005	...	...	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...	...	...
	2009	...	...	...	...	...	...	...	...	...
JM	2005	...	...	95	...	...	...	...	...	...
	2006	...	...	98	...	...	...	...	...	...
	2007	...	...	100	...	...	...	...	...	...
	2008	...	...	85	...	...	...	...	...	...
LC	2005	...	...	...	...	...	8	...	...	...
	2006	...	...	...	...	...	8	...	...	...
	2007	...	...	...	...	...	0	...	...	...
SR	2005	...	...	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...	...	...
BM	2005	...	...	...	...	...	...	337	344	681
	2006	...	...	...	...	...	...	289	310	599
	2007	...	...	...	...	...	...	234	293	617
	2008	...	...	...	...	...	...	292	272	564

Infection is spread through contaminated food or drinking-water, or from person to person as a result of poor hygiene. Severe diarrhea leads to fluid loss, and may be life-threatening, particularly in young children and people who are malnourished or have impaired immunity. (Please refer to the World Health Organization's website at <http://www.who.int/topics/diarrhoea/en/>)

Respiratory tract diseases are diseases that affect the air passages, including the nasal passages, the bronchi and the lungs. They range from acute infections, such as pneumonia and bronchitis, to chronic conditions such as asthma and chronic obstructive pulmonary disease. (Please refer to the World Health Organization's website at <http://www.who.int/topics/>

[respiratory_tract_diseases/en/](http://www.who.int/topics/respiratory_tract_diseases/en/)

Other: Other refers to any other environmentally related diseases not previously mentioned.

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.2 (a) – Number of Households by Type of Sanitation facilities: 2000 and 2010 Round of Censuses

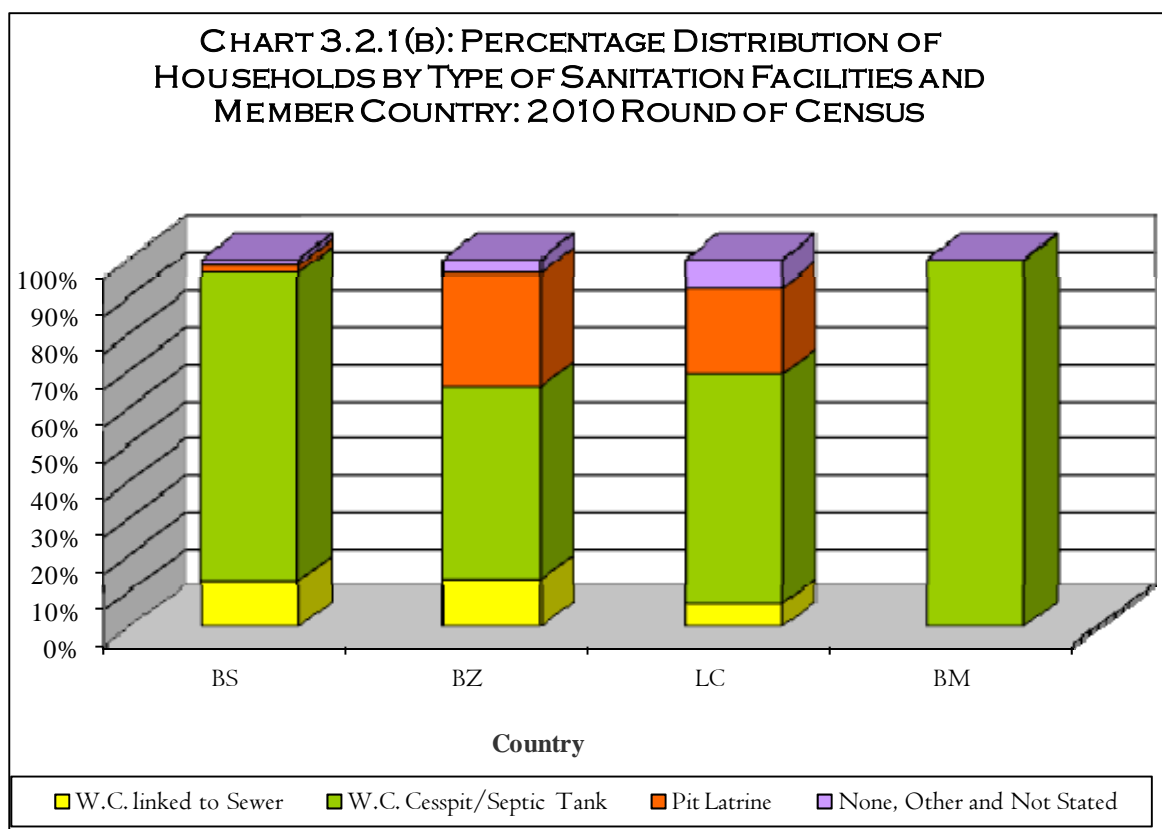
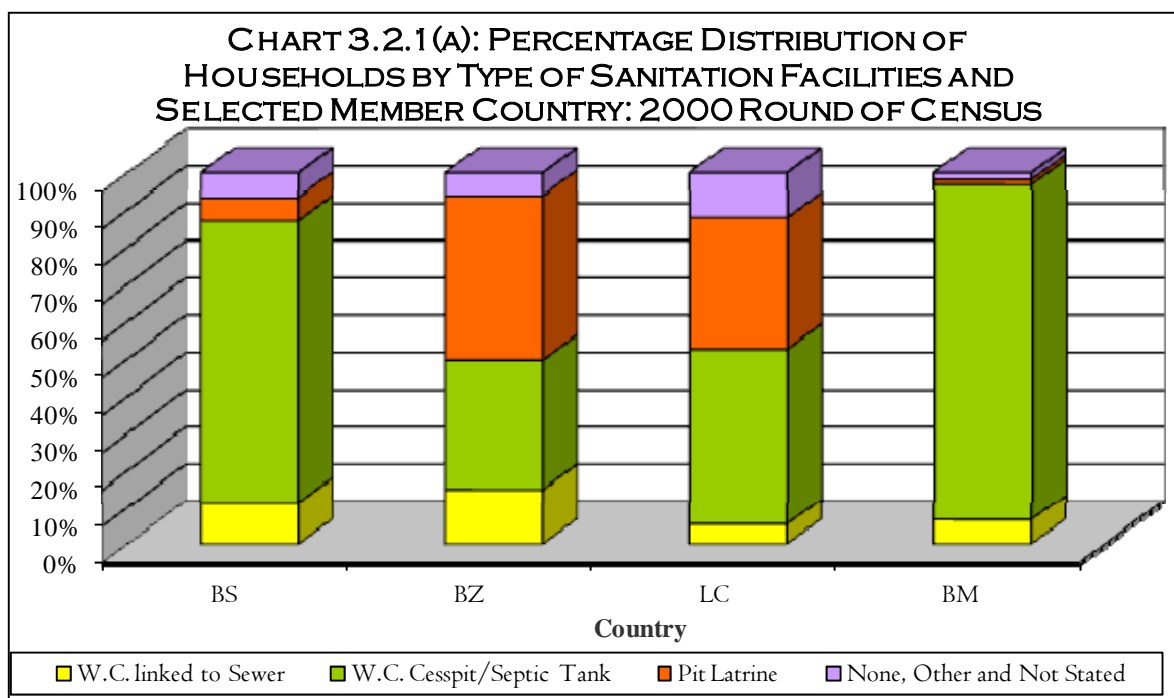
Country	Year	W.C. Linked to sewer	W.C. Cesspit / Septic Tank	Pit Latrine	None	Other	Not Stated	Total all Households
AG	2001	14,868		5,176	293	113		20,450
BS	2000	9,978	66,507	5,445	1,054	4,703	55	87,742
	2010	13,378	85,728	2,125	209	1,318	0	102,758
BB	2000	428	67,511	13,684	487	453	463	83,026
BZ	2000	7,851	18,049	22,864	2,222	847	112	51,945
	2010	10,694	41,594	24,294	2,308	386	215	79,491
DM	2001	3,010	8,991	6,332	3,572	454	0	22,359
GD	2001	603	12,834	11,719	934	128		26,218
GY	2002	10,435	62,815	105,661	3,497	207		182,615
HT	2003	...	83,575	880,373	534,128	295,122		1,793,198
JM	2001	157,851	268,783	273,086	18,978	0	29,628	748,326
MS	2001	355	1,673	170	84	47	0	2,329
KN	2001	124	12,239	2,774	499	44	0	15,680
LC	2001	2,333	20,224	15,072	4,652	417	0	42,698
	2010	3,889	37,002	13,611	3,653	766	...	58,920
VC	2001	189	15,549	13,408	1,046	70	0	30,262
	2008	3,472	16,858	9,031	259	125	59	29,804
TT	2000	65,851	152,713	81,318	1,320	2,669	0	303,871
AI	2001	3,354	25	144	78	129	0	3,730
BM	2010		26,896			27		26,923
VG	2001	2,056	6,079	88	77	86	0	8,386
TC	2001	0	4,954	2,000	267	33	0	7,254

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.2 (b) – Percentage distribution of Households by Type of Sanitation facilities: 2000 and 2010 Round of Censuses, 2005-2009

Country	Year	W.C. Linked to sewer	W.C. Cesspit / Septic Tank	Pit Latrine	None	Other	Not Stated	Total all Households
AG	2001	72.7	0.0	25.3	1.4	0.6	0.0	100.0
BS	2000	11.4	75.8	6.2	1.2	5.4	0.1	100.0
	2010	13.0	83.4	2.1	0.2	1.3	0.0	100.0
BB	2000	0.5	81.3	16.5	0.6	0.5	0.6	100.0
BZ	2000	15.1	34.7	44.0	4.3	1.6	0.2	100.0
	2010	13.5	52.3	30.6	2.9	0.5	0.3	100.0
DM	2001	13.5	40.2	28.3	16.0	2.0	0.0	100.0
GD	2001	2.3	49.0	44.7	3.6	0.5	0.0	100.0
	2005	5.4	54.4	38.5	0.7	1.1		100.0
GY	2002	5.7	34.4	57.9	1.9	0.1	0.0	100.0
HT	2003		4.7	49.1	29.8	16.5	0.0	100.0
JM	2001	21.1	35.9	36.5	2.5	0.0	4.0	100.0
	2006	18.9	46.0	33.3	0.0	1.8		100.0
	2007	21.9	42.4	34.6	0.0	1.1		100.0
	2008	27.4	44.0	28.3	0.0	0.3		100.0
	2009	24.0	43.6	32.3	...	0.1		100.0
MS	2001	15.2	71.8	7.3	3.6	2.0	0.0	100.0
KN	2001	0.8	78.1	17.7	3.2	0.3	0.0	100.0
LC	2001	5.5	47.4	35.3	10.9	1.0	0.0	100.0
	2010	6.6	62.8	23.1	6.2	1.3		100.0
VC	2001	0.6	51.4	44.3	3.5	0.2	0.0	100.0
	2008	11.6	56.6	30.3	0.9	0.4	0.2	100.0
SR	2004	0.6	72.6	16.6	...	10.2		100.0
TT	2000	21.7	50.3	26.8	0.4	0.9	0.0	100.0
AI	2001	89.9	0.7	3.9	2.1	3.5	0.0	100.0
BM	2010	0.0	99.9	0.0	0.0	0.1	0.0	100.0
VG	2001	24.5	72.5	1.0	0.9	1.0	0.0	100.0
TC	2001	0.0	68.3	27.6	3.7	0.5	0.0	100.0

CHAPTER 3: ENVIRONMENTAL HEALTH



CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.3 (a): Number of Households by Type of Water Supply: 2000 and 2010 Round of Censuses

Country	Year	Piped into dwelling	Piped into yard	Public Piped into dwelling	Private catchments		Public catchments: piped
					Not piped	Piped	
AG	2001	13,438	2,054	98	0	780	
BS	2000	76,841	1,866	0	2,877	0	
	2010	92,948	1,657		2,040		
BB	2000	75,494	4,636	0	1,592	0	
BZ	2000	15,548	8,828	0	14,190	0	
	2010	6,350	14,904	46,850	2,207	0	
DM	2001	11,495	2,615	0	516	0	
GD	2001	215	3,024	16,325	888	996	
GY	2002	16,912	70,817	52,956	8,829	0	
JM	2001	46,830	122,133	342,723	74,445	0	14,659
HT	2003		201,652				
MS	2001	13	222	1,987	1	2	
KN	2001	295	1,887	12,196	70	98	
LC	2001		8,259	26,308	508	0	
	2010	236	4,949	46,311	884	..	
VC	2001	521	5,167	15,826	864	1,599	
	2008	3,021	4,382	17,112	2,339		
TT	2000	13,561	26,777	183,966	25,341	0	
AI	2001	1,965	203	0	1,251	0	
BM	2010	4,914	...	21,982	...	...	...
VG	2001	2,320	244	3,750	241	1,356	
TC	2001	1,585	n/a	0	4,928	0	

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.3 (a): Number of Households by Type of Water Supply: 2000 and 2010 Round of Censuses (cont'd)

Country	Year	Public standpipe	Public well or tank	Purified Water	Spring Water	Other	Total
AG	2001	3,750	0			330	20,450
BS	2000 2010	4,794 2,351	589 2,041			775 1,721	87,742 102,758
BB	2000	614	8			682	83,026
BZ	2000 2010	2,207 938	456 4,544	8,767	1,166 1,639	783 2,059	51,945 79,491
DM	2001	6,109	277			1,347	22,359
GD	2001	3,241	56			1,473	26,218
GY	2002	5,949	1,796		19,390	5,966	182,615
JM	2001	78,467	0		34,051	83,728	748,326
HT	2003	125,822			248,460	1,217,264	1,793,198
MS	2001	75	3			26	2,329
KN	2001	843	48			243	15,680
LC	2001 2010	3,636 2,595	140			3,847 3,948	42,698 58,923
VC	2001 2008	4,438 1,270	158 379			1,689 1,303	30,262 29,806
TT	2000	29,057	0	6,279	4,550	14,340	303,871
AI	2001	59	26			226	3,730
BM	2010	...	...	...	...	27	26,923
VG	2001	8	60			407	8,386
TC	2001	...	434			309	7,256

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.3 (b): Percentage distribution of Households by Type of Water Supply: 2000 and 2010 Round of Censuses

Country	Year	Piped into dwelling	Piped into yard	Public Piped into dwelling	Private catchments		Public catchments: piped
					Not piped	Piped	
AG	2001	65.7	10.0	0.5	0.0	3.8	
BS	2000	87.6	2.1	0.0	3.3	0.0	
	2010	90.5	1.6	0.0	2.0		
BB	2000	90.9	5.6	0.0	1.9	0.0	
BZ	2000	3.9	17.0	26.0	27.3	0.0	
	2010	8.0	18.7	58.9	2.8	0.0	
DM	2001	51.4	11.7	0.0	2.3	0.0	
GD	2001	0.8	11.5	62.3	3.4	3.8	
	2005	5.9	8.4	70.1			
GY	2002	9.3	38.8	29.0	4.8	0.0	
JM	2001	6.3	16.3	45.8	9.9	0.0	2.0
	2006		19.3	48.5	15.4		
	2007		19.6	50.6	14.1		
	2008		18.5	53.9	14.7		
	2009		18.6	53.9	13.7		
HT	2003		11.2				
MS	2001	0.6	9.5	85.3	0.0	0.1	
KN	2001	1.9	12.0	77.8	0.4	0.6	
LC	2001	0.0	19.3	61.6	1.2	0.0	
	2010	0.4	8.4	78.6	1.5	...	
VC	2001	1.7	17.1	52.3	2.9	5.3	
	2008	10.1	14.7	57.4	7.8		
TT	2000	4.5	8.8	60.5	8.3	0.0	
AI	2001	52.7	5.4	0.0	33.5	0.0	
BM	2010	18.3	...	81.6	...	...	...
VG	2001	27.7	2.9	44.7	2.9	16.2	0.0
TC	2001	21.8	n.a.	0.0	67.9	0.0	

CHAPTER 3: ENVIRONMENTAL HEALTH

Table 3.3 (b): Percentage distribution of Households by Type of Water Supply: 2000 and 2010 Round of Censuses (cont'd)

Country	Year	Public standpipe	Public well or tank	Purified Water	Spring Water	Other	Total
AG	2001	18.3	0.0			1.6	100.0
BS	2000	5.5	0.7			0.9	100.0
	2010	2.3	2.0			1.7	100.0
BB	2000	0.7	0.0			0.8	100.0
BZ	2000	4.2	0.9	16.9	2.2	1.5	100.0
	2010	1.2	5.7	0.0	2.1	2.6	100.0
DM	2001	27.3	1.2			6.0	100.0
GD	2001	12.4	0.2			5.6	100.0
	2005	8.5				7.1	100.0
GY	2002	3.3	1.0		10.6	3.3	100.0
JM	2001	10.5	0.0		4.6	11.2	100.0
	2006	6.7	1.8			8.4	100.0
	2007	6.4	1.1			8.3	100.0
	2008	5.9	1.3			5.7	100.0
	2009	6.2	1.1			6.6	100.0
HT	2003	7.0			13.9	67.9	100.0
MS	2001	3.2	0.1			1.1	100.0
KN	2001	5.4	0.3			1.5	100.0
LC	2001	8.5	0.3			9.0	100.0
	2010	4.4	0.0			6.7	100.0
VC	2001	14.7	0.5			5.6	100.0
	2008	4.3	1.3			4.4	100.0
TT	2000	9.6	0.0	2.1	1.5	4.7	100.0
AI	2001	1.6	0.7			6.1	100.0
BM	2010	...	...	...	...	0.1	100.0
VG	2001	0.1	0.7	0.0	0.0	4.9	100.0
TC	2001	...	6.0			4.3	100.0

CHAPTER 3: ENVIRONMENTAL HEALTH

Concepts and Definitions

The number of households by type of water supply describes the main source of water available to households.

Other refers to any source other than those listed above (e.g. river, stream, spring, creek, etc).

The number of households by sanitation facilities describes the types of toilet facilities available to households.

Types of Water Supply

Piped into dwelling refers to the water supply received by a household from a private source that is piped into the dwelling unit through water pipes within the walls that constitute a dwelling.

Piped into yard describes a situation where the household receives running water from a public source through a pipe in the yard or compound on which the dwelling stands.

Public piped into dwelling describes a situation where running water from a public source is piped directly into the dwelling unit.

Private catchments: not piped occurs where the water supply to the household is from a private source within the premises and is not piped into the dwelling.

Private catchments: piped occurs where the water supply to the household is from a private source piped into the dwelling unit.

Public standpipe: This describes a situation where water is available to the household from a standpipe in the street or elsewhere, but not in the compound on which the dwelling stands.

Public well or tank applies when the water available to the dwelling unit is from a protected well or tank built by the public authorities or community-based, non-governmental organizations.

Types of Sanitation Facilities

W.C. Linked to Sewer: This is a flush toilet or water closet (W.C.), which fills from a piped water supply and empties into a sewerage disposal system.

W.C. Cesspit/Septic Tank is a waterborne toilet facility and empties into a cesspit or septic tank (a tank in which sewage is decomposed by the action of bacteria).

A pit latrine is a type of toilet facility that is available to the household outside of the dwelling. It is not waterborne.

None refers to households that are without sanitary facilities.

Other refers to all other sanitary facilities not so far mentioned.

CHAPTER 3: ENVIRONMENTAL HEALTH

CHART 3.3.1(A): PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY TYPE OF WATER SUPPLY AND SELECTED MEMBER COUNTRY: 2000 ROUND OF CENSUS

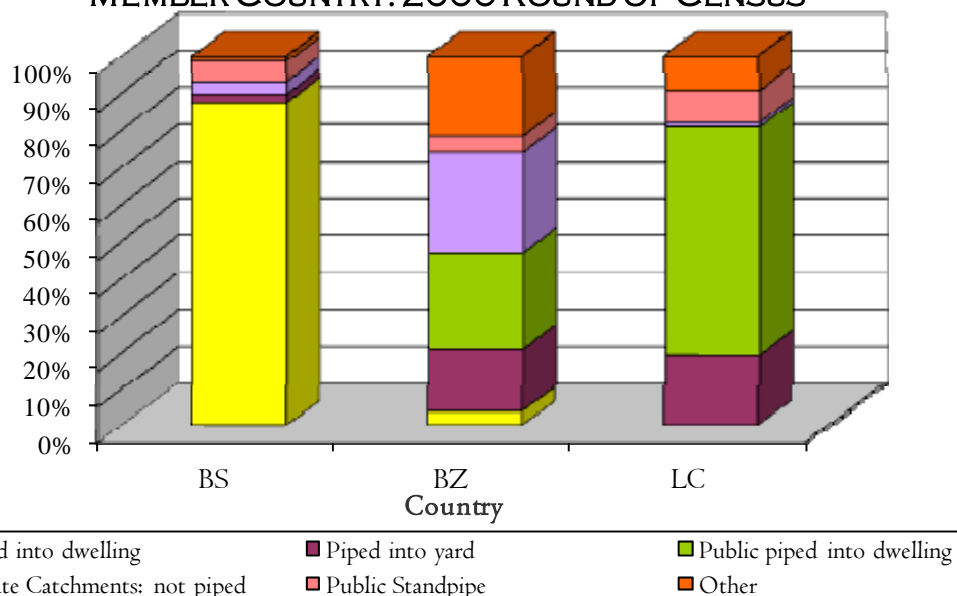
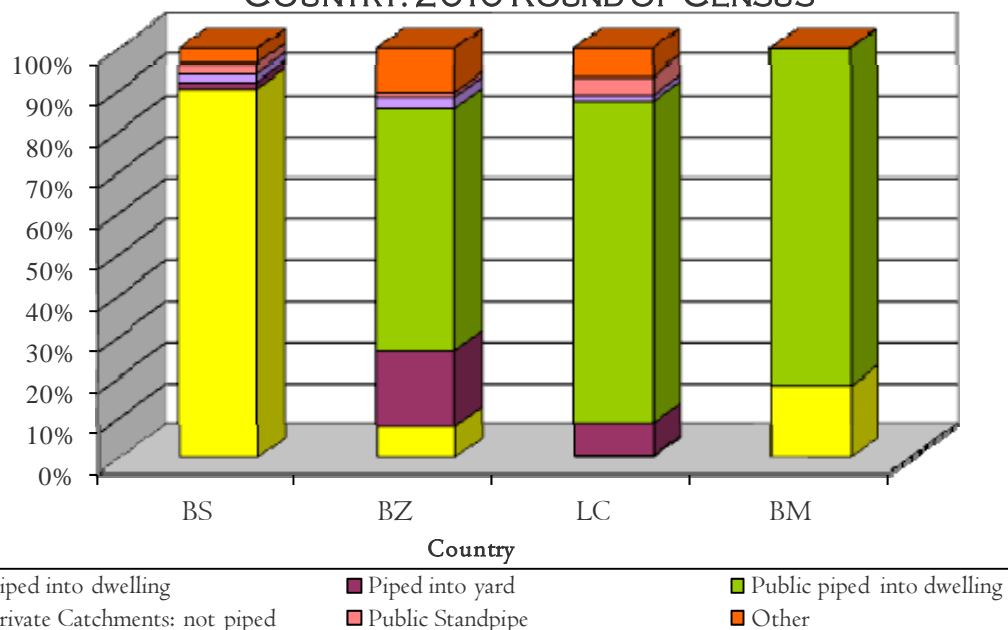


CHART 3.3.1(B): PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY TYPE OF WATER SUPPLY AND MEMBER COUNTRY: 2010 ROUND OF CENSUS



Other includes Private Catchments: piped, Public Catchments: piped, Public Well or Tank, Purified Water, Spring Water and Other

CHAPTER 3: ENVIRONMENTAL HEALTH

1.3.1 (a) Sources of Data for Table 3.1: Number of Reported Cases of Environmentally Related Diseases: 2005-2009

Country	Data Source
THE BAHAMAS	Gastroenteritis, Typhoid, Malaria, Dengue, Cholera, Foodborne Illnesses: Department of Public Health; Accidental pesticide, Poisoning, Diarrhoea, Respiratory diseases: Public Hospitals Authority - Kean Information System (Princess Margaret Hospital and Rand Memorial Hospital discharge data) Prepared by: Health Information and Research Unit - 09/07
BELIZE	The Statistical Institute of Belize
DOMINICA	Health Information Unit, Ministry of Health
GRENADA	The Ministry of Health
JAMAICA	The Statistical Institute of Jamaica
SAINT LUCIA	The Ministry of Health
SURINAME	The Ministry of Public Health
BERMUDA	The Department of Statistics

1.3.1 (b) Notes for Table 3.1: Number of Reported Cases of Environmentally Related Diseases: 2005-2009

Country	Data Source
THE BAHAMAS	The Department of Environment Health Services which falls under the Ministry of Health is the primary authority of all environmental health matters in the Commonwealth of the Bahamas. Due to the change in reporting format, foodborne illnesses are now being reported under gastroenteritis as part of syndromic surveillance. This has resulted in an upward shift in the number of gastroenteritis cases and a decrease in foodborne illnesses. Most of these numbers are reported from the sentinel site at the Accident and Emergency Department, Princess Margaret Hospital.
DOMINICA	For 2006 increase in cases of Gastroenteritis under 5 was due to an outbreak of Novo Virus From 2004 increase in respiratory diseases was due to a vigilant syndromic surveillance
SAINT LUCIA	Other includes Leptospirosis

CHAPTER 3: ENVIRONMENTAL HEALTH

**1.3.2 (a): Sources of Data for Table 3.2 (a) – Number of Households by Type of Sanitation facilities:
and Table 3.2(b) - Percentage distribution of Households by Type of Sanitation facilities 2000 Census
and 2010 Census**

Country	Year	Data Source
ALL COUNTRIES	2000 and 2010	Population and Housing Census
JAMAICA	2006-2009	Jamaica Survey of Living Conditions
ST VINCENT AND THE GRENADINES	2008	2010 Environmental Statistics Report

**1.3.2 (a): Notes for Table 3.2 (a) – Number of Households by Type of Sanitation facilities:
and Table 3.2(b) - Percentage distribution of Households by Type of Sanitation facilities 2000 Census
and 2010 Census**

Country	Year	Data Source
JAMAICA	2006-2009	Other includes none.
TRINIDAD AND TOBAGO	2000	Other includes not stated
BERMUDA	2010	Bermuda has a building code whereas all houses must have a cesspit on their property that is linked to their dwelling unit. This is not part of the Census questionnaire. Other Includes 27 boats Total Includes 1,106 households for which there is no data by type of tenure.

CHAPTER 3: ENVIRONMENTAL HEALTH

**1.3.3 (a): Sources of Data for Table 3.3 (a) – Number of Households by Type of Water Supply:
and Table 3.3(b) - Percentage distribution of Households by Type of Water Supply 2000 Census and
2010 Census**

Country	Year	Data Source
ALL COUNTRIES	2000 2010	2000 Round of Population and Housing Census 2010 Round of Population and Housing Census
GRENADA	2005	Grenada Core Welfare Indicators Survey (CWIQ) 2005
JAMAICA	2006-2009	Jamaica Survey of Living Conditions
ST VINCENT AND THE GRENADINES	2008	2010 Environmental Statistics Report

**1.3.3 (a): Notes for Table 3.3 (a) – Number of Households by Type of Water Supply:
and Table 3.3(b) - Percentage distribution of Households by Type of Water Supply: 2000 Census and
2010 Census**

Country	Year	Data Source
THE BAHAMAS	2000	Other includes not stated Rain water is included in piped into dwelling, but can be either piped into dwelling or into yard. Private catchments, not piped refer to friend/relative's pipe. Piped into dwelling is disaggregated by Public or Private Piped into dwelling. Public piped is the government water system and private piped is the individual household private water system. Public Piped = 48962 and private piped = 26796. The cumulative is given.
BARBADOS	2000	Other includes not stated
BELIZE	2000	Other includes not stated
DOMINICA	2001	Other includes not stated
ST KITTS AND NEVIS	2001	Other includes not stated
SAINT LUCIA	2001 2010	Other includes not stated Other includes Private dug well
ST VINCENT AND THE GRENADINES	2001 2008	Other includes private catchment piped Other includes not stated
TRINIDAD AND TOBAGO	2000	Other includes Truck borne and Not Stated
ANGUILLA	2001	Other includes not stated
BERMUDA	2010	Other includes not stated
TURKS AND CAICOS	2001	Other includes not stated

CHAPTER 4: NATURAL DISASTERS



A natural disaster is a physical natural event that overwhelms local capacity for damage control or recovery. Natural disasters have been responsible for the loss of life in significant numbers around the world. With an expanding world population, more people are living in close proximity to the sea or volcanic mountains or in low lying areas making them vulnerable to flooding in the latter case.

Natural disasters can take the form of sudden, usually catastrophic events, such as earthquakes or those which develop gradually, such as droughts. Besides the loss of life and property, disruption of economic activities due to dislocation of human resources and damage to buildings and infrastructure can occur. This is particularly relevant in the CARICOM region because of the small size of the islands and the majority of the population living in close proximity to the sea.

Natural disasters also have a great impact because of the location of hotels on beaches. Damages to hotel infrastructure can result in loss of jobs, income and earnings from Tourism, which is the main foreign export earner in some of the island states. Beach and Coral Reef damage from Hurricanes is also a major source of concern. In other instances, the loss of fertile agricultural land due to flooding for example can be a source of major disruption.

The data collected in this report seeks to measure the number of persons affected by these natural events and the impact on the economy through economic losses resulting in infrastructure damage.

CHAPTER 4: NATURAL DISASTERS

Table 4.1 Natural Disasters by Year: 2005 - 2010

Country	Year	Disaster		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		
AG	2008	Tropical Storm	Omar	16-Oct	1	1	5,088	17.4
BS	2005	Tropical Storm	...	21-Jul	...	0	...	0	...	13,170	...
	2005	Tropical Storm	...	24-Aug	...	0	...	0	...	68,163	...
	2005	Tropical Storm	...	19-Sep	...	0	...	0	...	2,992	...
	2007	Tropical Storm	...	30-Oct	...	1	...	0	...	6,563	10.0
BZ	2005	Storm	...	...	...	3	...	...	...	0	0
	2007	Storm	...	...	...	0	...	...	...	20,000	14.8
	2008	Flood	...	...	...	1	...	...	...	38,000	9.7
	2008	Storm	...	...	...	7	...	...	...	10,000	0
DM	2004	Earthquake	...	21-Nov	...	0	...	0	...	19,527	90.0
	2007	Hurricane	Dean	17-Aug	29	3	26	0	50	...	64.3
	2008	Hurricane	Omar	16-Oct	0	0	...	0	...	253*	1.7
GD	2002	Storm	...	...	...	...	...	...	...	...	...
	2004	Hurricane	...	7-Sep	...	28	...	...	...	81,553	EC\$2.2 billion
	2005	Hurricane	...	14-Jul	...	1	...	...	...	3,905	51.9

CHAPTER 4: NATURAL DISASTERS

Table 4.1 Natural Disasters by Year: 2005 - 2010

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			
GY	2005	Flooding	...	18-Jan	5,034	34	...	...	***629492	...	465.0
	2006	Flooding	...	28-Jan	...	...	...	...	**31807	...	30.0
HT	2005	...	...	...	...	2,720	22	16	165,000	...	...
	2008	Cyclone	...	...	...	793	548	310	800,000	...	897.4
	2010	Earthquake	...	12-Jan	...	250,000	300,000	...	3,000,000	...	7,804
JM	2005	Hurricane	...	7-Jul	...	...	...	...	331,672	...	95.2
	2005	Hurricane	...	16-Jul	...	...	...	...	...	...	...
	2005	Hurricane	...	13-Oct	...	...	...	...	...	...	...
	2006	Flooding	...	1-Feb	...	6	...	...	...	...	358.3
	2007	Hurricane	...	Jun Nov	...	1	...	...	179,552	...	9.4
	2007	Flooding	...	28-Aug	...	...	...	...	...	...	226.0
	2008	Storm	...	...	2446	44	122	...	...	...	94.3
	2008	Fires	...	...	2417	52	93	...	...	...	...
	2009	Fires	...	...	0	0	0	0	0	...	0.0
	2008	Hurricane	Omar	1-Oct	...	...	...	...	25	...	6.3

CHAPTER 4: NATURAL DISASTERS

Table 4.1 Natural Disasters by Year: 2005-2010

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		
LC	2007	Hurricane	Dean	7-Aug	...	1	...	...	0	...	...
	2007	Earthquake	...	29-Nov	...	0	...	...	0	...	...
	2007	Flood	...	6-Oct	...	0	...	...	0	...	...
	2007	Earthquake	...	11-Dec	...	0	...	...	0	...	...
	2009	Fire at St Jude Hospital	...	9-Sep	...	3	...	...	-	...	...
	2009	Oil Spill in Corinth River	...	9-Oct	...	0	...	...	0	...	...
	2009	Drought	...	1-Oct	...	0	...	...	0	...	...
	2010	Oil Spill in Corinth River	...	16-Mar	...	0	...	...	0	...	...
VC	2005	.. Hurricane and landslides.	Emily	...	...	1	...	...	...	...	EC\$M10
	2007	Hurricane	Dean	...	...	...	...	...	...	...	EC\$M2.2
	2008	Landslide	Omar	...	...	1	...	...	...	...	EC\$M5.6
	2009	Hurricane/Storm surge	...	...	...	...	...	...	...	...	...
SR	2008	Flooding in the interior	...	1-Jun	...	1	...	...	4780	6548	...
TC	2008	Hurricane	...	6th/9	0	0	0	0	**	10,270	216.6*

CHAPTER 4: NATURAL DISASTERS

Concepts and Definitions:

A **disaster** is a situation or event, which overwhelms local capacity, necessitating a request to the national or international level for external assistance or an unforeseen and often sudden event that causes great damage, destruction and human suffering. (*Please refer to International Strategy for Disaster Reduction's website at <http://www.unisdr.org/disaster-statistics/introduction.htm>.)*

A **casualty** is defined as any human accessing health or medical services, including mental health services and medical forensics/mortuary care (for fatalities), as a result of a hazard impact.

Of which:

Killed: Persons confirmed as dead and persons missing and presumed dead.

Injured: People suffering from physical injuries, trauma or an illness requiring medical treatment as a direct result of a disaster.

Homeless: These are persons who are in need of immediate assistance in the form of shelter as a consequence of a disaster.

Affected: People requiring immediate assistance during a period of emergency, i.e. requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance.

Total affected: The sum of people that have been injured, affected and left homeless after a disaster.

Estimated damage: The economic impact of a disaster usually consists of direct (e.g. damage to infrastructure, crops, housing) and indirect (e.g. loss of revenues, unemployment, market destabilisation) consequences on the local economy. *<http://www.emdat.be/glossary/9>, International Agreed Glossary of Basic Terms Related to Disaster Management (1992) UN-DHA, IDNDR, Geneva and WHO Mass Casualty Management Systems Strategies and guidelines for building health sector capacity*

CHAPTER 4: NATURAL DISASTERS

1.4.1 (a) Sources of Data for Table 4.1 - Natural Disasters by Year:2005-2010

Country	Data Source
ANTIGUA AND BARBUDA	National Office for Disaster Services (NODS)
THE BAHAMAS	Bahamas Department of Meteorology & the Department of Statistics
BELIZE	National Emergency Management Team
DOMINICA	Disaster Coordinating Unit and OECS Macro-socio economic assessment. Dominica, Natural Disasters and Economic Development in a Small Island State, Disaster Coordinating Unit and OECS Secretariat, Rapid Assessment Report, October 2008, Department of Local Government
GRENADA	National Disaster Management Agency - NaDMA
GUYANA	Civil Defence Commission (CDC)
HAITI	Ministère de l'Environnement (MDE) , Programa de las Naciones Unidas para el Desarrollo (PNUD)
JAMAICA	The Statistical Institute of Jamaica
ST KITTS AND NEVIS	The Statistics Department
SAINT LUCIA	The Saint Lucia Government Statistics Department
ST VINCENT AND THE GRENADINES	The Statistical Office, 2010 Environmental Statistics Report
SURINAME	The General Bureau of Statistics Suriname
TURKS AND CAICOS	Department of Disaster Management and Emergencies

CHAPTER 4: NATURAL DISASTERS

1.4.1 (b) Notes for Table 4.1 - Natural Disasters by Year:2005-2010

Country	Data Source
ANTIGUA AND BARBUDA	NODS staff normally make routine visits to evaluate the effects that the storms make. The findings from the evaluations of the effects of the storms are normally compiled into reports
THE BAHAMAS	The Bahamas Department of Meteorology records information on all hurricanes whose centers either passed near or through The Bahamas. This information dates back to the 1850's and is archived and updated by the Climatologically Section of the Department. The detailed reports include the tracking of the hurricanes, the wind speeds, damages and their estimated costs, and number of fatalities. The dates provided in the table indicate when the effects of the hurricanes were first felt in any part of the archipelago.
DOMINICA	*Number of families
GUYANA	5000 represents amount in homeless shelters at it's peak ** Ministry of housing estimates those affected as being 22% of region 2's population of 49253 + 40% of region 4's population of 52428 *** 274774 severely affected + 354718 Moderately affected
ST VINCENT AND THE GRENADINES	533 houses severely damaged; 18 houses completely destroyed
TURKS AND CAICOS	Damages and Losses accounted for ** - 250 Homes Destroyed and 825 persons severely affected Persons were relocated with family and friends

CHAPTER 5: ENERGY AND MINERALS



Minerals are non-renewable resources, and the most important ones in the CARICOM region include gold, diamonds and bauxite. Unsustainable exploitation will cause depletion in the long term, which can ultimately have a great impact on the economy of a country. The activities associated with *mineral production*, such as explosions, drilling and smelting, are a major source of air, water and soil pollution caused by the discharges of mineral wastes or mine tailings. In addition, these activities can also cause loss of habitats of wildlife.

The indicators used in this chapter include:

1. Energy Consumption by Types and Year
2. Number of Households by Types of Fuel Used for Cooking
3. Number of Households by Types of Fuel Used for Lighting
4. Mineral Production by Types
5. Mineral Reserves by Types

The proportion of households using solid fuels is one of the indicators for monitoring the Millennium Development Goals. There are important linkages between household solid fuel use, indoor air pollution, deforestation and soil erosion and greenhouse gas emissions. The type of fuel and participation in cooking tasks are important predictors of exposure to indoor air pollution.

CHAPTER 5: ENERGY AND MINERALS

Table 5.1 - Energy consumption by type and year: 2005-2009

Country	Year	Solid Fuels	Liquid Fuels	Gaseous Fuels	Primary electricity ('000kwh)	Traditional fuels		
						Charcoal	Fuelwood	Bagasse
AG	2005	...	...	...	176,031	...	...	...
	2006	...	...	...	184,575	...	...	...
	2007	...	...	...	206,415	...	...	...
	2008	...	...	...	215,673	...	...	...
	2009	...	...	...	220,829	...	...	...
BB			(bbls)	(m ³)				
	2005	...	2,811,703	11,918,416	884,708	...	...	...
	2006	...	3,157,965	11,250,970	903,398	...	...	...
	2007	...	3,220,008	11,773,870	940,845	...	...	...
	2008	...	3,129,553	11,165,735	460,253	...	...	...
	2009	...	3,143,188	12,074,613	951,231	...	...	...
BS			(bbls)					
	2005	...	3,610,667	...	1,420,778	...	...	...
	2006	...	3,614,889	...	1,428,037	...	...	...
	2007	...	2,944,670	...	1,414,350	...	...	...
DM	2005	...	...	...	33,492	...	...	...
	2006	...	...	...	34,176	...	...	...
HT						(mT)		
	2005	...	...	...	...	300,000	...	...
JM		(mT)	(bbls)			(BOE)	(BOE)	(BOE)
	2005	53	27,326,100	...	3,011,360	186,000	556,000	467,000
	2006	32	29,164,400	...	3,087,972	...	...	602,000
	2007	36	29,093,000	...	3,164,022	...	...	591,000
	2008	48	27,531,000	...	3,113,306	...	...	508,000
	2009	63	21,908,000	...	3,231,411	...	...	528,000
VC	2006	...	...	...	132,882	...	...	...
	2007	...	...	...	139,647	...	...	...
	2008	...	...	...	148,930	...	...	...
	2009	...	...	...	142,148	...	...	...
SR	2005	...	12,000	...	1,500,000	...	...	...
	2006	...	12,000	...	1,600,000	...	...	...
	2007	...	13,200	...	1,600,000	...	...	...
	2008	...	14,000	...	...	...	...	...
BM	2005	...	...	...	616,654	...	...	...
	2006	...	...	...	631,366	...	...	...
	2007	...	...	...	643,821	...	...	...
	2008	...	...	...	644,954	...	...	...

CHAPTER 5: ENERGY AND MINERALS

Concepts and Definitions:

Energy consumption refers to all the energy used for heat, power, and electricity generation, regardless of where the energy was produced.

Solid fuels include hard coal, lignite, peat, patent fuel, lignite briquettes, peat briquettes, coke and bituminous sands.

Liquid fuels include crude oil, natural gas liquids, plant condensate, gasoline, petroleum products, jet fuel, kerosene, liquefied petroleum gas, refinery gas, feedstock, naphtha, lubricants, gas/diesel oils and residual (heavy) fuel oils and bitumen.

Gaseous fuels include natural gas and other petroleum gases, such as gasworks gas, coke oven gas and blast furnace gas.

Primary electricity refers to electricity generated by noncombustible energy sources and includes electrical energy of geothermal, hydro, nuclear, tide, wind, wave/ocean and solar origin.

Traditional fuels include estimates of the consumption of charcoal, fuel wood and bagasse.

Charcoal is solid residue consisting mainly of carbon and obtained by the destructive distillation of wood in the absence of air.

Fuel wood is all wood in the rough that is used for fuel purposes.

Bagasse is the cellulosic residue left after sugar is extracted from sugar cane.

Energy Statistics: Definitions, Units of Measure, and Conversion Factors (see http://unstats.un.org/unsd/publication/SeriesF/SeriesF_44E.pdf [last accessed: June 20 2012]).

Fuel is defined as combustible matter used to maintain fire, such as coal, wood, oil, or gas, in order to create heat or power.

Fuel used for cooking refers to the fuel used predominantly for the preparation of principal meals.

The number of households by type of fuel used for cooking describes the types of fuels that households use for cooking.

Types of Cooking Fuel

Charcoal (in the table format it is coal – the terms need to be harmonized) is a solid residue that consists mainly of carbon and is obtained by the destructive distillation of wood in the absence of air.

Wood refers to all wood in the rough that is used for fuel.

Liquefied Petroleum Gas (LPG)/Gas (Natural Gas): *LPG* is a combination of hydrocarbons (propane, butane and ethane) which are gaseous under conditions of normal temperature and pressure, but are liquefied by compression or cooling to facilitate storage, handling and transportation. *Natural gas* is a mixture of hydrocarbon compounds and small quantities of non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs.

Kerosene is medium oil that is distilled between 150°C and 300°C. It is used as an illuminant and as a fuel and is often referred to as burning oil, vaporizing oil, power kerosene or illuminating oil.

Electricity is an electric current used as a source of power.

Other refers to types of cooking fuel not mentioned above.

Energy Statistics: Definitions, Units of Measure, and Conversion Factors (see http://unstats.un.org/unsd/publication/SeriesF/SeriesF_44E.pdf [last accessed: July 2nd 2009]).

Type of lighting refers to the source of lighting predominantly used by occupants of a housing unit.

The number of households by type of lighting describes the types of fuels that members of households use for lighting.

Types of Fuel Used for Lighting

Gas (Natural gas) is a mixture of hydrocarbon compounds and small quantities of non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs.

Kerosene is medium oil that is distilled between 150°C and 300°C. It is used as an illuminant and as a fuel and is often referred to as burning oil, vaporizing oil, power kerosene or illuminating oil.

Electricity is an electric current used as a source of power.

Other is other types of lighting fuel not so far mentioned.

Energy Statistics: Definitions, Units of Measure, and Conversion Factors (see http://unstats.un.org/unsd/publication/SeriesF/SeriesF_44E.pdf [last accessed: July 2nd 2009]).

Units:

‘000kwh - Thousand Kilowatt hours
m³ - cubic meters
Bbbls - barrels
mT - metric Tonnes
BOE - Barrels of energy

CHAPTER 5: ENERGY AND MINERALS

Table 5.2 (a) Number of Households by Type of Fuel used for cooking: 2000 and 2010 Round of Censuses, 2005-2009

Country	Year	Charcoal	Wood	LPG/Gas	Kerosene	Electricity	None	Not Stated	Other	Total
AG	2001	306	84	19,564	33	141		63	259	20,450
BB	2000	72		75,869	1,883	2,491		2,257	454	83,026
BS	2000	293	388	65,126	898	19,563		1,474		87,742
	2005	335	457	75,294	1,015	22,527	...	1,624	...	101,475
	2006	342	466	76,890	1,036	23,005	...	1,658	...	103,625
BZ	2000		8,197	41,281	780	299		440	948	51,945
	2010		11,304	63,274	310	953		3,313	338	79,492
DM	2001	973	2,578	18,367	313	69		6	428	22,734
GD	2001	753	1,032	23,968	157	44			264	26,218
GY	2002	1,143	23,982	71,660	82,158	2,600		110	956	182,609
HT	2003	889,573	1,070,492	82,043	134,882	3,916			6,876	2,187,782
JM	2001	116,834		597,578	3,009	11,958			8,110	737,489
MS	2001	38	41	2,207	3	11			29	2,329
KN	2001	159	233	14,521	140	393			234	15,680

CHAPTER 5: ENERGY AND MINERALS

Table 5.2 (a): Number of Households by Type of Fuel used for cooking: 2000 Census, 2005-2006,2008 and 2010 Census (cont'd)

Country	Year	Charcoal	Wood	LPG/Gas	Kerosene	Electricity	None	Not Stated	Other	Total
LC	2001	3,288	1,880	41,105	96	189			472	47,030
	2010	2,007	1,301	53,337	97	224	697	...	1,257	58,920
VC	2001	1,192	929	27,327	127	335			608	30,518
	2008	230	284	28,652	26	78	337	93	105	29,805
SR	2004		19,941	97,166	916	993	937	3,329	181	123,463
TT	2000	2,237		282,408	1,555	13,219	1,710	2,435	307	303,871
AI	2001	51		3,468	3	45		128	35	3,730
BM	2010					26,896			27	26,923
KY	2010	8		8,663	n/s	13,975			114	22,760
VG	2001	21	6	7,891	5	400			63	8,386
TC	2001	217		3,711	112	3,214				7,254

CHAPTER 5: ENERGY AND MINERALS

**Table 5.2 (b): Percentage distribution of Households by Type of Fuel used for cooking: 2000 and 2010
Round of Censuses, 2005-2009**

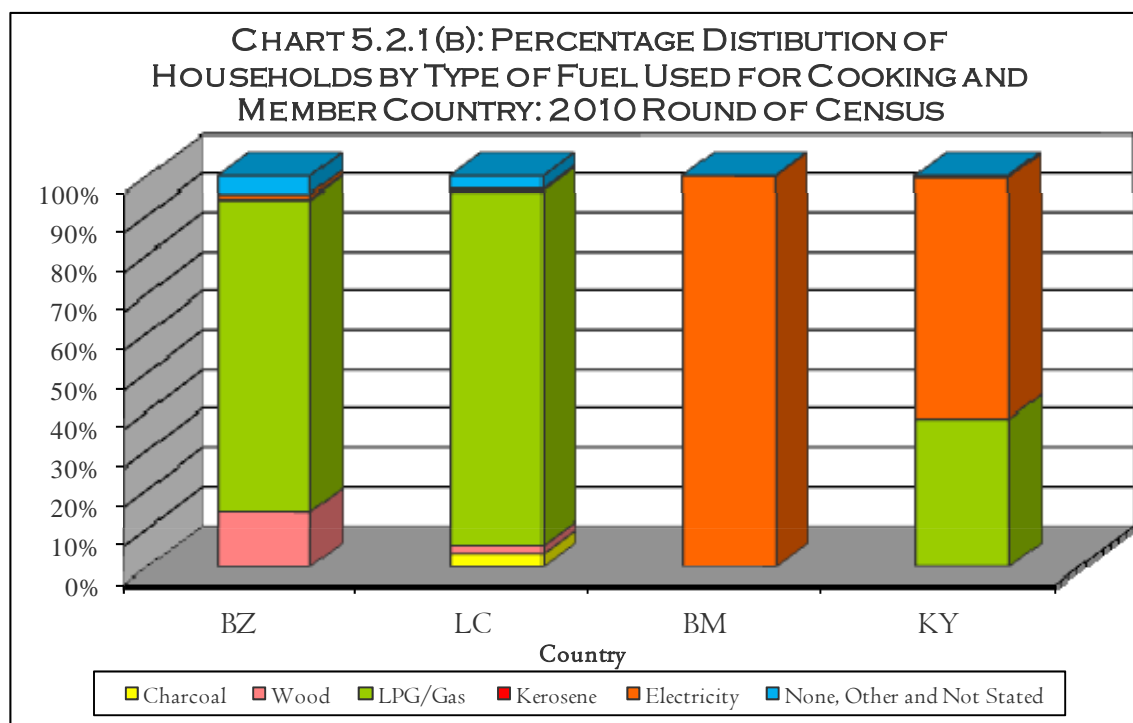
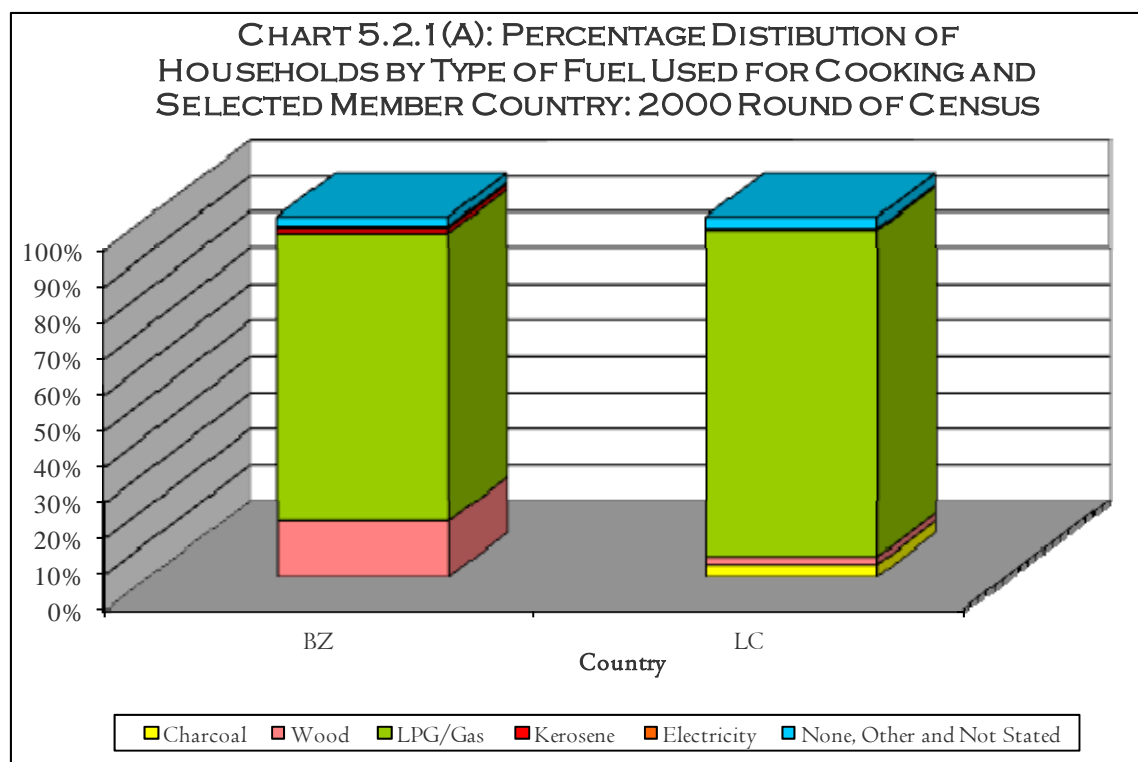
Country	Year	Charcoal	Wood	LPG/ Gas	Kerosene	Electricity	None	Not Stated	Other	Total
AG	2001	1.5	0.4	95.7	0.2	0.7	0.0	0.3	1.3	100.0
BB	2000	0.1	0.0	91.4	2.3	3.0	0.0	2.7	0.5	100.0
BS	2000	0.3	0.4	74.2	1.0	22.3	0.0	1.7	0.0	100.0
	2005	0.3	0.5	74.2	1.0	22.2	0.0	1.6	0.0	100.0
	2006	0.3	0.5	74.2	1.0	22.2	0.0	1.6	0.0	100.0
BZ	2000	0.0	15.8	79.5	1.5	0.6	0.0	0.8	1.8	100.0
	2010		14.2	79.6	0.4	1.2	0.0	4.2	0.4	100.0
DM	2001	4.3	11.3	80.8	1.4	0.3	0.0	0.0	1.9	100.0
GD	2001	2.9	3.9	91.4	0.6	0.2	0.0	0.0	1.0	100.0
GY	2002	0.6	13.1	39.2	45.0	1.4	0.0	0.1	0.5	100.0
HT	2003	40.7	48.9	3.8	6.2	0.2	0.0	0.0	0.3	100.0
JM	2001	15.8	0.0	81.0	0.4	1.6	0.0	0.0	1.1	100.0
	2009	6.0	9.2	80.0	0.6	3.4	0.7		0.1	100.0
MS	2001	1.6	1.8	94.8	0.1	0.5	0.0	0.0	1.2	100.0
KN	2001	1.0	1.5	92.6	0.9	2.5	0.0	0.0	1.5	100.0
LC	2001	7.0	4.0	87.4	0.2	0.4	0.0	0.0	1.0	100.0
	2010	3.4	2.2	90.5	0.2	0.4	1.2	0.0	2.1	100.0

CHAPTER 5: ENERGY AND MINERALS

Table 5.2 (b): Percentage distribution of Households by Type of Fuel used for cooking: 2000 Census, 2005-2009 and 2010 Census (cont'd)

Country	Year	Charcoal	Wood	LPG/ Gas	Kerosene	Electricity	None	Not Stated	Other	Total
VC	2001	3.9	3.0	89.5	0.4	1.1	0.0	0.0	2.0	100.0
	2008	0.8	1.0	96.1	0.1	0.3	1.1	0.3	0.4	100.0
SR	2004	0.0	16.2	78.7	0.7	0.8	0.8	2.7	0.1	100.0
TT	2000	0.7	0.0	92.9	0.5	4.4	0.6	0.8	0.1	100.0
AI	2001	1.4	0.0	93.0	0.1	1.2	0.0	3.4	0.9	100.0
BM	2010	0.0	0.0	0.0	0.0	99.9	0.0	0.0	0.1	100.0
KY	2010	0.0	0.0	38.1	0.0	61.4	0.0	0.0	0.5	100.0
VG	2001	0.3	0.1	94.1	0.1	4.8	0.0	0.0	0.8	100.0
	2008	0.8	1.0	96.1	0.1	0.3	1.1	0.3	0.4	100.0
TC	2001	3.0	0.0	51.2	1.5	44.3	0.0	0.0	0.0	100.0

CHAPTER 5: ENERGY AND MINERALS



CHAPTER 5: ENERGY AND MINERALS

Table 5.3 (a) Number of Households by Type of Fuel used for Lighting: 2000 and 2010 Round of Censuses, 2005-2009

Country	Year	Gas	Kerosene	Electricity	None	Not Stated	Other	Total
AG	2001	61	566	19,206	163	32	422	20,450
	2005	...	...	37,026	...	...	...	37,026
	2006	...	...	38,824	...	...	...	38,824
	2007	...	...	39,247	...	...	...	39,247
	2008	...	...	41,430	...	...	...	41,430
	2009	...	...	43,306	...	...	...	43,306
BB	2000	69	1,807	80,126		559	465	83,026
BS	2000	837	2,075	84,115		72	643	87,742
	2005	964	2,395	97,274	...	822	...	101,475
	2006	984	2,446	99,335	...	839	...	103,625
BZ	2000	1,068	6,859	42,417		113	1,488	51,945
	2010		3,699	71,477	570	211	3,534	79,491
DM	2001	53	1,784	19,947	306	6	637	22,733
GD	2001	44	2,904	22,625	214.0		431	26,218
GY	2002	9,821	44,301	126,201		202	2,084	182,609
HT	2003	1,475,545		458,935			549,576	2,484,056
JM	2001		79,066	651,405			3,060	733,531
MS	2001		24	2,233	26		46	2,329
KN	2001	54	655	14,665	129		177	15,680
LC	2001	112	2,411	41,890	490		2,128	47,031
	2010	143	733	54,951	691		2,402	58,920

CHAPTER 5: ENERGY AND MINERALS

Table 5.3 (a): Number of Households by Type of Fuel used for Lighting: 2000 Census, 2005-2009 and 2010 Census (cont'd)

Country	Year	Gas	Kerosene	Electricity	None	Not Stated	Other	Total
VC	2001	71	3,877	24,940	432		1,198	30,518
SR	2004			102,872	10,248	2,867	4,170	120,157
TT	2000	711	22,392	277,413		1,809	1,546	303,871
AI	2001	1	95	3,491	23	110	10	3,730
BM	2010			26,896			27	26,923
KY	2010	25	5	22,638			66	22,734
VG	2001	30	11	8,320	7		18	8,386
TC	2001	21	167	6,938			128	7,254

CHAPTER 5: ENERGY AND MINERALS

Table 5.3 (b) Percentage distribution of Households by Type of Fuel used for lighting: 2000 and 2010 Round of Censuses, 2005-2009

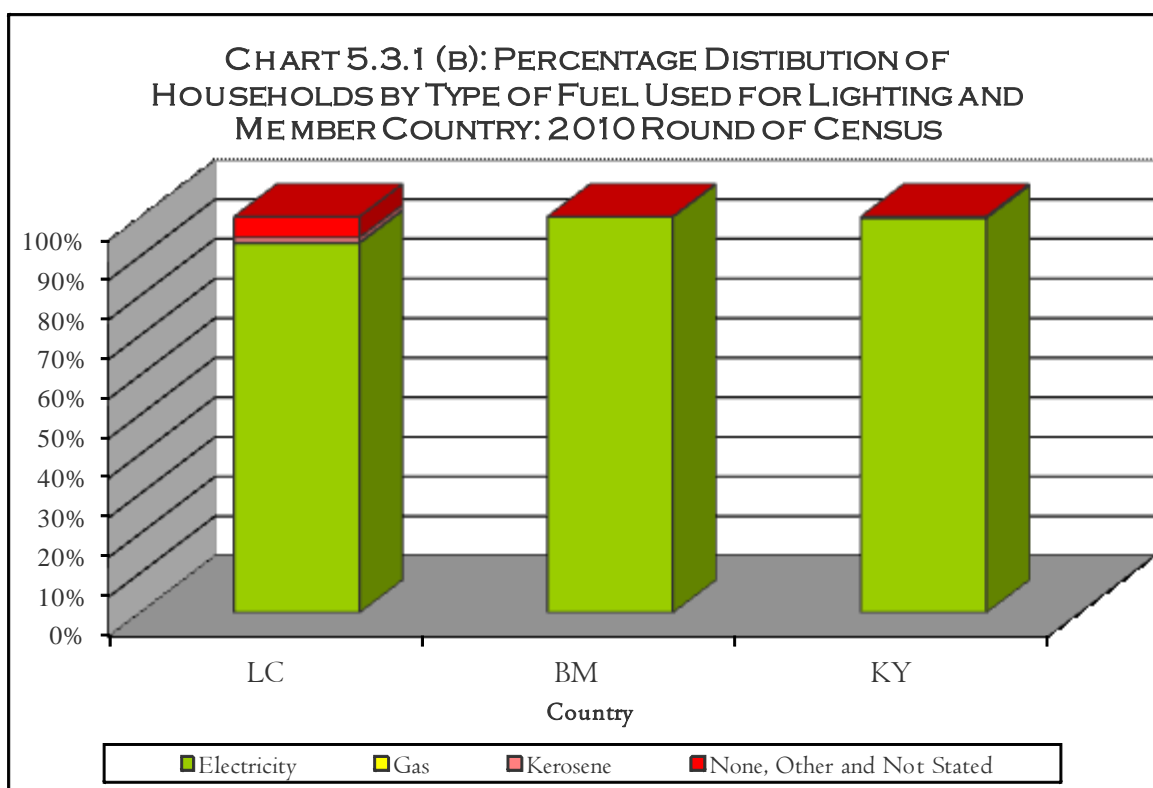
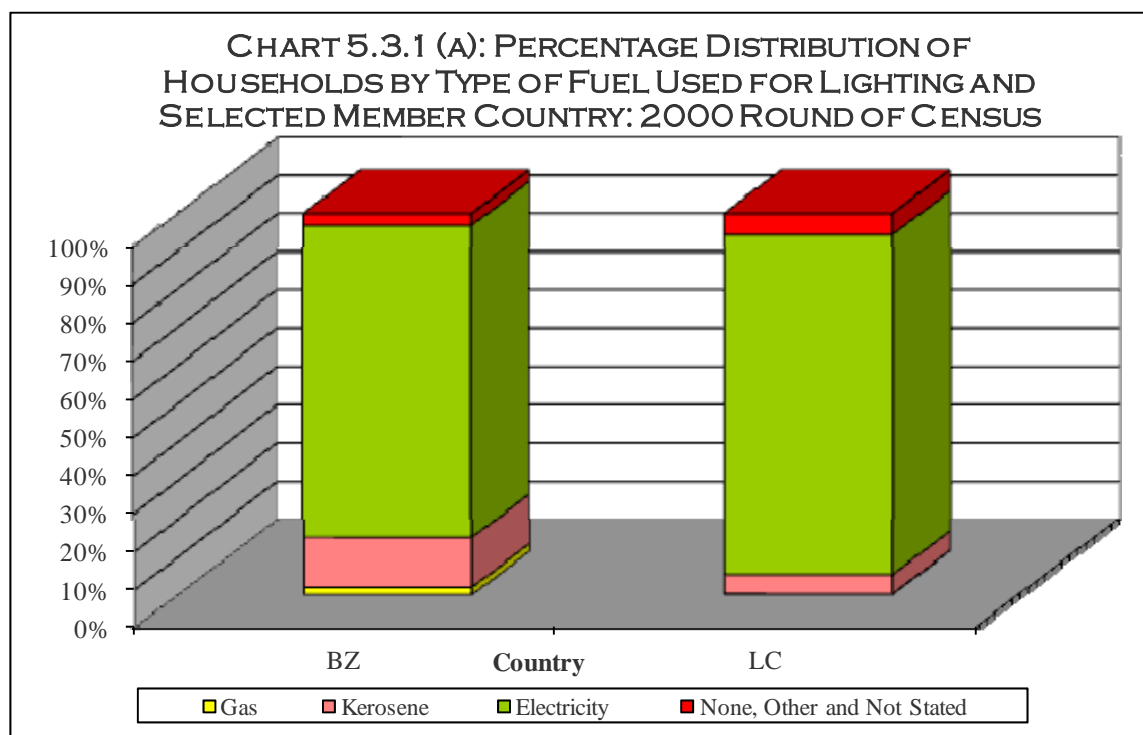
Country	Year	Gas	Kerosene	Electricity	None	Not Stated	Other	Total
AG	2001	0.3	2.8	93.9	0.8	0.2	2.1	100.0
BB	2000	0.1	2.2	96.5	0.0	0.7	0.6	100.0
BS	2000	1.0	2.4	95.9	0.0	0.1	0.7	100.0
	2005	1.0	2.4	95.9	0.0	0.8	0.0	100.0
	2006	1.0	2.4	95.9	0.0	0.8	0.0	100.0
BZ	2000	2.1	13.2	81.7	0.0	0.2	2.9	100.0
	2010	0.0	4.7	89.9	0.7	0.3	4.4	100.0
DM	2001	0.2	7.8	87.7	1.3	0.0	2.8	100.0
GD	2001	0.2	11.1	86.3	0.8	0.0	1.6	100.0
	2005	1.8	14.7	80.9	...	...	2.6	100.0
GY	2002	5.4	24.3	69.1	0.0	0.1	1.1	100.0
HT	2003							
JM	2001		10.8	88.8			0.4	100.0
	2006		7.1	90.0	2.0		0.9	100.0
	2007		6.3	90.3	1.9		1.5	100.0
	2008		4.9	92.7	1.1		1.3	100.0
	2009		5.1	92.9	0.8		1.2	100.0
MS	2001		1.0	95.9	1.1		2.0	100.0
KN	2001	0.3	4.2	93.5	0.8	0.0	1.1	100.0

CHAPTER 5: ENERGY AND MINERALS

Table 5.3 (b): Percentage distribution of Households by Type of Fuel used for lighting: 2000 and 2010 Round of Censuses, 2005-2009 (cont'd)

Country	Year	Gas	Kerosene	Electricity	None	Not Stated	Other	Total
LC	2001	0.2	5.1	89.1	1.0	0.0	4.5	100.0
	2010	0.2	1.2	93.3	1.2	0.0	4.1	100.0
VC	2001	0.2	12.7	81.7	1.4	0.0	3.9	100.0
SR	2004	0.0	0.0	85.6	8.5	2.4	3.5	100.0
	2008	...	...	92.3	1.4		6.3	100.0
TT	2000	0.2	7.4	91.3	0.0	0.6	0.5	100.0
AI	2001	0.0	2.5	93.6	0.6	2.9	0.3	100.0
BM	2010			99.9			0.1	100.0
KY	2010	0.1	0.0	99.6	0.0	0.0	0.3	100.0
VG	2001	0.4	0.1	99.2	0.1	0.0	0.2	100.0
TC	2001	0.3	2.3	95.6	0.0	0.0	1.8	100.0

CHAPTER 5: ENERGY AND MINERALS



CHAPTER 5: ENERGY AND MINERALS

Table 5.4- Mineral Production by Type: 2005 - 2009

Country	Year	Bauxite	Sand	Gold	Diamond	Loam	Laterite Stone	Quarry Stone
		(thousands of tonnes)	(thousands of tonnes)	(thousands of ounces)	(thousands of carats)	(thousands of tonnes)	(thousands of tonnes)	(thousands of tonnes)
GY	2005	1,648.0	573.1	262.5	356.9	12.0	4.0	316.0
	2006	1,453.0	285.0	205.9	340.5	-	21.0	204.0
	2007	2,239.0	715.5	246.2	268.9	-	34.6	368.0
	2008	2,109.0	683.9	260.4	168.9	-	13.3	449.6
	2009	1,448.3	479.0	305.2	144.0	-	2.0	340.0

Country	Year	Bauxite	Sand & Gravel	Limestone	Shale	Clay	Pozzolan	Gypsum & Anhydrite	Marble	Silica sand
		('000 tonnes)	('000 tonnes)	('000 tonnes)	('000 tonnes)	('000 tonnes)	('000 tonnes)	('000 tonnes)	('000 tonnes)	('000 tonnes)
JM	2005	14,118.3	2,392.0	7,920.0	164.0	45.0	79.0	302.1	0.1	14.3
	2006	14,865.4	2,760.0	5,802.0	180.0	102.6	149.3	364.4	0.1	9.6
	2007	14,567.7	3,611.0	6,178.0	168.4	663.8	114.5	227.7	0.1	14.5
	2008	14,636.1	2,985.0	5,267.5	200.3	101.2	124.3	238.3	0.1	14.8
	2009	7,817.5	2,600.0	3,968.8	164.5	81.0	132.5	156.9	0.1	6.8

Country	Year	Bauxite	Aluminum	Sand & Gravel	Crude oil
		(KG)	(1000 mT)	(m ³)	(millions of barrels)
SR	2005	11,681.0	1,940.0	73,568.0	4.4
	2006	12,117.0	2,151.0	120,316.0	4.8
	2007	14,253.0	2,178.0	27,518.0	7.3
	2008	16,466.0	2,154.0	9,443.0	5.5
	2009	16,497.0	1,536.0	15,205.0	6.0

CHAPTER 5: ENERGY AND MINERALS

Table 5.5 - Mineral reserves by Type: 2008-2009

Country	Year	Crude Oil
SR		(million barrels)
	2008	8.2
	2009	8.2

A '*Mineral Reserve*' is the economically mineable part of a measured or indicated mineral resource. It is inclusive of diluting materials and allows for losses that may occur when the material is mined.

A '*Mineral Resource*' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust (a deposit) in such form and quantity that there are reasonable prospects for eventual economic extraction.

Crude Oil is unrefined petroleum, which is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface.

CHAPTER 5: ENERGY AND MINERALS

1.5.1 (a) Sources of Data for Table 5.1 - Energy Consumption by Type and Year: 2005-2010

Country	Data Source
ANTIGUA AND BARBUDA	Antigua Public Utilities Authority Statistics Department
THE BAHAMAS	Bahamas Electricity Corporation
BARBADOS	Ministry of Environment
DOMINICA	Environmental Statistics 2008, Central Statistical Office Dominica
HAITI	IHSI/Census 2003
JAMAICA	Jamaica Public Service Company Ministry of Mining and Energy
SURINAME	Surinamese Energy Company (N.V. EBS) State oil company
ST VINCENT AND THE GRENADINES	2010 Environmental Statistics Report
TURKS AND CAICOS	Department of Statistics

CHAPTER 5: ENERGY AND MINERALS

1.5.1 (b) Notes for Table 5.1 - Energy Consumption by Type and Year: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	Antigua Data is available for Energy consumption but only by electricity. APUA collects the data from every household as units used and then compiles it annually. Data goes back as far as 2002 only. The units used are kW but the questionnaire request an unknown units (kH).
THE BAHAMAS	The primary authority of energy in the Commonwealth of The Bahamas is the Bahamas Electricity Corporation, however, there are also some small private providers. All minerals in the country are managed and reported by the Industry section of the Bahamas Agricultural and Industrial Corporation. Table 10 provides information on Energy Consumption by type and year. Tables 11 ,12 and 13 show usage of Energy and Minerals, by households. It is important to note that these figures are based on the Census of 2000 figures and that the year 2001-2006 have been extrapolated based on the forecasted population growth using household expenditure breakdown. The increase in kwh sold and the corresponding fuel consumption is a direct reflection of BEC's use of higher efficiency machinery, which uses lower grade fuel while also using less fuel.
BARBADOS	Solids includes coal Liquids include kerosene oil, LPG diesel, biofuels etc
JAMAICA	2009 figure for bagasse is estimated.
SURINAME	Energy data is the source, the Surinamese Energy Company (N.V. EBS) Liquids data is in thousands barrels per day and the source is State oil company

CHAPTER 5: ENERGY AND MINERALS

1.5.2 (a): Sources of Data for Table 5.2(a) - Number of Households by Type of Fuel Used for Cooking and Table 5.2(b) - Percentage distribution of Households by Type of Fuel Used for Cooking: 2000 and 2010 Round of Censuses

Country	Year	Data Source
ALL COUNTRIES	2000 2010	2000 Round of Population and Housing Census 2010 Round of Population and Housing Census
THE BAHAMAS	2005-2006	Household Expenditure Survey
GRENADA	2005	Grenada Core Welfare Indicators Survey (CWIQ) 2005
JAMAICA	2009	Jamaica Survey of Living Conditions
ST VINCENT AND THE GRENADINES	2008	2007/08 Country poverty Assessment
SURINAME	2008	Household Budget Survey 2008

1.5.2 (b): Notes for Table 5.2(a) - Number of Households by Type of Fuel Used for Cooking and Table 5.2(b) - Percentage distribution of Households by Type of Fuel Used for Cooking: 2000 and 2010 Round of Censuses

Country	Year	Data Source
BARBADOS	2000	Charcoal = wood/charcoal. Other includes natural gas, solar and other.
BELIZE	2000 and 2010	Wood refers to wood and charcoal
GRENADA	2001	Other includes not stated
HAITI	2003	Other includes 1500 households using solar panels
SURINAME	2004	None refers to Doesn't cook Not Stated refers to Unknown Wood refers to Wood/Charcoal
TRINIDAD AND TOBAGO	2000	Charcoal refers to Wood/Charcoal
ANGUILLA	2001	Charcoal refers to Wood/Charcoal
BERMUDA	2010	Bermuda has one electric provider for all dwelling units. Total Includes 1,106 households for which there is no data by type of tenure. Total Includes 27 boats
THE CAYMAN ISLANDS	2010	Other refers to Other/Not Stated
TURKS AND CAICOS	2001	Charcoal refers to Wood/Charcoal

CHAPTER 5: ENERGY AND MINERALS

1.5.3 (a): Sources of Data for Table 5.3(a) - Number of Households by Type of Fuel Used for Lighting and Table 5.3 (b) Percentage distribution of Households by Type of Fuel used for Lighting: 2000 and 2010 Round of Censuses, 2005-2009

Country	Year	Data Source
ALL COUNTRIES	2000 2010	2000 Round of Population and Housing Census 2010 Round of Population and Housing Census
ANTIGUA AND BARBUDA	2005-2009	Antigua Public Utilities Authority Statistics Department
THE BAHAMAS	2005-2006	Household Expenditure Survey
GRENADA	2005	Grenada Core Welfare Indicators Survey (CWIQ) 2005
JAMAICA	2006-2009	Jamaica Survey of Living Conditions
ST VINCENT AND THE GRENADINES	2008	2010 Environmental Statistics Report & 2007/08 Country Poverty Assessment report
SURINAME	2008	Household Budget Survey_2008

1.5.3 (b): Notes for Table 5.3(a) - Number of Households by Type of Fuel Used for Lighting and Table 5.3 (b) Percentage distribution of Households by Type of Fuel used for Lighting: 2000 and 2010 Round of Censuses, 2005-2009

Country	Year	Data Source
BARBADOS	2000	Other includes Batteries
GRENADA	2001	Other includes not stated
GUYANA	2002	Other includes generator/inverter and other.
JAMAICA	2001	Other includes not stated
BERMUDA	2010	Bermuda has one electricity provider for all dwelling units. Total Includes 27 boats
THE CAYMAN ISLANDS	2010	Gas includes 16 households using Private Generators Other refers to Other/Not Stated

CHAPTER 5: ENERGY AND MINERALS

1.5.4 (a): Sources of Data for Table 5.4 - Mineral Production by Type: 2005 - 2009

Country	Data Source
GUYANA	Guyana Geology & Mines Commission
JAMAICA	Mines & Geology Division, Jamaica Bauxite Institute, Planning Institute of Jamaica
SURINAME	State Oil Company Suriname The Central Bank of Suriname Bauxite Institute Suriname

1.5.4 (b): Notes for Table 5.4 - Mineral Production by Type: 2005 - 2009

Country	Data Source
JAMAICA	Limestone includes marl and fill.
SURINAME	The Gold production is only for small scale gold mining crude oils is per million barrels

1.5.5 (a): Sources of Data for Table 5.5 - Mineral Reserves by Type: 2008 - 2009

Country	Data Source
SURINAME	State Oil Company Suriname

CHAPTER 6: LAND USE AND AGRICULTURE



Land use refers to the functional division of land for different human purposes or economic activities. This data assists policy makers in understanding the impact of human activities on the environment and enables them to respond to changes in environmental conditions in a timely and efficient manner.

A number of human activities such as agriculture mainly through the use of pesticides and insecticides; mining, industry, infrastructure development and urbanization often result in abrupt and unplanned changes in the use of the land which can lead to a decline in both the quality and quantity of water available to ensure the continued sustainability of ecosystems and living organisms. Economic activities also use significant volumes of water which can put a strain on water resources threatening the livelihood of marine life, and reducing the amount of water available for irrigation and agricultural purposes.

The challenges to collection of data in this area remain the need for training in the classification and categorization of land use types as used internationally. The absence of comprehensive land-use and development/management plans, coupled with unclear legislation and the non- implementation of a legal framework all contribute to the lack of capacity in being able implement zoning of areas as well as to accurately collect and compile data in this area. Further the technological capacity and the IT infrastructure needs to be developed so as to better facilitate the sharing of geo-spatial data and information amongst national and regional agencies.

CHAPTER 6: LAND USE AND AGRICULTURE

Table 6.1 - Land Use : 2005 - 2009

Unit=km²

Country	Year	Agricultural land					Total
		Arable land	Land under permanent crops	Land under permanent meadows and pastures	All other agricultural land, n. e. s.	Fallow and other agricultural land	
JM	2005	...	...	...	...	...	...
	2006	...	...	...	...	...	...
	2007	...	1,551	498	380	829	...
	2008	1,740	...	...	...	...	5,130
	2009	...	...	...	...	...	...
LC	2007	6,017	17,005	7,525	...	...	24,530

Table 6.1 cont'd - Land Use : 2005 - 2009

Unit = km²

Country	Year	Forest and other wooded land	Built-up and related land	Wet open land	Dry open land with special vegetation cover	Open land without, or with insignificant, vegetation cover	Other Lands	Total land area	Waters	Total area of the country
JM	2005	...	...	...	...	...		10,831	160	10,991
	2006	...	...	...	...	...		10,831	160	10,991
	2007	3,382	...	...	...	...		10,831	160	10,991
	2008	3,382	...	...	...	...		10,831	160	10,991
	2009	...	...	...	...	...		10,831	160	10,991
LC	2007	3,713	...	...	...	...	1,961	...	...	...

CHAPTER 6: LAND USE AND AGRICULTURE

Table 6.2: Use of fertilizers by type and year: 2005-2009

Unit: Tonne						
Country	Year	Nitrogenous fertilizers	Phosphate fertilizers	Potash fertilizers	NPK MIX	TOTAL
BS						
	2005	12	1	2		15
	2006	26	1	2		30
	2007	17	4	2		23
	2008	12	6	2		20
	2009	27	4	2		34
BB						
	2005	2,337	32	171		4,343
	2006	2,876	2	50		5,840
	2007	2,639	21	207		4,850
	2008	2,494	1	172		5,706
	2009	3,282	0	11		5,649
DM						
	2005	23	0	0	1,341	1,364
	2006	43	0	1	1,556	1,600
GD						
	2005					601
	2006					747
	2007					819
	2008					571
	2009					442
GY						
	2007					49,365
	2008					82,929
	2009					25,441
JM						
	2005	...	...	...		35,829
	2006	...	7	...		31,092
	2007	...	4	...		21,047
	2008	...	0	...		29,513
	2009	...	...	...		26,498
VC						
	2005					3,180
	2006					2,629
	2007					2,941
	2008					2,578
	2009					2,903
SR						
	2005	10,377	61	1,308	1,724	13,470
	2006	14,704	345	1,433	2,755	19,237
	2007	10,991	125	766	3,903	15,785
	2008	49,258	DPP	77	3,903	53,239
	2009	15,172	51	125	4,436	19,884
BM(\$)						
	2005	132,782	44,930	24,615		660,213
	2006	191,699	55,507	198		880,584
	2007	112,974	49,206	7,716		709,368
	2008	140,439	75,870	40,551		987,507

CHAPTER 6: LAND USE AND AGRICULTURE

Table 6.3: Use of Pesticides by type and year: 2005-2009

								Unit: Tonne
Country	Year	Insecticides	Herbicides	Fungicides, bactericides and seed treatments	Plant growth regulators	Rodenticides	Others (including mineral oils)	TOTAL
BS	2005	663	28	76	54	32	28	880
	2006	575	22	56	65	29	231	979
	2007	686	46	27	39	77	1,257	2,133
	2008	393	44	15		60	2,467	2,979
	2009	182	18	8		14	652	873
BB	2005	433	510	34	38	43	762	1,820
	2006	315	492	2	22	33	884	1,749
	2007	454	466	13	14	50	812	1,808
	2008	1,010	539	12	19	40	1,039	2,659
	2009	414	497	12	24	32	764	1,743
DM	2005	99	3	74		11		
	2006	75	9	186		10		
GD	2005							19
	2006							19
	2007							15
	2008							15
	2009							14
JM	2005	234	763	354	...	64	150	1,566
	2006	161	923	435	...	69	—	1,588
	2007	142	840	349	...	—	—	1,331
	2008	260	708	214	...	37	78	1,296
	2009	135	826	460	...	—	—	1,421
LC	2005	413	203	21	2	41	11	690
	2006	212	53	21	2	26	6	319
	2007	153	5	6	4	17	6	191
	2008	153	9	18	6	18	8	213
	2009	209	12	26	4	24	11	285
VC	2006	187	82	126	32	11	985	1,424
	2007	146	156	112	0	9	68	490
	2008	227	126	91	1	12	63	520
	2009	224	99	45	0	3	90	462
SR	2005	1,065	575	317	...	...	...	1,957
	2006	882	821	359	...	...	...	2,062
	2007	1,019	767	316	...	...	...	2,102
	2008	2,648	3,397	642	...	...	...	6,687
	2009	733	609	418	...	...	...	1,760
BM (\$)	2005	648,651	220,616	84,534	...	...	77,159	1,030,960
	2006	981,467	268,170	78,953	...	...	68,762	1,397,352
	2007	463,856	117,438	64,969	...	...	690,529	1,336,792
	2008	250,914	150,772	62,677	...	...	999,235	1,463,598

CHAPTER 6: LAND USE AND AGRICULTURE

Concepts and Definitions

Land use refers to the functional division of land for different human purposes or economic activities. *(Please refer to the OECD's Glossary of Statistical Terms website at <http://stats.oecd.org/glossary/>)*

Land Types

Agricultural land includes land under scattered farm buildings, yards and their annexes and permanently uncultivated land, such as uncultivated patches, banks, footpaths, ditches, headlands and shoulders.

Arable land refers to all land generally under rotation whether for temporary crops or meadows or left fallow.

Land under permanent crops signifies land used for crops occupying it for a long period of time and which do not have to be planted for several years after each harvest. Land under trees and shrubs producing flowers, such as roses and jasmine, is so classified, as are nurseries (except those for forest trees); permanent meadows and pastures are excluded.

Fallow and other agricultural land is arable land not under rotation that is set at rest for a period of time ranging from one to five years before it is cultivated again. It includes land usually under permanent crops, meadows or pastures, which is not being used for that purpose for a period of at least one year. Arable land which is normally used for the cultivation of temporary crops but which is temporarily used for grazing is included. Also included are scattered farm buildings, that is, isolated buildings not belonging to closed villages or similar rural localities.

Land under permanent meadows and pastures means land used permanently (that is, for five years and more) for herbaceous forage crops. Permanent meadows and pastures on which trees and shrubs are grown are included in this category only if the growing of forage crop is the most important use of the area.

Forest and other wooded land includes forest nurseries and seed orchards that constitute an integral part of the forest; forest roads, cleared tracts, firebreaks and other small open areas within the forest; forest in national parks, nature reserves and other protected areas such as those of special environmental, scientific, historical, cultural or spiritual interest; and windbreaks and shelterbelts of trees with an area of more than half a hectare and a width of more than twenty metres. Rubberwood plantations and cork oak stands are included but land predominantly used for agricultural practices are excluded.

Land under forest refers to land under natural or planted stands of trees, whether productive or not. This category includes land from which forests have been cleared but that will be reforested in the foreseeable future, but it excludes woodland or forest used only for recreation purposes.

Other wooded land refers to land either with a tree crown cover of five to ten per cent of trees able to reach a height of five metres at maturity; or a crown cover of more than ten per cent of trees not able to reach a height of five metres at maturity and shrub or bush cover.

Built-up and related land refers to land under houses, roads, mines and quarries, and other facilities, including
(continued)

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(continued from page 116)

their auxiliary spaces, deliberately installed for the pursuit of human activities. Land under closed villages or similar rural localities and open land closely related to these activities, such as waste tips, derelict land in built-up areas, junk yards, city parks and gardens, etc, are included in this category. Land occupied by scattered farm buildings, yards and their annexes are excluded.

Wet open land refers to non-wooded sites either partially, temporarily or permanently water-logged, the water of which may be fresh, brackish or saline, on blanket or raised peatlands. The water may be either stagnant or running, and is usually shallow, especially if it is saline.

Dry open land with special vegetation cover refers to non-wooded land that is covered by low (less than two metres high) vegetation.

Open land without, or with insignificant, vegetation cover refers to non-built-up land whose surface is either not covered at all by vegetation or scarcely covered by some vegetation.

Waters relate to the part of the national territory to be reported which is covered by surface waters. The national territory to be reported is defined as the surface enclosed by all inland borders and, if applicable, the normal base-line on the seaward side.

Total area is the total area of the country, including area under inland and tidal water bodies but excluding uninhabited islands. **Total land area** is the total area excluding area under inland water bodies (major rivers, lakes, etc).

Fertilizers are compounds given to plants to promote growth. They are usually applied either via the soil, for uptake by plant roots, or by foliar feeding, for uptake through leaves. Fertilizers can be organic (composed of organic matter), or inorganic (made of simple, inorganic chemicals or minerals). They can be naturally occurring compounds such as peat or mineral deposits, or manufactured through natural processes (such as composting) or chemical processes (such as the Haber process).

Types of Fertilizers

Nitrogenous fertilizers refer to the nitrogen content of commercial inorganic fertilizers.

Phosphate fertilizers refer to commercial phosphoric acid (P_2O_5) and cover the P_2O_5 of super-phosphates, ammonium phosphate and basic slag.

Potash fertilizers refer to the potassium oxide (K_2O) content of commercial potash, muriate, nitrate and sulphate of potash, manure salts, kainite and nitrate of soda potash.

NPK Mix: NPK is an acronym for nitrogen, phosphorus and potassium: the three nutrients that compose a complete fertilizer. They are also the three nutrients plants extract from soil in the greatest quantity and are available in synthetic, organic, and mineral forms.

Please refer to The CARICOM Environment in Figures 2002, Caribbean Community Secretariat, United Nations (2003)

CHAPTER 6: LAND USE AND AGRICULTURE

A *pesticide* is any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or substances which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term pesticide also includes substances intended for use as a plant growth regulator, defoliant, desiccant (agent for thinning fruit or preventing the premature fall of fruit), and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport.

Types of Pesticides

Insecticides are agents of chemical or biological origin that control insects. Control may result from killing the insect or otherwise preventing it from engaging in behaviours deemed destructive. Insecticides may be natural or manmade and include chlorinated hydrocarbons, organo-phosphates, carbonates-insecticides, pyrethroids, and botanical and biological products. Examples include Chlordane and DDT.

Herbicides are used to kill unwanted plants. Selective herbicides kill specific targets while leaving the desired crop relatively unharmed. Some selective herbicides act by interfering with the growth of the weed and are often based on plant hormones. Nonselective herbicides, on the other hand, kill all plant material with which they come into contact. Herbicides include phenoxy hormone products, triazines, amides, carbonates-herbicides, dinitroanilines, urea derivatives, sulfonyl urea, bipiridils

and uracil.

Fungicides are chemical compounds used to prevent the spread of fungi or plants in gardens and crops, which can cause serious damage resulting in loss of yield and thus profit. Fungicides can either be contact or systemic. A contact fungicide kills fungi when sprayed on its surface; a systemic fungicide has to be absorbed by the plant.

Bactericides destroy, suppress or prevent the spread of bacteria. Examples are swimming pool chemicals containing chlorine, and products used to control black spot (bacterial blight) on garden plants or in orchards. Disinfectants for household and industrial use are excluded and are not considered pesticides

Seed treatments are chemical or biological substances or physical processes applied to seeds or seedlings. They help to protect the seeds and assure optimum emergence of the plant or crop. Application of a chemical to seeds is a very well-targeted method of reducing pest and disease attacks on the growing plant.

Plant growth regulators are substances or mixture of substances intended, through physiological action, to accelerate or retard the rate of growth or maturation, or otherwise alter the behavior of plants or their produce. Additionally, plant regulators are characterized by their low rates of application (high application rates of the same compounds often are considered herbicidal).

Rodenticides are pesticides used specifically for controlling rodents, such as mice and rats, and include anti-coagulants.

Other refers to pesticides not so far mentioned.

Source: FAO

CHAPTER 6: LAND USE AND AGRICULTURE

1.6.1 (a): Sources of data for Table 6.1 Land Use: 2005-2009

Country	Notes
JAMAICA	The Statistical Institute of Jamaica
SAINT LUCIA	Government Statistics Department

1.6.1 (b): Notes for Table 6.1 Land Use: 2005-2009

Country	Notes
JAMAICA	<p>2000 data refers to National Forest Management and Conservation Plan 2000 and Census of Agriculture 1996.</p> <p>2000 data for forest and other wooded land includes disturbed forests and fields. Data for other years is for forested land only.</p> <p>2007 data derived from agricultural census.</p> <p>2008 data estimated by the World Bank.</p> <p>In 2007 and 2008, figures for 'Forest and other wooded land' refer to forest only.</p>

CHAPTER 6: LAND USE AND AGRICULTURE

1.6.2 (a): Sources of Data for Table 6.2 - Use of Fertilizers by Type and Year: 2005-2009

Country	Data Source
THE BAHAMAS	Department of Statistics-Trade Section
BARBADOS	Barbados Statistical Service
DOMINICA	Central Statistical Office
GRENADA	Trade Section, Central Statistical Office
GUYANA	Guyana Bureau of Statistics
JAMAICA	Statistical Institute of Jamaica
ST VINCENT AND THE GRENADINES	The Statistical Office
SURINAME	General Bureau of Statistics, Trade Statistics Section
BERMUDA	Department of Statistics

1.6.2 (a): Notes for Table 6.2 - Use of Fertilizers by Type and Year: 2005-2009

Country	Data Source
BARBADOS	Other Fertilizers include <ul style="list-style-type: none"> • other fertilizers in packets 10 kg & under • fertilizers with nitrogen phosphorous and potassium • monoammonium and diammonium phosphate • other fertilizers containing nitrogen and phosphorus • fertilizers with phosphorous/ potassium • other fertilizers
JAMAICA	Imports of fertilizers are used as a proxy for the use of fertilizers. However, the trade classification is quite different, giving terms such as ammonium nitrate, ammonium sulphate, potassium chloride and combinations of nitrogen, phosphorus and potassium.
SURINAME	a) Other are mixed fertilizers. b) The data presented are imports
BERMUDA	Values in Bermuda dollars

CHAPTER 6: LAND USE AND AGRICULTURE

1.6.3(a): Sources of Data for Table 6.3 - Use of Pesticides by Type and Year: 2005-2009

Country	Data Source
THE BAHAMAS	Department of Statistics-Trade Section
BARBADOS	Barbados Statistical Service
DOMINICA	Central Statistical Office
GRENADA	Trade Section, Central Statistical Office
JAMAICA	Statistical Institute of Jamaica
SAINT LUCIA	Government Statistics Department
SURINAME	General Bureau of Statistics, Trade Statistics Section
BERMUDA	Department of Statistics

1.6.3 (a): Notes for Table 6.3 - Use of Pesticides by Type and Year: 2005-2009

Country	Data Source
THE BAHAMAS	Herbicides includes Plant Growth Regulators for 2008 Herbicides includes Plant Growth Regulators for 2009 Plant growth regulators for 2008 & 2009 See Herbicides
JAMAICA	Preliminary data for 2005 to 2008. Plant growth regulators included in Other.
BERMUDA	Values in Bermuda dollars

CHAPTER 7: COASTAL AND MARINE RESOURCES



CARICOM countries depend heavily on fishing for income, food, employment. As a result, most coastal resources are fully or overexploited (especially those of higher commercial value).

The coastal and marine resources in the CARICOM region are of critical importance. As most of the Member States are either small-island or low-lying coastal states, the issues affecting them are similar in nature, though different in magnitude. Traditionally, the coastal zone has been considered as a band about fourteen miles wide inland from the land-water interface and extending no more than three miles seaward to the extent of the territorial sea. In the case of most of the insular CARICOM Member States, this so-called coastal zone encompasses the entire island, or a significant portion of the inhabited land area. Therefore, not only are the resources of this area of major importance to the Member States, but they also continue to be under threat from natural and anthropogenic activities.

There are three (3) Indicators covered in this section.

1. Total **and** Protected Marine Area: an indicator of Government's will to protect biodiversity.
2. Fish landings by type: used to measure the impact that fishing has on the environment.
3. Number of families and Population of coastal area: measure of population growth in coastal areas to provide an estimation of the pressures on the environment that will arise as a result of habitation of the coast.

CHAPTER 7: COASTAL AND MARINE RESOURCES

Table 7.1 - Total and protected marine area: 2005-2009

Country	Year	Marine Area	
		Total	Protected
AG	2009	77,147	...
BS	2005 - 2007	230,000	1,622.1
BB	2005 -2009	3,984	2.0
DM	2008	...	10.76
HT	2009	...	148
JM	2005-2009	15,973	1,975
VC	2010	27,533	98.2
SR	2005-2009	...	2,971
BM	2008	4,236.1	294.7
KY	2005-2009	208.9	91.7

Concept and definition

A *Marine Protected Area* (MPA) is “any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment”.

(Please refer to the IUCN 1988. Resolution 17.38 of the 17th General Assembly of the IUCN. IUCN; Gland; Switzerland and Cambridge; UK.)

CHAPTER 7: COASTAL AND MARINE RESOURCES

Table 7.2 (a) Fish landings: 2005-2009

Country	2005	2006	2007	2008	2009
AG	1,161	1,168	1,196	999	769
BB	1,804.4	1,414	1,737	2,414.5	2,594.2
BZ	564.7	582.9	533.4	547.6	819.4
DM	523	783	816	...	...
GD	2,047	2,165.2	2,211.2	2,386	...
GY	50,939	43,325	43,272	41,340	42,803
JM	8,537	13,068	11,838	9,475	13,205
LC	1,296	1,441	1,509	1,805	1,947
VC	778.2	770.1	981.7	635.8	969.0
BM	329.1	309.2	348.1	328.3	...
TC	1,105.0	1,158.4	1,125.0	918.9	926.6

Definitions

Fish landings are the weight of [the fish] that is landed at a landing site. May be different from the catch (which includes the discards).

Catch: The total number (or weight) of fish caught by fishing operations. Catch should include all fish killed by the act of fishing, not just those landed. *Restrepo V. (1999): Annotated Glossary of Terms in Executive Summary Reports of the International Commission for the Conservation of Atlantic Tunas' Standing Committee on Research and Statistics (SCRS). ICCAT.*

Source: <http://www.fao.org/fi/glossary/>

CHAPTER 7: COASTAL AND MARINE RESOURCES

Table 7.2(b) Fish landings by type: 2005-2009

Country	Year	Snappers (Lutjanidae sp.)	Groupers (Serranidae sp.)	Grunts (Haemulidae sp.)	Total Quantity (Metric Tonnes)
AG	2005	296.0	455.0	410.0	1,161.0
	2006	320.0	463.0	385.0	1,168.0
	2007	420.0	454.0	322.0	1,196.0
	2008	525.0	258.0	216.0	999.0
	2009	291.0	301.0	177.0	769.0

Country	Year	Flying Fish	Dolphin	KingFish	Tuna and pelagics	Shark	Bill Fish	Total Quantity (Metric Tonnes)
BB	2005	1,172.3	353.8	25.3	177.7	6.3	69.0	1,804.4
	2006	711.3	387.4	31.8	178.9	7.9	96.6	1,414.0
	2007	944.4	560.7	26.9	143.4	7.1	54.6	1,737.0
	2008	1,813.8	347.9	20.6	141.4	7.9	83.0	2,414.5
	2009	1,765.7	706.8	15.5	70.6	5.8	29.8	2,594.2

Country	Year	Finfish	Fish Fillet	Lobster	Conch	Shrimp	Crab	Other/ Misc.	Total Quantity (Metric Tonnes)
BZ	2005	7.7	15.9	243.6	285.3	8.2	...	4.1	564.7
	2006	4.1	19.5	207.7	307.1	20.9	...	23.6	582.9
	2007	4.5	27.2	209.6	260.8	11.8	...	19.5	533.4
	2008	3.2	15.9	213.2	278.5	16.3	1.0	19.5	547.6
	2009	3.9	6.2	232.1	333.9	12.5	1.1	229.8	819.4

CHAPTER 7: COASTAL AND MARINE RESOURCES

Table 7.2(b) cont'd Fish landings by type: 2005-2009

Country	Year	Snappers (Lutjanidae sp.)	Groupers (Serranidae sp.)	Flying Fish	Grunts (Haemulidae sp.)	Jacks and related species	Shark	Conch	Total Quantity (Metric Tonnes)
GD*	2005	118.8	2.6	9.1	14.3	20.5	18.0	16.3	2,047
	2006	141.9	2.3	2.9	17.5	23.1	15.8	2.1	2,165
	2007	117.7	2.9	0.6	11.3	19.0	22.3	24.9	2,211
	2008	122.1	1.7	14.6	5.2	16.0	24.2	2.7	2,386

Figures do not add up to total quantity

Country	Year	Finfish	Red Snapper	Shrimp	Total Quantity (Metric Tonnes)
GY	2005	29,972.0	341.0	20,626.0	50,939.0
	2006	25,250.0	424.0	17,651.0	43,325.0
	2007	26,421.0	976.0	15,875.0	43,272.0
	2008	23,829.0	871.0	16,640.0	41,340.0
	2009	24,511.0	789.0	17,503.0	42,803.0

Country	Year	Flying Fish	Dolphin	KingFish	Tuna and pelagics	Shark	Red Snapper	Lobster	Conch	Other/ Misc.	Total Quantity (Metric Tonnes)
LC	2005	71.0	198.0	169.0	466.0	12.0	0.0	15.0	42.0	323.0	1,296.0
	2006	30.0	382.0	187.0	410.0	7.0	0.0	9.0	35.0	381.0	1,441.0
	2007	46.0	512.0	211.0	328.0	5.0	51.0	13.0	41.0	302.0	1,509.0
	2008	249.0	361.0	182.0	560.0	9.0	52.0	13.0	38.0	341.0	1,805.0
	2009	220.0	465.0	195.0	486.0	9.0	64.0	10.0	15.0	483.0	1,947.0

CHAPTER 7: COASTAL AND MARINE RESOURCES

Table 7.2(b) cont'd Fish landings by type: 2005-2009

Country	Year	Dolphin	KingFish	Jacks and related species	Lobster	Conch	Turtle	Whale	Shark	Balahoo
VC	2006	75	40	53	14	4	1	0	3	34
	2007	135	37	202	9	11	1	4	8	46
	2008	91	24	27	3	15	0	0	4	39
	2009	111	31	140	13	18	0	0	5	59

Country	Year	Bonito	Cavalli	Porpoise	Red Hind	Red Snapper	Robin	Skip Jack	Other/ Misc.	Total Quantity (Metric Tonnes)
VC (cont'd)	2006	16	15	1	23	14	60	147	270	770.1
	2007	23	13	3	55	11	151	88	185	981.7
	2008	27	21	2	58	6	115	83	122	635.8
	2009	15	9	1	54	4	236	52	220	969.0

Country	Year	Snappers (Lutjanidae sp.)	Groupers (Serranidae sp.)	Jacks and related species	Tuna and pelagics	Shark	Other/ Misc.	Total Quantity (Metric Tonnes)
BM	2005	35.5	49.5	46.8	173.2	7.1	17.0	329.1
	2006	33.3	54.1	52.6	146.1	6.5	16.7	309.2
	2007	30.1	60.8	51.1	181.4	18.2	6.6	348.1
	2008	36.7	53.5	48.9	162.7	20.1	6.6	328.3

Country	Year	Lobster	Conch	Scalefish	Total Quantity (Metric Tonnes)
TC	2005	430.0	675.0	-	1,105.0
	2006	446.4	681.2	30.8	1,158.4
	2007	335.8	728.9	60.4	1,125.0
	2008	160.1	728.0	30.8	918.9
	2009	162.0	755.9	8.8	926.6

CHAPTER 7: COASTAL AND MARINE RESOURCES

Table 7.3 - Number of families and Population of coastal areas: 1980, 1990, 2000 and 2010 Round of Population and Housing Censuses, 2005-2009

Country	Year	Population in coastal areas	Number of families in coastal areas
BS	2005	325,200	...
	2006	329,500	...
	2007	334,000	...
BB	1980	67,353	19,818
	1990	68,421	22,125
	2000	68,714	23,828
BZ	1980	60,988	12,430
	1991	68,070	16,111
	2000	81,659	19,457
	2010	89,214	26,522
DM	2001	25,952	
JM	1991	275,608	...
	2001	333,326	...
SR	2007	382,764	...
	2008	388,845	...
	2009	395,022	...
KY	2010	55,036	...

Concept and Definition

Population of coastal areas is the total population living within one hundred kilometres of the coastline. A country might also consider percentage of population in the low elevation coastal zone (<10 meters elevation) or percentage of population in river deltas. Please refer to http://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets.pdf

A **coastal area** is the part of the land affected by its proximity to the sea, and that part of the sea affected by its proximity to the land as the extent to which man's land-based activities have a measurable influence on water chemistry and marine ecology. (Please refer to European Environment Agency's website at [http://glossary.eea.europa.eu/EEAGlossary /C/coastal_area](http://glossary.eea.europa.eu/EEAGlossary/C/coastal_area).)

CHAPTER 7: COASTAL AND MARINE RESOURCES

1.7.1(a): Sources of Data for Table 7.1 - Total and Protected Marine Area: 2005-2009

Country	Notes
ANTIGUA AND BARBUDA	EarthTrends Environmental Information Senior Fisheries Officer, Fisheries Division Senior Environment Officer, Environment Division
THE BAHAMAS	Bahamas National Trust
BARBADOS	Coastal Zone Management Unit.
DOMINICA	Forestry and Wildlife Division and Fisheries Division, Ministry of Agriculture, 2008 update
HAITI	Centre National de l'Information Géo-Spatiale (CNIGS), Programme of Land-based Information for the Sustainable Development (PITDD) project
JAMAICA	Earth Trends, National Environment and Planning Agency
ST VINCENT AND THE GRENADINES	Statistical Office, 2010 Environmental Statistics Report
SURINAME	Forest service of Suriname, Division Nature Conservation
BERMUDA	Department of Planning
THE CAYMAN ISLANDS	Department of Environment, Cayman Islands Government

CHAPTER 7: COASTAL AND MARINE RESOURCES

1.7.1(b): Notes for Table 7.1 - Total and Protected Marine Area: 2005-2009

Country	Notes
ANTIGUA AND BARBUDA	The Marine Reserves have both terrestrial and marine area as protected areas. Total Marine Area includes all areas up to the territorial sea limit (12 nautical miles).
BARBADOS	The territorial sea area limit (12 nautical miles from the coast) as the total marine area.
THE CAYMAN ISLANDS	Department Areas of overlap between marine protected areas only counted once Area (ha.) of marine protected areas considered "no take" is 3134.66

CHAPTER 7: COASTAL AND MARINE RESOURCES

1.7.2(a) and (b): Sources of Data for Table 7.2 - Fish landings by type: 2005-2009

Country	Notes
ANTIGUA AND BARBUDA	Fisheries Division
BARBADOS	Barbados Statistical Service
BELIZE	Statistical Institute of Belize Abstract of Statistics
GRENADA	Fisheries Division, Grenada
GUYANA	Guyana Bureau of Statistics
SAINT LUCIA	Ministry of Agriculture & Fisheries
ST VINCENT AND THE GRENADINES	Statistical Office and Ministry of Agriculture, Rural transformation, Forestry & Fisheries.
SURINAME	Forest Service of Suriname, Division Nature Conservation
BERMUDA	Department of Environmental Protection, Marine Resources Division
TURKS AND CAICOS ISLANDS	Department of Environmental & Coastal Resources

1.7.2(a) and (b): Notes for Table 7.2 - Fish landings by type: 2005-2009

Country	Notes
BARBADOS	The five types are Flying Fish, Dolphin, King Fish, Shark, Tuna and Bill Fish. These were chosen because of the catch size. The average size of the fish was not available. Information for 2005 was not available.
BERMUDA	Total catch include fish landings in addition to bait and lobster catches.

CHAPTER 7: COASTAL AND MARINE RESOURCES

1.7.3(a): Sources of Data for Table 7.3 - Number of families and Population of Coastal Areas: 1980, 1990, 2000 and 2010 Round of Population and Housing Censuses, 2005-2009

Country	Notes
BAHAMAS	Department of Fisheries
BARBADOS	Barbados Statistical Service, Population And Housing Censuses, 1980, 1990, 2000
BELIZE	Statistical Institute of Belize Population and Housing Censuses
DOMINICA	Central Statistical Office
GUYANA	Guyana Bureau of Statistics
JAMAICA	Statistical Institute of Jamaica
SURINAME	Statistical Demographic data from the General Bureau of Statistics
THE CAYMAN ISLANDS	Population and Housing Censuses

1.7.3(b): Notes for Table 7.3 - Number of families and Population of Coastal Areas: 1980, 1990, 2000 and 2010 Round of Population and Housing Censuses, 2005-2009

Country	Notes
BAHAMAS	Entire Population is considered to be in the Coastal Area
BELIZE	Data for 2010 does not include rural communities along the Coast
JAMAICA	Estimated population figures from population census.

CHAPTER 8: BIODIVERSITY



Biological diversity describes the variety of life on Earth. It refers to the wide variety of ecosystems and living organisms: animals, plants, their habitats and their genes.

In the region, some of the contributory factors to these threats identified include the difficulty in collecting current information on farmers and farming activities including aquaculture. The increasing incidence of sand mining and infrastructure works close to beaches impacts negatively on the beach and marine life environment and also makes the monitoring of beaches and the surrounding environment difficult. This ultimately affects the timely availability of marine information and data on the quality of water.

One of the main challenges in this area continues to be the absence of accurate and updated geospatial data to define protected area sites. The data collected on protected areas is therefore useful for identifying new areas as well as monitoring the alterations in the biology of areas that have been changing overtime.

Some of the areas monitored include beaches; wetlands; mangrove; forests; sea grass beds; coral reefs and fishable resources.

The table on biodiversity seeks to collect the Total Surface Area, Protected Area (land and marine) and Protected Area as a per cent of Total Surface Area. This table also derives MDG 7.6 Proportion of terrestrial and marine areas protected.

The main source of data is the Environment Protection Agency in Member States.

CHAPTER 8: BIODIVERSITY

Table 8.1 - Protected Area as a percentage of Total Area: 2005-2010

Unit: km²

Country	Year	Total Area	Protected Area	Protected Area as a % of Total Area
AG	2005 -2009	7,589.0	179.6	2.4
BB	2005 -2009	183,865.9	2.9	0.0
BZ	2005 - 2008 2009	22,970 22,970	... 10,617	... 46.0
DM	2008		162.8	21.7
HT	2009	27,065.3	650.7	2.4
JM	2005 - 2006 2007 - 2009	26,964 26,964	3,576 3,954	13.3 14.7
VC	2010	389	122.7	31.5
SR	2005 - 2009	163,820.0	22,665.0	14.0
BM	2008	4,290.5	319.7	7.5

Concepts and Definition:

A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values.

IUCN categorises protected areas by management objective and has identified six distinct categories of protected areas:

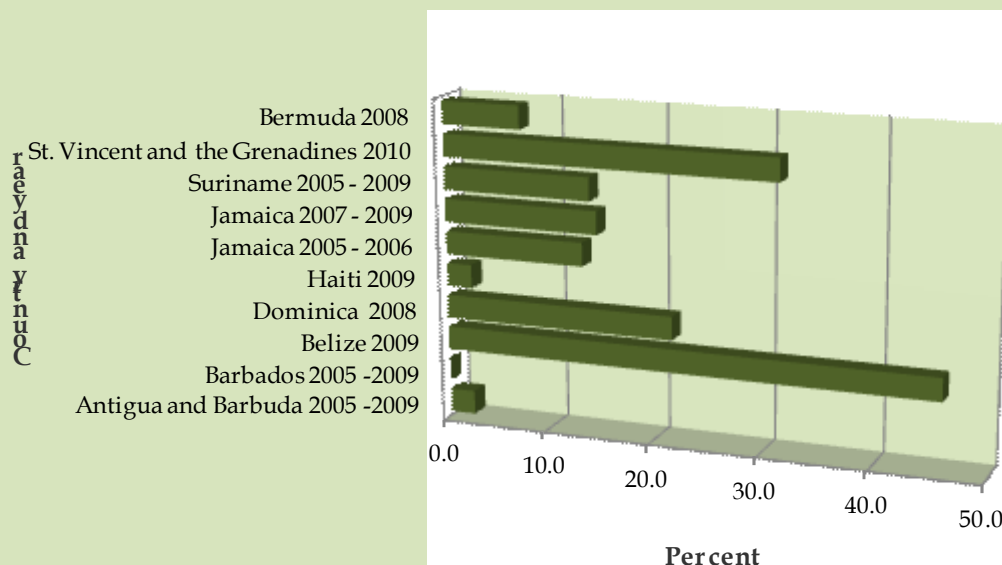
A protected area includes six categories, which are:

- Category I(a): Strict Nature Reserve
- Category I(b): Wilderness Area
- Category II: National Park
- Category III: National Monument
- Category IV: Habitat/Species Management Area
- Category V: Protected Landscape/Seascape
- Category VI: Managed Resource Protected Area

(Please refer to http://www.iucn.org/about/union/commissions/wcpa/wcpa_overview/ [last accessed: May 2nd 2012])

CHAPTER 8: BIODIVERSITY

CHART 8.1.1: PROTECTED AREA AS A PERCENTAGE OF TOTAL AREA: 2005-2010



CHAPTER 8: BIODIVERSITY

8.1.1 (a): Sources of Data for Table 8.1 - Protected Area As A Percentage of Total Area: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	State of the Country Report (Sustainable Island Resource Management Zoning Plan) EarthTrends Environmental Information World Database on Protected Areas (UN list of Protected Areas) Environment Division; Director, Antigua National Parks; Director, Barbuda National Parks
BARBADOS	Ministry of the Environment, Water Resources and Drainage
BELIZE	Prepared by the Statistical Institute of Belize
DOMINICA	Forestry and Wildlife Division, Ministry of Agriculture, 2008 Update
HAITI	Prepared by Institut Haïtien de Statistique et d'Informatique - IHSI
JAMAICA	National Environment and Planning Agency
ST VINCENT AND THE GRENADINES	2010 Environmental Statistics Report
SURINAME	Forest Service of Suriname, Division Nature Conservation
BERMUDA	Department of Planning

8.1.1 (b): Notes for Table 8.1 - Protected Area As A Percentage of Total Area: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	Total Surface Area includes terrestrial area (442 km ²) and territorial sea area (7147 km ²). There are a total of 7 officially designated protected areas in Antigua and Barbuda as of 2005. They range in size from .47 km ² to 77.7 km ² . for 2004-2006
THE BAHAMAS	The protected areas are inclusive of proposed protected areas

CHAPTER 9: FORESTS



This theme provides information on the extent of land area; including reforested areas, but not including agricultural or urban land; that are occupied by trees higher than 5 meters and providing a continuous cover of more than 10 percent of the area.

As well as supporting, varying types of ecosystems, forest provide an important habitat to many species of birds and wild animals including many endangered species. They also protect the conservation and livelihood of these species by serving as a barrier against the ravages of hurricanes and tropical storms and restrict the prevalence of landslides and erosion which would otherwise impact negatively on the biological conservation of the environment.

In this regard any downward change in the area of forest cover, must be viewed as a potential threat to the environment as this means that more areas now become vulnerable to the effects of climate change. It is for this reason that the indicators presented in this theme are critical to the overall monitoring of the environment and maintain the ecological balance.

Some of the activities to be embarked upon to collect data in this area are the undertaking of forest wildlife inventories.



CHAPTER 9: FORESTS

Table 9.1 Forest Area: 2005-2009

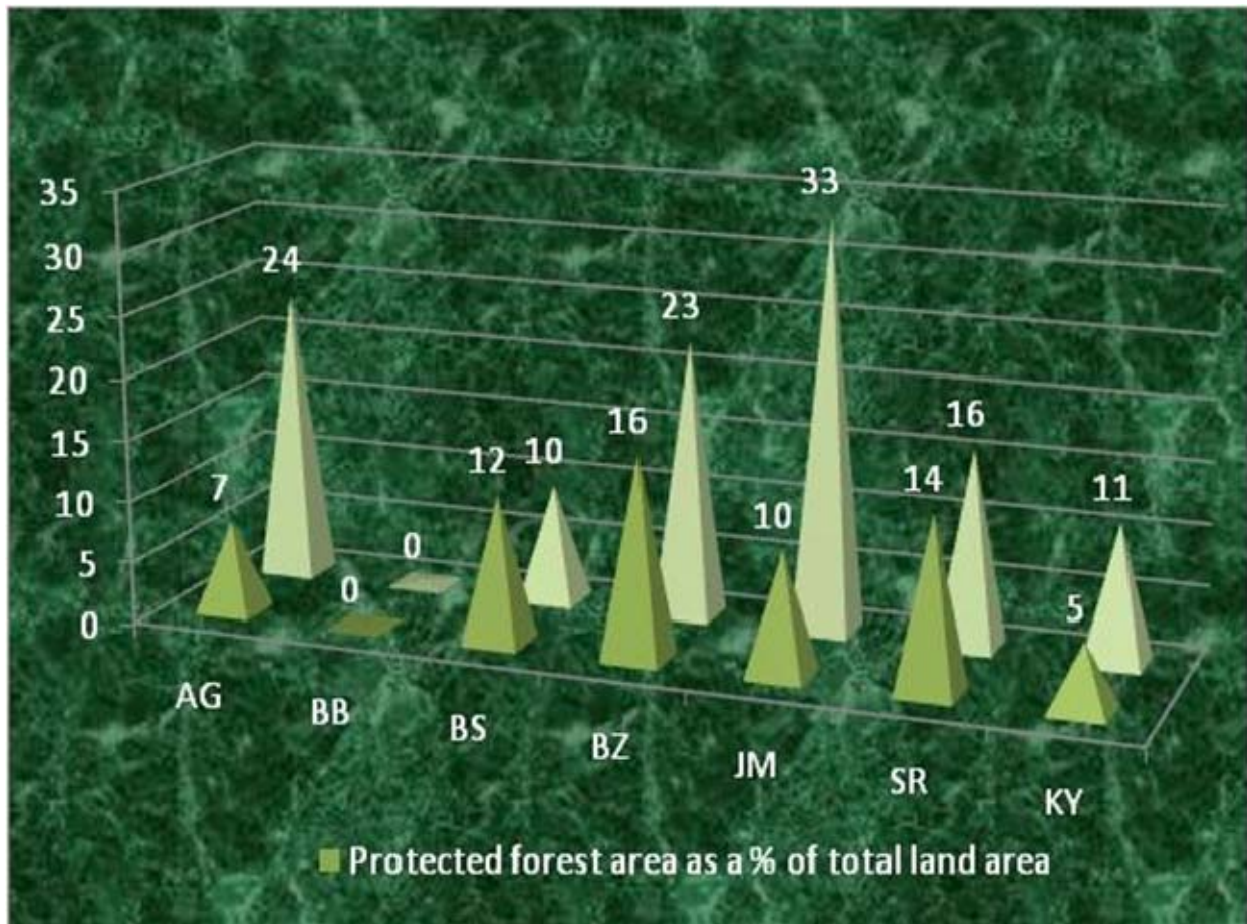
Country	Year					Unit = km ²
		Total Land area	Total forest area	Protected forest area	Protected forest area as a % of Total forest area	Protected forest area as a % of Total land area
AG	2005-2009		137.10	32.42	23.65	7.33
BB	2009		74.4	0.20	0.27	0.05
BS	2005	13,957	3,332	259	8.00	1.86
	2006	13,957	3,315	259	8.00	1.86
	2007	13,957	3,299	259	8.00	1.86
	2008	13,957	3,282	259	8.00	1.86
	2009	13,957	3,266	259	8.00	1.86
BZ	2005-2006	22,800	16,530	3,835	23.20	16.80
	2007-2009	22,800	16,530	3,727	22.50	16.30
GY	2005		184,179	...	...	...
	2006-2009		183,985	...	...	...
JM	2005		3,301	1,098	33.27	9.90
SR	2005-2008	163,820	148,280	22,665	16.00	14.00
KY	2006	255.65	123.23	13.79	11.19	5.39

Concepts and Definition:

Forest is land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use. (FAO, Global Forest Resources Assessment 2010, Annex 2: Terms and definitions used in FRA 2010 <http://www.fao.org/docrep/013/i1757e/i1757e.pdf>.)

Protected forest area as a percentage of total land area is the area of protected forest as a share of total land area, where land area is the total country area excluding the area of inland water bodies (major rivers, lakes and water reservoirs).

CHAPTER 9: FORESTS



NOTES:

BZ: Total Land Area for Belize is 22,800 sq km

JM: Protected forest areas are forest reserves and Crown lands.

VC: Forest Cover (hectares):1990-2005 11,000; Forest Cover (as % of total land area): 27.4;

Other wooded land (hectares): 2000; Other land with tree cover (hectares): Total land area (hectares): 39000

28,518.21 ha - 2005 data from Physical Planning Dept.

Conversion factor: 1 hectare = 0.01 (10⁻²) km²

CHAPTER 9: FORESTS

9.1.1 (a): Sources of Data for Table 9.1 - Forest Area: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	National Office for Disaster Services Director, Antigua National Parks Director, Barbuda National Parks
THE BAHAMAS	Dept of Lands and Survey
BARBADOS	Barbados Land Registry
BELIZE	Prepared by the Statistical Institute of Belize
GUYANA	Guyana Forestry Commission
JAMAICA	Forestry Dept.
SURINAME	Forest Service of Suriname, Division Nature Conservation
THE CAYMAN ISLANDS	Department of Environment (DoE), Cayman Islands Government

9.1.1 (b): Notes for Table 9.1 - Forest Area: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	The protected forest area includes portions of Codrington Lagoon National Park (CLNP) and Nelson's Dock Yard National Park (NDNP). Approximately 45% of CLNP is covered by mangrove forest. Approximately 60% of NDNP is covered by mangrove forest.
THE BAHAMAS	Forests - Proposed figures are subject to gazetting under the Forestry Act 2010 by the Bahamas Government. The areas covered in this table include pines, broadleaf coppice, mangroves, and wetlands from four major Pine Islands in the Bahamas. The table illustrates the amount of forest area kept and governed by the Bahamas Government. There are three distinct types of forest namely; protected forest, conservation forest and forest reserves. This table also shows the various types of forest as a percentage of total forest area and the amount of forest area as a percentage of total land. Historically, substantial plots of land were cleared for large scale commercial hotels, luxury houses, apartments, condominiums, and golf courses. Additionally, substantial amounts of forest land has been devoted to farming which includes crops such as cotton, pineapple, tomatoes, sugarcane, sisal and citrus.
BELIZE	Total Land Area for Belize is 22,800 sq km
JAMAICA	Protected forest areas are forest reserves and Crown lands..

CHAPTER 10 - AIR



Air is that odourless, tasteless mixture of gases that surrounds the Earth. Air consists of nitrogen, oxygen, carbon dioxide, helium and other gases in varying degrees of volume.

The pollution of the air and by extension the atmosphere is one of the greatest challenges facing human kind, particularly as it relates to providing energy and food for a growing world population. The emissions of Carbon Dioxide (CO_2) and other greenhouse gases pose a significant threat to our livelihood. Carbon dioxide is a colourless, odourless and non-poisonous gas formed by combustion of carbon and in the respiration of living organisms and is considered a greenhouse gas, because of its ability to trap the sun's rays in the atmosphere.

In CARICOM Member States the emissions of CO_2 and other greenhouse gases are relatively small mainly because of small populations and the absence of large scale manufacturing and production. The highest emissions come from Trinidad & Tobago and Jamaica mainly from oil refining and mining activities. On the other hand countries such as Guyana, Belize and Suriname with large forests and relatively small populations actually serve as CO_2 sinks and more than absorb any emissions which may emanate from these states.

Generally speaking, poor air quality in the CARICOM region can be the result of:

- Inadequate vehicle emissions controls, exacerbated by an influx of foreign used vehicles with inadequate emission devices;
- Inefficient energy use;
- Particulates from soil erosion and sugar cane burning.

The United Nations Framework Convention on Climate Change (UNFCCC) sets targets for signatories to control emissions, thereby improving efficiency in energy production and use, improving public transport and reducing waste landfills.

CHAPTER 10 - AIR

Table 10.1 - Emissions of Carbon Dioxide (CO₂)

Country	Year	Energy activities						TOTAL emissions
		Energy industries	Manufacturing industries and construction	Transport	Other fuel combustion	Total fuel combustion	Total fugitive emissions from fuels	
SR	2005	...	...	...	...	...	...	1.9
	2006	...	...	...	...	...	...	2.0
	2007	...	...	...	...	...	...	2.0

Concepts and Definition:

Emission sources: The classification of emission sources used in this questionnaire is based on the Revised IPCC 1996 Guidelines for National Greenhouse Gas Inventories.

Total emissions: Emissions from human activities in the country. Emissions from international aviation and maritime transport are excluded.

Energy activities [Production and Use]: This category comprises all emissions related to the production and use of energy in any sectors of the economy and households. It includes emissions from fuel combustion as well as fugitive fuels.

Energy industries: Emissions from fuel combustion in public electricity and heat production, in petroleum refining, manufacturing of solid fuels and other energy industries. Fugitive emissions from fuels (coal mining, oil and gas fields, venting and flaring etc.) are not allocated to this category. Evaporative emissions from vehicles are included under Transport.

Manufacturing industries and construction: Emissions from fuel combustion in manufacturing industries (except coke ovens that are allocated under Energy industries) and construction.

Transport: Emissions from fuel combustion in transport activities such as domestic air transport, road transport, railways, navigation and other transport. Evaporative emissions from vehicles are also included in this category. Emissions from international aviation and marine transport are excluded.

Other fuel combustion: Emissions from fuel combustion in commercial, institutional and residential buildings, agriculture, forestry, fishing and other non-specified fuel combustion (e.g. military). The fishing sector includes domestic inland, coastal and deep-sea fishing.

Fugitive emissions from fuels Intentional or unintentional releases of gases from anthropogenic activities. In particular, they may arise from the production, processing, transmission, storage and use of fuels, and include emissions from combustion only where it does not support a productive activity (e.g., flaring of natural gases at oil and gas production facilities).

CHAPTER 10 - AIR

1.10.1: Sources of Data for Tables 10.1 - Emissions of Carbon Dioxide (CO₂): 2005-2007

Country	Data Source
SURINAME	EIA: Energy Information Administration, January 2010

1.10.1: Notes for Tables 10.1 - Emissions of Carbon Dioxide (CO₂): 2005-2007

Country	Notes
SURINAME	Data for 2005 is per Million Metric Tons of CO ₂ and is the total Consumption of Fossil fuels

CHAPTER 11: WASTE



Photo: AFP

Waste refers to materials that are not prime products (i.e. products produced for the market) for which the generator has no further use for his own purpose of production, transformation or consumption, and which he discards, or intends or is required to discard. It excludes residuals directly recycled or reused at the place of generation (i.e. establishment) and waste materials that are directly discharged into ambient water or air. There are seven (7) tables reported in this section. These are:

1. Generation of Waste by Source
2. Management of Hazardous Waste
3. Management of Municipal Waste
4. Composition of Municipal Waste
5. Management of Municipal Waste-city
6. Waste Treatment and Disposal Facilities
7. Generation and Recycling of Selected Waste Materials

The generation of hazardous wastes, including wastes that are toxic, poisonous, explosive, corrosive, flammable, ecotoxic and infectious, is an important concern worldwide. When such wastes are dumped indiscriminately, spilled accidentally or managed improperly, they can cause health problems to humans, plants or animals, or poison water and land.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted in 1989, and entered into force on May fifth, 1992. This global environmental treaty strictly regulates the transboundary movements of hazardous wastes.

Data for the indicators under this theme are being collected directly by the United Nations Statistics Division under a collaborative arrangement with the CARICOM Secretariat.

CHAPTER 11: WASTE

Table 11.1 Generation of Waste by Source: 2005-2009

1000 t									
Country	Year	Agriculture, forestry and fishing (ISIC 01-03)	Mining and quarrying (ISIC 05-09)	Manufacturing (ISIC 10-33)	Electricity, gas, steam and air conditioning supply (ISIC 35)	Construction (ISIC 41-43)	Other economic activities excluding ISIC 38	Households	Total waste generation (Tonnes)
AG	2005					10.0	15.2 ^B	21.3	
	2006			0.2 ^A		9.8	13.1 ^B	20.5	91.0 ^C
	2007			0.3 ^A		17.8	13.2 ^B	20.8	111.9 ^C
	2008			0.2 ^A		10.6	12.4 ^B	23.0	121.7 ^C
	2009			0.2 ^A		7.9	9.6 ^B	22.7	136.4 ^C
BS	2005					81.6	67.9 ^A	90.5	239.9
	2006					101.7	36.1 ^A	89.4	227.2
GY	2005						32.0		
	2006						25.3		
	2007						28.0		
JM	2006							1,120	
	2007							1,125	
	2008							1,130	
SR	2006							87.6 ^{A,B}	
	2007	8.4 ^{A,B}						152.1 ^{A,B}	
	2008	9.3 ^{A,B}						143.2 ^{A,B}	
	2009	12.1 ^{A,B}						145.5 ^{A,B}	
TT	2005							1,548	
	2006							1,537	
	2007							1,629	
AI	2005	1.6 ^A				1.3 ^B	1.1 ^C	4.0	
	2006	2.7 ^A				1.6 ^B	1.4 ^C	4.8	
	2007	3.5 ^A				1.5 ^B	2.1 ^C	5.3	
	2008	4.0 ^A				1.8 ^B	3.9 ^C	5.0	

CHAPTER 11: WASTE

Table 11.2 :Management of Hazardous Waste: 2005-2009

		(Tonnes)			
Country	Year	Stock of hazardous waste at the beginning of the year	Hazardous waste generated during the year	Hazardous waste imported during the year	Hazardous waste exported during the year
AG	2005				
	2006				
	2007				
	2008				
	2009				
JM	2005		10,000 ^A	0	
	2006		10,000 ^A	0	1,565

Table 11.2 :Management of Hazardous Waste: 2005-2009 (cont'd)

		(Tonnes)				
Country	Year	Hazardous waste treated or disposed of during the year				
		Recycling	Incinerated	Landfilled	Other	Stock of hazardous waste at the end of the year
AG	2005			60 ^B		
	2006	45 ^A		86 ^B		
	2007	0 ^A		52 ^B		
	2008	75 ^A		101 ^B		
	2009	49 ^A		53 ^B		
JM	2005					10,000 ^A
	2006					8,435 ^A

CHAPTER 11: WASTE

Table 11.3: Management of Municipal Waste: 2005-2009

		1000 t				
Country	Year	Municipal waste collected from households (1)	Municipal waste collected from other origins (2)	Total amount of municipal waste collected (=1+2)	Municipal waste imported for treatment/ disposal	Municipal waste exported for treatment/ disposal
AG	2005	21.2 ^A	62.9 ^A	84.1 ^{A,B}		
	2006	20.5 ^A	70.4 ^A	90.9 ^{A,B}		
	2007	20.8 ^A	91.0 ^A	111.8 ^{A,B}		
	2008	23.0 ^A	98.7 ^A	121.7 ^{A,B}		
	2009	22.7 ^A	113.7 ^A	136.4 ^{A,B}		
BS	2005	90	149	240		
	2006	89	138	227		
BZ	2005	120.0		120.0		
	2006	132.5		132.5		
	2007	146.7		146.7		
	2008	162.6		162.6		
DM	2005			20.9		
JM	2005			970	0	0
	2006	1,025	439	1,464	0	0
SR	2005	45 ^{A,B}				
	2006	88 ^{A,B}				
	2007	152 ^{A,B}	31 ^A	183 ^{A,B}		
	2008	143 ^{A,B}	30 ^A	174 ^{A,B}		
	2009	145 ^{A,B}	29 ^{A,B}	175 ^{A,B}		
TT	2005					
	2006					
	2007					
AI	2005	4.0	4.0 ^A	8.0 ^A	0	0
	2006	4.8	5.7 ^A	10.5 ^A	0	0
	2007	5.3	7.1 ^A	12.4 ^A	0	0
	2008	5.0	9.6 ^A	14.7 ^A	0	0

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Table 11.3: Management of Municipal Waste: 2005-2009 (cont'd)

		1000 t					
Country	Year	Municipal waste managed in the country <i>Amounts going to:</i>					
		Recycling	Composting	Incineration	Landfilling	Controlled landfilling	Other
AG	2005	0 ^{A,C}	0 ^A	0 ^A	84.1 ^{A,D}	84.1 ^{A,D}	0 ^A
	2006	0 ^{A,C}	0 ^A	0 ^A	90.9 ^{A,D}	90.9 ^{A,D}	0 ^A
	2007	0 ^{A,C}	0 ^A	0 ^A	111.8 ^{A,D}	111.8 ^{A,D}	0 ^A
	2008	0 ^{A,C}	0 ^A	0 ^A	121.7 ^{A,D}	121.7 ^{A,D}	0 ^A
	2009	0 ^{A,C}	0 ^A	0 ^A	136.4 ^{A,D}	136.4 ^{A,D}	0 ^A
BS	2005						
	2006						
BZ	2005				120.0		120.0
	2006				132.5		132.5
	2007				146.7		146.7
	2008				162.6		162.6
DM	2005				20.9		
JM	2005		0		970		970
	2006		0		1,464		1,464
SR	2005			30.41 ^{A,B}	9.54 ^{A,B}		
	2006						
	2007						
	2008						
	2009						
TT	2005					565	
	2006					561	
	2007					595	
AI	2005	0	0	0	8.0 ^A	5.1	8.0
	2006	0	0	0	10.5 ^A	6.2	10.5
	2007	0	0	0	12.4 ^A	7.4	12.4
	2008	0	0	0	14.7 ^A	8.9	14.7

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Table 11.4: Composition of Municipal Waste: 2005-2009

										%
Country	Year	Paper, paperboard	Textiles	Plastics	Glass	Metals	Other inorganic material	Organic material (Total)	Organic material of which: food and garden waste	TOTAL
AG	2006	18.8	6.9	19.5	13.7	7.9	7.9 ^A	25.2	25.2	100.0
GY	2009	10.0	5.0	18.0	5.0	4.5	4.5	53.0	50.0	100.0
JM	2006	9.6	2.3	13.9	2.4	2.3	0.5	69.0		100.0
	2007	11.0	3.0	20.0	5.0	4.0	1.0	56.0	56.0	100.0
	2008	11.0	0.0	19.0	5.0	0.0	11.0	54.0		100.0
SR	2006	8.8		10.5	5.4	2.7			40.5	100.0

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Table 11.5: Management of Municipal Waste - City Data: 2005-2009

1000 t								
Country	Year	Total population of the city (1000 inh.)	Percentage of city population served by municipal waste collection (%)	Municipal waste collected from households (1)	Municipal waste collected from other origins (2)	Total amount of municipal waste collected (=1+2)	Municipal waste imported for treatment/ disposal	Municipal waste exported for treatment/ disposal
BZ								
	2005	60.8	100.0	57.3		57.3		
	2006	62.2	100.0	62.5		62.5		
	2007	63.7	100.0	68.2		68.2		
	2008	65.2	100.0	74.4		74.4		
DM								
	2005		100.0					
GY								
	2005		87.0	35.9	23.1	58.9		
	2006		87.0	32.5	28.9	61.4		
	2007		87.0	32.0	25.3	57.3		
	2008		95.0	35.0	44.1	79.2		
	2009		95.0	35.5	51.7	87.2		
SR								
	2009		98.0					

Table 11.5: Management of Municipal Waste - City Data: 2005-2009 (cont'd)

		1000 t					
Country	Year	Municipal waste managed in the country <i>Amounts going to:</i>					
		Recycling	Composting	Incineration	Landfilling	Controlled landfilling	Other Total
BZ	2005				57.3		
	2006				62.5		
	2007				68.2		
	2008				74.4		
DM	2005						
GY	2005						
	2006						
	2007						
	2008	1.2				78.0	
	2009	1.2				86.0	
SR	2009						

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Table 11.6: Waste Treatment and Disposal Facilities: 2005-2009

Country	Year	Treatment plants:		Incineration plants:		Landfill sites:		Landfill sites: of which: controlled landfill	
		number	annual capacity (1000 t)	number	annual capacity (1000 t)	number	annual capacity (1000 t)	number	annual capacity (1000 t)
DM	2005	0		0		2			
TT	2005					3		3	565
	2006					3		3	561
	2007					3		3	595

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Table 11.7: Generation and Recycling of Selected Waste Materials: 2005-2009

		1000 t					
Country	Year	Paper, paperboard and paper products		Glass		Plastic	
		Waste generated	Waste collected for recycling	Waste generated	Waste collected for recycling	Waste generated	Waste collected for recycling
TT							
	2005		248.54		249 ^A		
	2006		249.07		249		
	2007		228.38		228		24

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1.11.1(a): Sources of Data for Table 11.1: Generation of Waste by Source: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	Environment Division
SURINAME	Strategic Solid Waste Management Plan for Suriname 2010 - 2020
TRINIDAD AND TOBAGO	Trinidad and Tobago Solid Waste Management Company Limited
OTHER COUNTRIES	National Data

1.11.1(b): Notes for Table 11.1: Generation of Waste bySource: 2005-2009

Country	Notes
ANTIGUA AND BARBUDA	<p>A - Manufacturing =Industrial Sector</p> <p>B - The other economic activities are commercial, institutes, medical and cruise ships. Records for 2005 had ICI (Industrial, Commercial, Institutes) together but for 2006 to 2010 they were separate.</p> <p>C - These values for total waste generated, which were provided by the National Solid Waste Management Authority (NSWMA), includes waste generated from other sources not specified in the worksheet, for example, 'clean bulk, bulk waste, street sweep, sewage and tires'.</p>
THE BAHAMAS	A - Data refer to government waste, which includes paper, furniture and other office supplies.
JAMAICA	<p>A - Estimated ship-generated wastes.</p> <p>Before 2006, household waste generation was calculated from an estimated average daily generation rate of 1 kg per person in Kingston. From 2006 waste generation is estimated to be 1.5 kg per day in Kingston and 0.8 kg per day across the island.</p>
SURINAME	<p>Strategic A - Unit of measurement is 1000 m³.</p> <p>B - The figures cover the capital city (district Paramaribo) and the second largest district of Wanica.</p> <p>Information source: Strategic Solid Waste Management Plan for Suriname 2010 - 2020</p> <p>Data collection methodology: survey</p>
TRINIDAD AND TOBAGO	Data obtained from Trinidad and Tobago Solid Waste Management Company Limited - daily average tonnage
ANGUILLA	<p>A - Data refers to Green Waste.</p> <p>B - Data refers to Industrial Waste (Industrial waste consists of waste from construction sites including demolition of buildings, cement etc.).</p> <p>C - Data refers to Commercial Waste.</p>

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1.11.2(a): Sources of Data for Table 11.2: Management of Hazardous Waste: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	Antigua and Barbuda Waste Recycling Corporation (ABWRC)
JAMAICA	Statistical Institute of Jamaica

1.11.2(b): Notes for Table 11.2: Management of Hazardous Waste: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	<p>A - Data for Hazardous waste was provided by the Antigua and Barbuda Waste Recycling Corporation (ABWRC) and only dates back as far as 2006. This includes only car batteries (3518 batteries @ an estimated 30 lbs each). The figure that was originally recorded for 2006 was in standard tonnes, however the questionnaire requested metric tonnes; therefore that figure had to be changed. The figure now recorded is the accurate one.</p> <p>B - Hazardous waste gone to landfill is all waste generated from the medical sector so it is partly hazardous material but not all hazardous. The specific amount of how much medical waste is hazardous is unknown.</p>
JAMAICA	A - Estimated.

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1.11.3(a): Sources of Data for Table 11.3: Management of Municipal Waste: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	National Solid Waste Management Authority (NSWMA).
THE BAHAMAS	National Data
BELIZE	National Data
DOMINICA	Environmental Coordinating Unit
JAMAICA	Statistical Institute of Jamaica
SURINAME	General Bureau of Statistics, Environmental Statistics Report 2006
TRINIDAD AND TOBAGO	Trinidad and Tobago Solid Waste Management Company Limited (SWMCOL)
ANGUILLA	National Data

1.11.3(a): Sources of Data for Table 11.3: Management of Municipal Waste: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	<p>A - Data were provided by the National Solid Waste Management Authority (NSWMA). B - Data refer to total waste generation. C - Waste collected by the National Solid Waste Management Authority (NSWMA) is not recycled. The only waste that is recycled is what is collected by the Antigua and Barbuda Waste Recycling Corporation. D - All waste collected by NSWMA is put into landfilling. E - This estimate of the total population served by municipal waste was based on the entire country. There is no estimation by urban and rural populations.</p>
SURINAME	<p>A - Unit of measurement is 1000 m³. B - The figures cover the capital city (district Paramaribo) and the second largest district of Wanica. Information source: General Bureau of Statistics, Environmental Statistics Report 2006 Data collection methodology: national survey held in 2004 (Census 7)</p>
TRINIDAD AND TOBAGO	<p>B - Composting for the yr 2006 - 92, 684 m³/wk is compostable</p>
ANGUILLA	<p>A - From 2005, increase in the amount of municipal waste can be explained by the increase in construction activity including demolition of buildings and damage due to hurricanes (falling trees etc), and the number of tourist arrivals and improvements in reporting. B - There is no rural population in Anguilla.</p>

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1.11.4(a): Sources of Data for Table 11.4: Composition of Municipal Waste: 2005-2009

Country	Data Source
ANTIGUA AND BARBUDA	Environment Division
GUYANA	National Data
JAMAICA	Statistical Institute of Jamaica
SURINAME	Strategic Solid Waste Management Plan for Suriname 2010-2020

1.11.4(b): Notes for Table 11.4: Composition of Municipal Waste: 2005-2009

Country	Notes
ANTIGUA AND BARBUDA	A - Other Inorganic material includes special care waste and construction and demolition.
SURINAME	Data collection methodology: survey

1.11.5(a): Sources of Data for Table 11.5: Management of Municipal Waste - City Data: 2005-2009

Country	Data Source
BELIZE	National Data
DOMINICA	Environmental Coordinating Unit
GUYANA	National Data
SURINAME	National Data

1.11.6(a): Sources of Data for Table 11.6: Waste Treatment and Disposal Facilities: 2005-2009

Country	Data Source
DOMINICA	Environmental Coordinating Unit
TRINIDAD AND TOBAGO	Trinidad and Tobago Solid Waste Management Company (SWMCOL)

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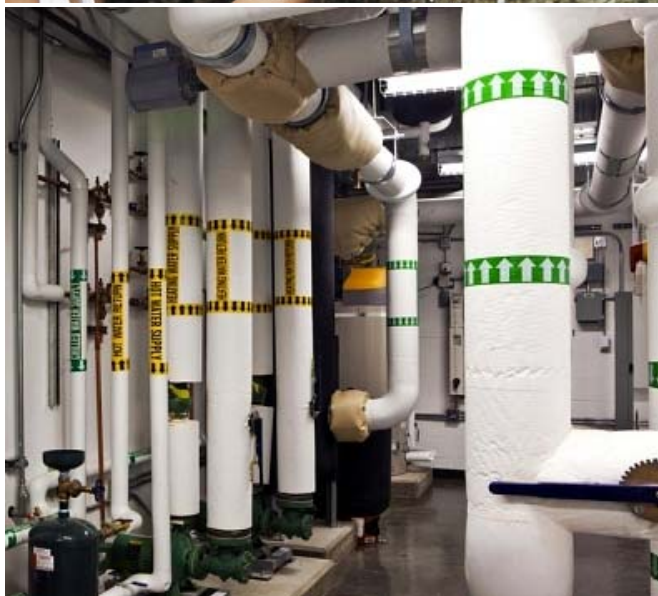
1.11.7(a): Sources of Data for Table 11.7: Generation and Recycling of Selected Waste Materials: 2005-2009

Country	Data Source
TRINIDAD AND TOBAGO	Trinidad and Tobago Solid Waste Management Company (SWMCOL)

1.11.7 (b): Notes for Table 11.7: Generation and Recycling of Selected Waste Materials: 2005-2009

Country	Notes
TRINIDAD AND TOBAGO	A - Data obtained from Carib Glassworks B - Plastics (2007) - 2 tons per month

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The conservation of this precious commodity continues to be very critical to the region, given that most countries have limited water resources. The increased demand for this resource by the tourist industry, coupled with increased urbanization and agricultural activities, prolonged dry spells owing to the effects of climate change have combined to make the sustainability of this scarce resource all the more necessary.

Its impact on the environment is far reaching and extends to all aspects of biodiversity in particular marine life. Agricultural pollutants and industrial waste can lead to changes in water quality, oxygen levels and salinity which can in turn affect the ability of less tolerant species to adapt. These changes can also affect the distribution and composition of aquatic organisms. The loss of these species in turn can affect the survival of others who depend on them for food, but may also cause the increase in other species that provided them with food.

The indicators under this theme provide an estimate of the quantity of renewable fresh water resources available and captures data on its consumption by its main users and the purpose for its use. It also provides data on the individual water treatment facilities of countries as well as their capacity.

Data for the indicators under this theme are being collected directly by the United Nations Statistics Division under a collaborative arrangement with the CARICOM Secretariat.

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Table 12.1 Renewable Freshwater Resources: 2005-2009

Country	Year						mio m ³ /y
		Precipitation (1)	Actual evapotranspiration (2)	Internal flow (3)=(1)-(2)	Inflow of surface and groundwaters (4)	Total renewable freshwater resources (5)=(3+4)	Outflow of surface and ground waters
AG	2005	371.0	...	...	...	...	...
	2006	332.8	...	...	...	...	...
	2007	293.6	...	...	...	...	...
	2008	392.5	...	...	...	...	...
	2009	276.9	...	...	...	...	...
BZ	2005	49,017	36,045.0 ^A	12,972.0	...	12,972.0	...
JM	2005	21,080	10,051.0	11,029.0	0.0	11,029.0	7,305.0
	2006	18,299	...	...	...	...	...
	2007	23,509	...	...	...	...	...
	2008	21,563	...	...	...	...	...
TT	2005	12,084.1	8,016	4,067.8	...	4067.8	...
	2006	10,882.8	6,530	4,353.1	...	4353.1	...
AI	2005	124.4	...	...	...	...	...
	2006	99.6	...	...	...	...	...
	2007	86.3	...	...	...	...	...
	2008	96.9	...	...	...	...	...
	2009	71.1	...	...	...	...	...
BM	2005	70.4	...	...	...	...	...
	2006	80.8	0.3	80.5 ^B	0.0	80.5	...
	2007	76.1	0.3	75.8 ^C	0.0	75.8	...
	2008	76.5	0.3	76.2	0.0	76.2	...
	2009	77.4	0.3	77.1	0.0	77.1	...
VG	2005	163.1

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Table 12.2 Freshwater Abstraction: 2005-2009

mio m³/y								
Country	Year	Gross freshwater abstracted						Total
		Water supply industry (ISIC 36)	Households	Agriculture, forestry and fishing (ISIC 01-03)	Manufacturing (ISIC 10-33)	Electricity industry (ISIC 351)	Other economic activities	
AG								
	2005	...	...	...	...	...	...	3.1
	2006	...	...	...	...	...	...	3.0
	2007	...	...	...	...	...	...	2.4
	2008	...	...	...	...	...	...	3.0
	2009	...	...	...	...	...	...	3.5
BZ								
	2005	...	...	...	...	...	...	10.1
	2006	...	...	...	...	...	...	9.8
2007	...	...	...	...	...	...	10.3	
GY								
	2005	...	...	...	...	...	...	95.2
	2006	...	...	...	...	...	...	100.3
	2007	...	...	...	...	...	...	109.5
	2008	...	...	...	...	...	...	117.3
	2009	...	...	...	...	...	...	109.2
JM								
	2005	296.0	...	111.0 ^B	...	...	...	...
	2006	294.0	...	109.0 ^B	...	...	...	...
	2007	293.0	...	...	...	...	...	...
2008	288.0	...	...	...	...	...	...
TT								
	2005	324.2	...	4.5	16.5	...	...	345.2
	2006	327.6	...	0.1	18.0	...	...	345.7
	2007	326.0	...	0.1	18.2	...	...	344.2
	2008	334.6	...	0.1	15.4	...	...	350.1
BM								
	2005	2.4	4.2	0.0	0.0	0.0	1.1	7.6
	2006	2.4	4.6	0.0	0.0	0.0	1.2	8.1
	2007	2.4	4.2	0.0	0.0	0.0	1.1	7.7
	2008	2.0	4.2	0.0	0.0	0.0	1.1	7.3
	2009	1.8	3.9	0.0	0.0	0.0	1.1	6.8

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Table 12.2 Freshwater Abstraction: 2005-2009 (cont'd)

		Gross fresh surface water abstracted						mio m ³ /y	
Country	Year	Water supply industry (ISIC 36)	Households	Agriculture, forestry and fishing (ISIC 01-03)	Manufacturing (ISIC 10-33)	Electricity industry (ISIC 351)	Other economic activities	Total	
AG	2005	...	...	...	...	...	...	1.8	
	2006	...	...	...	...	...	...	1.8	
	2007	...	...	...	...	...	...	1.2	
	2008	...	...	...	...	...	...	2.1	
	2009	...	...	...	...	...	...	2.4	
BZ	2005	...	...	...	...	...	...	8.5	
	2006	...	...	...	...	...	...	8.1	
	2007	...	...	...	...	...	...	8.4	
GY	2005	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...
	2009	...	...	...	...	...	...	...
JM	2005	...	...	86.0 ^B	...	...	...	...
	2006	...	...	81.0 ^B	...	...	...	...
	2007	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...
TT	2005	234.2	...	3.2	11.9	...	...	249.4	
	2006	234.6	...	0.0	8.8	...	...	243.4	
	2007	229.5	...	0.0	9.5	...	...	239.0	
	2008	232.5	...	0.1	8.5	...	...	241.0	
BM	2005	0.0	3.5 ^B	0.0	0.0	0.0	0.9 ^C	4.4 ^A	
	2006	0.0	3.9 ^B	0.0	0.0	0.0	1.0 ^C	4.9 ^A	
	2007	0.0	3.6 ^B	0.0	0.0	0.0	0.9 ^C	4.5 ^A	
	2008	0.0	3.6 ^B	0.0	0.0	0.0	0.9 ^C	4.5 ^A	
	2009	0.0	3.2 ^B	0.0	0.0	0.0	0.9 ^C	4.2 ^A	

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Table 12.2 Freshwater Abstraction: 2005-2009 (cont'd)

mio m³/y								
Country	Year	Gross fresh groundwater abstracted						
		Water supply industry (ISIC 36)	Households	Agriculture, forestry and fishing (ISIC 01-03)	Manufacturing (ISIC 10-33)	Electricity industry (ISIC 351)	Other economic activities	Total
AG								
	2005	...	...	...	...	...	...	1.3
	2006	...	...	...	...	...	...	1.2
	2007	...	...	...	...	...	...	1.2
	2008	...	...	...	...	...	...	0.9
	2009	...	...	...	...	...	...	1.1
BZ								
	2005	...	...	...	...	...	...	1.7
	2006	...	...	...	...	...	...	1.7
	2007	...	...	...	...	...	...	1.8
GY								
	2005	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...
	2009	...	...	...	...	...	...	...
JM								
	2005	...	...	25.0 ^B	...	...	...	...
	2006	...	...	28.0 ^B	...	...	...	...
	2007	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...
TT								
	2005	90.0	...	1.3	4.6	...	...	95.8
	2006	93.0	...	0.0	9.2	...	...	102.2
	2007	96.5	...	0.0	8.7	...	...	105.2
	2008	102.1	...	0.1	7.0	...	...	109.1
BM								
	2005	2.4 ^D	0.7 ^F	0.0	0.0	0.0	0.1 ^G	3.2
	2006	2.4 ^D	0.7 ^F	0.0	0.0	0.0	0.1 ^G	3.2
	2007	2.4 ^D	0.7 ^F	0.0	0.0	0.0	0.1 ^G	3.2
	2008	2.0 ^D	0.7 ^F	0.0	0.0	0.0	0.1	2.8
	2009	1.8 ^D	0.7 ^F	0.0	0.0	0.0	0.1 ^G	2.6

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Table 12.3 Freshwater Available for Use: 2005-2009

mio m³/y											
Country	Year	1	2	3	4	5	6	7	8	9	10
		Gross freshwater abstracted	Water returned without use	Net freshwater abstracted	Desalinated water	Reused water	Imports of water	Exports of water	Total freshwater available for use (=3+4+5+6- 7)	Losses during transport	Total freshwater use (=8-9)
AG											
	2005	3.1	...	3.1	3.7	...	...	...	6.7	2.7 ^A	4.0
	2006	3.0	...	3.0	2.9	...	...	...	5.8	2.3 ^A	3.5
	2007	2.4	...	2.4	4.5	...	...	...	6.8	2.7 ^A	4.1
	2008	3.0	...	3.0	4.9	...	...	...	7.9	3.2 ^A	4.8
2009	3.5	...	3.5	4.4	...	...	...	7.9	3.2 ^A	4.7	
BZ											
	2005	10.1	...	10.1	0.4	...	0.0	0.0	10.6	...	...
	2006	9.8	...	9.8	0.5	...	0.0	0.0	10.3	...	...
2007	10.3	...	10.3	0.6	...	0.0	0.0	10.8	...	...
GY											
	2005	95.2	...	...	...	...	...	...	...	...	...
	2006	100.3	...	...	...	...	...	...	...	...	...
	2007	109.5	...	...	...	...	...	...	...	...	...
	2008	117.3	...	...	...	...	...	...	...	...	...
2009	109.2	...	...	...	...	...	...	...	...	...
AI											
	2005	...	...	...	0.9	...	...	...	0.9	...	...
	2006	...	...	...	1.0	...	...	...	1.0	...	...
	2007	...	...	...	1.1	...	...	...	1.1	...	...
	2008	...	...	...	1.0	...	...	...	1.0	...	...
2009	...	...	...	1.1	...	...	...	1.1	...	...
BM											
	2005	7.6 ^A	0.0	7.6 ^B	1.1 ^C	...	...	...	8.7 ^B	...	...
	2006	8.1	0.0	8.1	1.1 ^C	...	...	...	9.2	...	...
	2007	7.7	0.0	7.7	1.1 ^C	...	...	...	8.8	...	...
	2008	7.3	0.0	7.3	1.1 ^C	...	...	...	8.4	0.0 ^E	8.4 ^E
2009	6.8	0.0	6.8	1.9 ^D	...	...	...	8.7	0.0 ^E	8.7 ^E	
VG											
	2005				2.8 ^A						
2006											
TT											
	2005	345.2	...	345.2	29.8 ^A	...	...	...	375.0 ^B	195.7 ^C	...
	2006	345.7	...	345.7	37.5	383.2	200.8	...
	2007	344.2	...	344.2	41.8	386.0	202.3	...
2008	350.1	...	350.1	39.3	389.5	205.7	...	

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Table 12.4: Total Water Use: 2005-2009

mio m ³ /y								
Country	Year	Households	Agriculture, forestry and fishing (ISIC 01-03)	Agriculture, forestry and fishing (ISIC 01-03) of which for irrigation in agriculture	Manufacturing (ISIC 10-33)	Electricity industry (ISIC 351)	Other economic activities	Total freshwater use
AG	2005	2.1 ^A	0.0 ^{A,B}	...	0.0 ^{A,B}	0.0 ^{A,B}	0.6 ^{A,C}	4.0
	2006	2.1 ^A	0.0 ^{A,B}	...	0.0 ^{A,B}	0.0 ^{A,B}	0.7 ^{A,C}	3.5
	2007	2.2 ^A	0.0 ^{A,B}	...	0.0 ^{A,B}	0.0 ^{A,B}	0.8 ^{A,C}	4.1
	2008	...	...	...	...	...	...	4.8
	2009	...	...	...	...	...	...	4.7
GY	2005	...	...	...	...	...	...	95.2
	2006	...	...	...	...	...	...	100.3
	2007	...	...	...	...	...	...	109.5
	2008	...	...	...	...	...	...	117.3
	2009	...	...	...	...	...	...	109.2
JM	2005	218.0	...	439.0	86.0 ^B	0.0	569.0	1312.0
	TT	2005	154.5	9.6	52.6			179.3 ^A
BM	2005	5.9 ^{A, B}	0.0	...	0.0	0.0	2.3 ^C	8.2 ^A
	2006	6.6 ^{A, B}	0.0	...	0.0	0.0	2.4 ^C	9.0 ^A
	2007	6.3 ^{A, B}	0.0	...	0.0	0.0	2.3 ^C	8.6 ^A
	2008	5.8 ^{A, B}	0.0	...	0.0	0.0	2.2 ^C	8.0 ^A
	2009	6.2 ^{A, B}	0.0	...	0.0	0.0	2.5 ^C	...

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Table 12.5: Water Supply Industry (ISIC 36): 2005-2009

Country	Year	Gross freshwater supplied by water supply industry (ISIC 36)	Losses during transport by ISIC 36			Net freshwater supplied by water supply industry (ISIC 36)
			Losses by evaporation	Losses by leakage	Total	
AG	2005	6.7	...	...	2.7 ^A	4.04
	2006	5.8	...	...	2.3 ^A	3.50
	2007	6.8	...	...	2.7 ^A	4.10
	2008	7.9	...	...	3.2 ^A	4.76
	2009	7.9	...	...	3.2 ^A	4.74
BZ	2005	10.6	...	...	4.2 ^A	6.37
	2006	10.3	...	...	3.8 ^A	6.42
	2007	10.8	...	...	4.1 ^A	6.72
JM	2005	296.0 ^A	...	...	202.0 ^A	94.0 ^A
	2006	294.0 ^A	...	...	199.0 ^A	95.0 ^A
	2007	293.0	...	...	193.0	100.0 ^A
	2008	288.0 ^A	...	...	197.0 ^A	91.0 ^A
SR	2005	32.6	...	...	1.8	30.8
	2006	33.1	...	...	1.9	31.3
	2007	31.7	...	...	1.7	30.0
	2008	33.9	...	...	2.8	31.1
	2009	35.0	...	...	2.1	32.9
TT	2005	354.0 ^A	...	195.7	195.7 ^A	...
	2006	365.1	...	200.8	200.8	...
	2007	367.8	...	202.3	202.3	...
	2008	374.0	...	205.7	205.7	...
	2009					
BM	2005	3.3	0.0	0.0 ^A	0.0 ^A	3.3
	2006	3.3	0.0	0.0 ^A	0.0 ^A	3.3
	2007	3.3	0.0	0.0 ^A	0.0 ^A	3.3
	2008	2.7	0.0	0.0 ^A	0.0 ^A	2.7
	2009	3.9	0.0	0.0 ^A	0.0 ^A	3.9 ^B

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Table 12.5: Water Supply Industry (ISIC 36): 2005-2009 (cont'd)

Country	Year	Net freshwater supplied by water supply industry (ISIC 36) of which supplied to:				Population supplied by water supply industry (ISIC 36) (%)
		Households	Agriculture, forestry and fishing (ISIC 01-03)	Manufacturing (ISIC 10-33)	Electricity industry (ISIC 351)	
AG	2005	2.1 ^B	0.0 ^{B,C}	0.0 ^{B,C}	0.0 ^{B,C}	0.6 ^{B,D}
	2006	2.1 ^B	0.0	0.0 ^{B,C}	0.0 ^{B,C}	0.7 ^{B,D}
	2007	2.2 ^B	0.0	0.0 ^{B,C}	0.0 ^{B,C}	0.8 ^{B,D}
	2008	...	...	...	...	...
	2009	...	...	...	...	84.0
BZ	2005	...	...	...	...	58.9 ^B
	2006	...	...	...	...	59.4 ^B
	2007	...	...	...	...	59.9 ^B
JM	2005	...	...	...	...	70.0
	2006	...	...	...	...	...
	2007	...	...	...	...	...
	2008	...	...	...	...	...
SR	2005	14.6	...	2.8	...	1.2
	2006	14.0	...	2.8	...	1.2
	2007	14.6	...	3.0	...	1.3
	2008	14.7	...	3.1	...	1.2
	2009	13.7	...	2.9	...	1.1
TT	2005	179.3	5.1	36.1	...	...
	2006	...	...	...	...	...
	2007	...	...	...	...	...
	2008	...	...	...	...	...
	2009	...	...	...	...	...
BM	2005	2.0	0.0	0.0	0.0	1.2
	2006	2.0	0.0	0.0	0.0	1.2
	2007	2.0	0.0	0.0	0.0	1.2
	2008	1.6	0.0	0.0	0.0	1.1
	2009	2.5 ^C	0.0	0.0	0.0	1.4 ^D

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Table 12.6: Wastewater Treatment Facilities: 2005-2009

Country	Year	Population connected to wastewater collecting system	Population connected to wastewater treatment		Population connected to wastewater collecting system	Population with independent wastewater treatment (e.g., septic tanks)	Population not connected to wastewater treatment (100% - (2) - (4))	Sewage sludge production (dry matter)
			Total	of which at least secondary treatment				
		% of pop.	%	%	Number	% of pop.	% of pop.	1000 t
BZ	2005	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...
DM	2005	23.0	13.0	0.0	...	...	87.0	0.0
GY	2005	...	...	...	7.2	...	100.0	...
	2006	...	...	...	...	...	100.0	...
	2007	...	...	...	...	...	100.0	...
	2008	...	...	...	...	...	100.0	...
	2009	...	...	...	...	...	100.0	...
JM	2005	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...
	2009	...	...	...	...	...	...	...
TT	2005	20.0 ^A	20.0	20.0	...	...	...	...
	2006	25.2	25.2	25.2	...	...	...	...
	2007	25.2	25.2	25.2	...	...	...	...
BM	2005	5.0 ^A	5.0	1.5	...	95.0 ^B	0.0	...
	2006	5.0 ^A	5.0	1.5	...	95.0 ^B	0.0	...
	2007	5.0 ^A	5.0	1.5	...	95.0 ^B	0.0	...
	2008	5.0 ^A	5.0	1.5	...	95.0 ^B	0.0	...
	2009	5.0 ^A	5.0	1.5	...	95.0 ^B	0.0	...
VG	2007	...	...	...	...	...	...	...

CHAPTER 12: WATER

Table 12.6: Waste Water Treatment Facilities: 2005-2009 (cont'd)

Country	Year	Primary urban wastewater treatment			Secondary urban wastewater treatment				Independent Wastewater Treatment
		Number of plants	Design capacity (Volume)	Actual occupation (Volume)	Number of plants	Design capacity (Volume)	Design capacity (BOD)	Actual occupation (Volume)	Number of plants
		Number	1000 m³/d	1000 m³/d	Number	1000 m³/d	1000 kg O₂/d	1000 m³/d	
BZ	2005	3.0	...	...	0.0	...	...	...	...
	2006	3.0	...	...	0.0	...	...	...	...
	2007	3.0	...	...	0.0	...	...	...	...
DM	2005	1.0	...	2.3	0.0	...	...	0.0	...
GY	2005	...	...	...	...	...	...	...	...
	2006	...	...	...	...	...	...	...	...
	2007	...	...	...	...	...	...	...	...
	2008	...	...	...	...	...	...	...	...
	2009	...	...	...	...	...	...	...	...
JM	2005	3.0	...	...	65.0	...	...	...	...
	2007	...	...	...	68.0	...	...	...	43.0
	2008	2.0	...	...	51.0	...	...	...	...
	2009	...	...	...	...	...	...	...	...
TT	2005	...	...	...	...	...	...	...	...
	2006	2.0	0.3	...	34.0	237.8	...	...	...
	2007	2.0	0.3	...	34.0	237.8	64.1	...	...
BM	2005	4.0	...	...	...	...	...	...	...
	2006	4.0	...	...	...	...	...	...	...
	2007	4.0	...	...	...	...	...	...	...
	2008	4.0	...	...	...	...	...	...	...
	2009	4.0	...	...	...	...	...	...	...
VG	2007	2.0	100.0	100.0	2.0	100.0	...	100.0	...

CHAPTER 12: WATER

1.12.1 (a): Sources of Data for Table 12.1 - Renewable Freshwater Resources

Country	Data Source
ALL COUNTRIES	National

1.12.1 (b): Notes for Table 12.1 - Renewable Freshwater Resources

Country	Notes
ANTIGUA AND BARBUDA	The data on the precipitation was provided by the Meteorological Center.
BELIZE	A - Information provided refers to the Phillip Goldson International Airport Station.
BERMUDA	<p>B - 77.6 mio m³/year = (28.2 mio m³/y capacity of the ground water lenses + 39.02 mio m³/y can be supplied by household water catches + 10.41 mio m³/y can be supplied by other roofs and constructed water catchments - calculated summary).</p> <p>C - 73.1 mio m³/year = (28.2 mio m³/y capacity of the ground water lenses + 35.50 mio m³/y can be supplied by household water catches + 9.47 mio m³/y can be supplied by other roofs and constructed water catchments - calculated summary).</p>

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1.12.2 (a): Sources of Data for Table 12.2 - Freshwater Abstraction

Country	Data Source
ALL COUNTRIES	National

1.12.2 (b): Notes for Table 12.2 - Freshwater Abstraction

Country	Notes
ANTIGUA AND BARBUDA	Data is not available for the fresh water abstracted by the various categories.
JAMAICA	B - Data is for financial year (April–March, i.e. 2006 = 2006/07)
BERMUDA	<p>A - Fresh water sources: The primary source of water for domestic use in Bermuda is rainwater collected by roof catchments.</p> <p>B - Supplied by household catchments.</p> <p>C - Supplied by other roof and constructed water catchments.</p> <p>D - 1.8 mio m³/year ground water abstracted for the Government of Bermuda brackish RO plants; 0.6 mio m³/year ground water abstracted for the Bermuda Water Works brackish EDR plant.</p> <p>E - 1.24 mio m³/year ground water abstracted for the Government of Bermuda brackish RO plants; 0.6 mio m³/year ground water abstracted for the Bermuda Water Works brackish EDR plant.</p> <p>F - Private Wells: 0.68 mio m³/year (State of Environment Report - 2005).</p>

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1.12.3(a): Sources of Data for Table 12.3 - Freshwater Available for Use

Country	Data Source
ALL COUNTRIES	National

1.12.3 (b): Notes for Table 12.3 - Freshwater Available for Use

Country	Notes
ANTIGUA AND BARBUDA	A- Losses during transport - The quantity of water lost during transport is estimated at 40% of the total freshwater available for use.
TRINIDAD AND TOBAGO	A - WASA only began purchasing desalinated water from March 2002. B - Includes Net freshwater abstracted and Desalinated water only. C - Unaccounted for Water (UFW) of 50% were estimated. This was based on investigations conducted by WASA within District Metered Areas which it has established. This UFW was used for calculating water losses during transport and is assumed to have remained constant over the reporting period.
BERMUDA	A - 3.485 mio m ³ /y can be supplied by household catchments; 0.93 mio m ³ /y can be supplied by other roof and constructed water catchments; 1.8 mio m ³ /year ground water abstracted for the Government of Bermuda brackish RO plants; 0.6 mio m ³ /year ground water abstracted for the Bermuda Waterworks brackish EDR plant; Private Wells: 0.68 mio m ³ /year (State of Environment Report - 2005); Others (incl. bottling unit): 0.125 mio m ³ /year. B - Includes brine/concentrate from brackish water RO plants (0.19 mio. m ³ /y) which is recharged to the boreholes. C - Bermuda Water Works (private company) has a seawater RO desalination plant at 650 Imp gpd = 1.08 mio m ³ /y. D - Bermuda Government has a new seawater RO desalination plant at 500,000 Imp gpd = 0.83 mio m ³ /y E - Leakage during transport might be around 15 to 20% but there are no supporting data.
BRITISH VIRGIN ISLANDS	A - Water is from the two desalination plants in the British Virgin Islands.

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1.12.4(a): Sources of Data for Table 12.4 - Total Water Use

Country	Data Source
ALL COUNTRIES	National

1.12.4 (b): Notes for Table 12.4 - Total Water Use

Country	Notes
ANTIGUA AND BARBUDA	<p>A - These represented the amount of water that the consumers actually used and were billed for.</p> <p>B - The value was less than half the unit of measurement.</p> <p>C - Other Economic Activities include the sum from the commercial sector and the cruise ship industry.</p>
JAMAICA	B - Includes mining and processing (60).
TRINIDAD AND TOBAGO	A- Includes Households, Agriculture, forestry and fishing, and Manufacturing industries only.
BERMUDA	<p>A - Water directly abstracted from private wells (0.68 mio m³/y) is not included.</p> <p>B - Water are from water supplied by house hold catchments - rainwater collection system, Government of BDA's water supply, Bermuda Water Works' water supply and 78 private reverse osmosis plants with potential production capacity of 0.415 mio m³/y.</p> <p>C - Others (incl. bottling unit) includes water from government of BDA's water supply, BWW's water supply; and other roofs and constructed water catchments - calculated sum.</p>

CHAPTER 12: WATER

1.12.5(a): Sources of Data for Table 12.5 - Water Supply Industry (ISIC 36)

Country	Data Source
ALL COUNTRIES	National

1.12.5 (b): Notes for Table 12.5 - Water Supply Industry (ISIC 36)

Country	Notes
ANTIGUA AND BARBUDA	<p>A - The quantity of water lost during transport is estimated at 40% of the total freshwater available for use.</p> <p>B - These represented the amount of water that the consumers actually used and were billed for.</p> <p>C - The value was less than half the unit of measurement.</p> <p>D - Other Economic Activities include the sum from the commercial sector and the cruise ship industry.</p>
BELIZE	<p>A - Water loss is due to leakage, illegal connection, malfunctioning of meters, etc.</p> <p>B - Refers to population with access to water supplied by the Belize Water Services Limited. Mostly Urban areas with a few villages that are connected to the system.</p>
JAMAICA	<p>A - Data refers to public water supply only.</p>
TRINIDAD AND TOBAGO	<p>A - Derived from number of sewer connections and assuming each household has an occupancy of 4.1 capita/household. Percentage of population figures given in the table is based on the Total National Population given in the 2000 Census (1,262,400 persons)</p>
BERMUDA	<p>A - Leakage during transport might be around 15 to 20% but there are no supporting data.</p> <p>B - 2.26 mio m³/year delivered by the Government of Bermuda Water Supply system; 0.6 mio m³/y delivered by the Bermuda Water Works brackish water EDR plant;</p> <p>1.08 mio m³/y delivered by the Bermuda Water Works Desalting RO plant.</p> <p>C - 1.70 mio m³/y - 75% of Government of Bermuda water supply system; 0.84 mio m³/y - 50% of Bermuda Water Works water supply system.</p> <p>D - 0.56 mio m³/y - 25% of Government of Bermuda water supply system; 0.84 mio m³/y - 50% of Bermuda Water Works water supply system.</p>

CHAPTER 12: WATER

1.12.5(a): Sources of Data for Table 12.6 - Wastewater Treatment Facilities: 2005-2009

Country	Data Source
ALL COUNTRIES	National

1.12.6 (b): Notes for Table 12.6 - Wastewater Treatment Facilities: 2005-2009

Country	Notes
TRINIDAD AND TOBAGO	<p>A - Derived from number of sewer connections and assuming each household has an occupancy of 4.1 capita/household.</p> <p>Percentage of population figures given in the table is based on the Total National Population given in the 2000 Census (1,262,400 persons)</p> <p>Design capacity was based on the following assumption :</p> <p>Influent BOD₅ is assumed to be 270 mg/l</p>
BERMUDA	<p>A - City of Hamilton, Town of St. George's and part of Prospect residential area have sewage collection systems (~ 1 mio lgpd = 1.66 mio m³/y)</p> <p>B - a) 21000 cesspits - Total capacity of 3.5 mio lgpd = 5.8 mio m³/y; b) 86 deep sealed boreholes - 300,000 Imp gpd = 0.5 mio m³/y.</p>

ANNEX I

STATUS OF NATIONAL DATA REPORTED BY MEMBER STATES IN "THE CARICOM ENVIRONMENT IN FIGURES 2009" CLASSIFIED BY ENVIRONMENT INDICATORS / STATISTICS

Theme/ Chapter	Name of Indicator / statistic	Antigua & Barbuda	The Bahamas	Barbados	Belize	Dominica	Grenada	Guyana	Haiti	Jamaica	Montserrat
1	2	3	4	5	6	7	8	9	10	11	12
Population and Households (Data obtained primarily from Population Census)	PH1: Number of Households by Type of Dwelling	√	√	√	√	√	√	√		√	√
	PH2: Number of Households by Type of Tenure	√	√	√	√	√	√	√		√	√
	PH3: Number of Households by Type of Material of Outer Walls	√	√	√	√	√	√	√		√	√
	PH4: Number of Households by Type of Material Used for Roofing	√	√	√	√	√	√	√		√	√
	PH5: Households by Number of Bedrooms	√	√	√	√	√	√	√		√	√
	PH6: Population by Size of Household	√	√	√	√	√	√	√		√	√
Tourism	TO1(a): Tourist Arrivals by Type of Arrival and Number of Tourist Nights Spent										
	1. Non-residents	√	√	√	√	√	√	√	√	√	√
	2. Non-residents (stop over)	√	√	√	√	√	√	√	√	√	√
	3. Cruise passengers	√	√	√	√	√	√	√	√	√	√
	4. Cruise ships arrivals	√	√	√	√	√	√	√	√	√	√
	5. No. of tourists nights spent	√	√	√	√	√	√	√	√	√	√
	TO1(b): Tourist Intensity and Tourist Penetration Ratio										
	1. Tourism Density Ratio	√	√	√	√	√	√			√	
	2. Tourist penetration ratio	√	√	√	√	√	√	√		√	
	TO2: Number of Hotels classified by number of rooms, Beds and Rooms occupied by Year										
	1. Number of hotels by number of rooms		√	√	√					√	
	3. Total number of rooms occupied				√					√	
	4. Total number of beds			√	√					√	
	5. Room occupancy rate		√	√	√					√	
	TO3: Visitor Expenditure										
	1. Visitor expenditure (in US\$)	√	√	√	√	√	√	√		√	√
	1.1 Int'l and domestic tourism expenditure										
	1.2 Expenditure on same-day visits									√	
	1.3 Expenditure on accommodation, meals and drinks, shopping, entertainment etc.									√	
	1.4. Total directly employed in tourism			√						√	
	TO4: Tourist Arrivals by Type of Accommodation	√	√	√				√			
	TO5: Tourist Arrivals by Country of Origin	√	√	√	√	√	√	√		√	√
Environmental Health (Data obtained primarily from Population Census)	EH1: Number of Reported Cases and Incidence of Environmentally Related Diseases	√	√		√	√	√	√		√	
	EH2: Number of Households by Type of Sanitation Facilities	√	√	√	√	√	√	√	√	√	√
	EH3: Number of Households by Type of Water Supply	√	√	√	√	√	√	√	√	√	√
Natural Disasters	ND1(a): Natural Disasters by Year	√	√	N/A	√	√	√	√	√	√	

Notes:

Blank : No data
 N/A : Not applicable
 v : National data reported by Member States in "The Caricom Environment in figures 2009".

STATUS OF NATIONAL DATA REPORTED BY MEMBER STATES IN "THE CARICOM ENVIRONMENT IN FIGURES 2009"
CLASSIFIED BY ENVIRONMENT INDICATORS / STATISTICS (CONTINUED)

Theme/ Chapter	Name of Indicator / statistic	Antigua & Barbuda	The Bahamas	Barbados	Belize	Dominica	Grenada	Guyana	Haiti	Jamaica	Montserrat
1	2	3	4	5	6	7	8	9	10	11	12
Energy and Minerals <i>(Data obtained primarily from Population Census)</i>	EM1: Energy Consumption by Type and Year	√	√	√		√			√	√	
	EM2: Number of Households by Type of Fuel Used for Cooking	√	√	√	√	√	√	√	√	√	√
	EM3: Number of Households by Type of Fuel Used for Lighting	√	√	√	√	√	√	√	√	√	√
	EM4: Mineral Production by Type							√		√	
	EM5: Mineral Reserves by Type										
Coastal and Marine Resources	MR1: Total and Protected Marine Area	√	√	√		√			√	√	
	MR2: Fish Landings by Type	√	√	√	√	√	√	√		√	
	MR3: Population of Coastal Area		√	√	√	√				√	
Land Use and Agriculture	LA1: Land Use									√	
	LA2: Use of Fertilizers by Type and Year		√	√		√	√	√		√	
	LA3: Use of Pesticides by Type and Year		√	√		√	√			√	
Biodiversity	BIO1: Protected Area as a Percentage of Total Area	√		√	√	√			√	√	
Forests	FOR1: Forest Area	√	√	√	√			√		√	
Air	AIR1: Emissions of Sulfur Dioxide (SO₂)										
	AIR2: Emissions of Nitrogen Oxides (NO_x)										
	AIR3: Emissions of Non-Methane Volatile Organic Compounds (NM-VOCs)										
	AIR4: Emissions of Carbon Dioxide (CO₂)										
	AIR5: Emissions of Methane (CH₄)										
	AIR6: Emissions of Nitrous Oxide (N₂O)										
	AIR7: Emissions of Lead (Pb) and Consumption of Leaded Petrol										
Waste	WA1: Generation of Waste by Source	√	√					√		√	
	WA2: Management of Hazardous Waste	√								√	
	WA3: Management of Municipal Waste	√	√		√	√				√	
	WA4: Composition of Municipal Waste	√						√		√	
	WA5: Management of Municipal Waste — City Data				√			√			
	WA6: Waste Treatment and Disposal Facilities					√					
	WA7: Generation and Recycling of Selected Waste Materials										
Water	WT1: Renewable Freshwater Resources	√			√					√	
	WT2: Freshwater Abstraction	√			√			√		√	
	WT3: Freshwater Available for Use	√			√			√			
	WT4: Total Water Use	√						√		√	
	WT5: Water Supply Industry (ISIC 36)	√			√					√	
	WT6: Wastewater Treatment Facilities				√	√		√		√	
	WT7: Population Connected to Wastewater Treatment					√		√			

Notes:

Blank : No data
N/A : Not applicable
√ : National data reported by Member States in "The Caricom Environment in figures 2009".

STATUS OF NATIONAL DATA REPORTED BY MEMBER STATES IN "THE CARICOM ENVIRONMENT IN FIGURES 2009"
CLASSIFIED BY ENVIRONMENT INDICATORS / STATISTICS (CONTINUED)

Theme/ Chapter	Name of Indicator / statistic	St. Kitts & Nevis	Saint Lucia	St. Vinc. & Grenadines	Suriname	Trinidad & Tobago	Anguilla	Bermuda	British Virgin Islands	Turks & Caicos Islands	The Cayman Islands
1	2	13	14	15	16	17	18	19	20	21	22
Population and Households <i>(Data obtained primarily from Population Census)</i>	PH1: Number of Households by Type of Dwelling	√	√	√	√	√	√	√	√	√	√
	PH2: Number of Households by Type of Tenure	√	√	√	√	√	√	√	√	√	√
	PH3: Number of Households by Type of Material of Outer Walls	√	√	√	√	√	√	√	√	√	√
	PH4: Number of Households by Type of Material Used for Roofing	√	√	√	√	√	√	√	√	√	√
	PH5: Households by Number of Bedrooms	√	√	√	√	√	√	√	√	√	√
	PH6: Population by Size of Household	√	√	√	√	√	√	√	√	√	√
Tourism	TO1(a): Tourist Arrivals by Type of Arrival and Number of Tourist Nights Spent										
	1. Non-residents	√	√	√	√	√	√	√	√	√	√
	2. Non-residents (stop over)	√	√	√	√	√	√	√	√	√	√
	3. Cruise passengers	√	√	√	√	√	√	√	√	√	√
	4. Cruise ships arrivals	√	√	√	√	√	√	√	√	√	√
	5. No. of tourists nights spent	√	√	√	√	√	√	√	√	√	√
	TO1(b): Tourist Intensity and Tourist Penetration Ratio										
	1. Tourism Density Ratio		√	√		√	√	√	√	√	√
	2. Tourist penetration ratio		√	√		√	√	√	√	√	√
	TO2: Number of Hotels classified by number of rooms, Beds and Rooms occupied by Year										
	1. Number of hotels by number of rooms							√		√	√
	3. Total number of rooms occupied							√			√
	4. Total number of beds							√			
	5. Room occupancy rate							√		√	√
	TO3: Visitor Expenditure										
	1. Visitor expenditure (in US\$)	√	√	√	√	√	√	√	√	√	√
	1.1 Int'l and domestic tourism expenditure										
	1.2 Expenditure on same-day visits										
	1.3 Expenditure on accommodation, meals and drinks, shopping, entertainment etc.										
	1.4. Total directly employed in tourism							√		√	
	TO4: Tourist Arrivals by Type of Accommodation			√		√		√			√
	TO5: Tourist Arrivals by Country of Origin	√	√	√	√	√	√	√		√	√
Environmental Health	EH1: Number of Reported Cases and Incidence of Environmentally Related Diseases		√		√			√			
<i>(Data obtained primarily from Population Census)</i>	EH2: Number of Households by Type of Sanitation Facilities	√	√	√		√	√	√	√	√	
	EH3: Number of Households by Type of Water Supply	√	√	√		√	√	√	√	√	
Natural Disasters	ND1(a): Natural Disasters by Year	√	√	√	√			N/A		√	

Notes:

Blank : No data
N/A : Not applicable
√ : National data reported by Member States in "The Caricom Environment in figures 2009".

STATUS OF NATIONAL DATA REPORTED BY MEMBER STATES IN "THE CARICOM ENVIRONMENT IN FIGURES 2009"
CLASSIFIED BY ENVIRONMENT INDICATORS / STATISTICS (CONTINUED)

Theme/ Chapter	Name of Indicator / statistic	St. Kitts & Nevis	Saint Lucia	St. Vinc. & Grenadines	Suriname	Trinidad & Tobago	Anguilla	Bermuda	British Virgin Islands	Turks & Caicos Islands	The Cayman Islands
1	2	13	14	15	16	17	18	19	20	21	22
Energy and Minerals <i>(Data obtained primarily from Population Census)</i>	EM1: Energy Consumption by Type and Year			√	√			√			
	EM2: Number of Households by Type of Fuel Used for Cooking	√	√	√	√	√	√	√	√	√	√
	EM3: Number of Households by Type of Fuel Used for Lighting	√	√	√	√	√	√	√	√	√	√
	EM4: Mineral Production by Type				√						
	EM5: Mineral Reserves by Type				√						
Coastal and Marine Resources	MR1: Total and Protected Marine Area			√	√			√			√
	MR2: Fish Landings by Type		√	√				√		√	
	MR3: Population of Coastal Area				√						√
Land Use and Agriculture	LA1: Land Use		√								
	LA2: Use of Fertilizers by Type and Year			√	√			√			
	LA3: Use of Pesticides by Type and Year		√	√	√			√			
Biodiversity	BIO1: Protected Area as a Percentage of Total Area			√	√			√			
Forests	FOR1: Forest Area				√						√
Air	AIR1: Emissions of Sulfur Dioxide (SO ₂)										
	AIR2: Emissions of Nitrogen Oxides (NO _x)										
	AIR3: Emissions of Non-Methane Volatile Organic Compounds (NM-VOCs)										
	AIR4: Emissions of Carbon Dioxide (CO ₂)				√						
	AIR5: Emissions of Methane (CH ₄)										
	AIR6: Emissions of Nitrous Oxide (N ₂ O)										
	AIR7: Emissions of Lead (Pb) and Consumption of Leaded Petrol										
Waste	WA1: Generation of Waste by Source				√	√	√				
	WA2: Management of Hazardous Waste										
	WA3: Management of Municipal Waste				√	√	√				
	WA4: Composition of Municipal Waste				√						
	WA5: Management of Municipal Waste — City Data				√						
	WA6: Waste Treatment and Disposal Facilities					√					
	WA7: Generation and Recycling of Selected Waste Materials					√					
Water	WT1: Renewable Freshwater Resources					√	√	√	√		
	WT2: Freshwater Abstraction					√		√			
	WT3: Freshwater Available for Use					√	√	√	√		
	WT4: Total Water Use					√		√			
	WT5: Water Supply Industry (ISIC 36)				√	√		√			
	WT6: Wastewater Treatment Facilities					√		√	√		
	WT7: Population Connected to Wastewater Treatment					√		√			
	MDG 7.5 :Proportion of total water resources used (MDG)										

Notes:

Blank : No data
NA : Not applicable
v : National data reported by Member States in "The Caricom Environment in figures 2009".

