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ECLAC SUBREGIONAL HEADQUARTERS FOR THE CARIBBEAN

# FOCUS

Newsletter of the Caribbean Development and Cooperation Committee (CDCC)

WHAT'S INSIDE:

**REGIONAL INTEGRATION:  
A NECESSARY AND URGENT TASK**

**REMITTANCES, MIGRATION AND CARIBBEAN  
DEVELOPMENT**

**DISABILITIES** IN THE CARIBBEAN

**GEOHERMAL ENERGY** IN THE CARIBBEAN

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In 1975, the Economic Commission for Latin America and the Caribbean (ECLAC) – then known as ECLA – established the Caribbean Development and Cooperation Committee (CDCC) as a permanent subsidiary body at the governmental level. ECLAC provides secretarial services to the CDCC acting principally through its Subregional Headquarters for the Caribbean.

The CDCC functions as an intergovernmental organization that meets annually at the technical level and every other year at the ministerial level. Its operational activities are carried out under the regular ECLAC work programme in the Caribbean, which includes economic and development planning, demography, economic surveys, the environment, international trade and trade-in-service, information for development, sustainable development of small island developing states, science and technology, women in development, tourism, training, and assistance with the management of national economies.

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## REGIONAL INTEGRATION: A NECESSARY AND URGENT TASK



**T**he global economy demands broad, unified markets and value chains that are integrated internationally. While regional integration extends beyond trade, without this element, integration initiatives are more difficult. For this reason, the Economic Commission for Latin America and the Caribbean (ECLAC) views as necessary and urgent all efforts toward maintaining the advances made in Latin America integration, via the search for consensus and greater political and economic cooperation.

This is clearly stated in UN regional commission's recent report [Latin America and the Caribbean in the World Economy 2006. Trends, 2007](#), which reaffirms ECLAC's commitment to integration and trade agreement convergence among Latin America's economies.

The report reviews the current status and evolution of diverse integration initiatives underway in the region. In Central America, the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR) has come into force in all member countries except Costa Rica, where it is at the ratification stage. This treaty can help reactivate the Central American integration scheme, with its Plan of Action for Central American Economic Integration, signed in 2002

as a mechanism for transitioning from the Central America Common Market to a customs union, and its ongoing negotiations toward an association agreement with the European Union. Meanwhile, the Caribbean Single Market and Economy (CSME) has come into force with a membership of 12 English and Dutch-speaking countries

All this stands in contrast to developments in other subregional integration processes. The Andean Community is undergoing a process of adjustment and decision-making following the withdrawal of Venezuela, the invitation to Chile to join as an associate member, and signing of bilateral agreements with the United States by Colombia and Peru. In addition, the Andean Community is preparing for negotiations on an association agreement with the European Union.

Meanwhile, 2006 was a special year for MERCOSUR. On the one hand, the entry of Venezuela, the region's second-ranking exporter, is the first enlargement of the bloc since its formation in 1991, incorporating a market of 38 million inhabitants. On the other hand, debate among MERCOSUR members opens a greater spectrum of possibilities to advance integration, including increased awareness of the treatment of asymmetries among members.

For some countries, 2007 has been a landmark year in the trade relationship

with the United States, with free trade agreements coming into force in Colombia, Costa Rica, Panama and Peru. In the case of Bolivia, Colombia, Ecuador and Peru, the most important event was the renewal of the Andean Trade Promotion and Drug Eradication Act (ATPDEA), which now expires on 29 February 2008.

Meanwhile, the Bolivarian Alternative for Latin America and the Caribbean (ALBA) remains active. It was conceived as an alternative to the Free Trade Area of the Americas (FTAA), and its first step was an agreement between Cuba and Venezuela (December 2004), followed by an agreement with Bolivia in 2006. Nicaragua joined in January 2007, becoming the first country to enter ALBA while having a free trade agreement in force with the United States.

The report also analyzes diverse proposals for the convergence of economic complementation agreements between the South American countries. Based on reviews undertaken by the Secretariats of ALADI, CAN and MERCOSUR ~ and in response to a request from Presidents at the first Summit of the South American Community of Nations (Brasilia, 29-30 September 2005) ~ ECLAC has compiled a series of proposals, augmented by complementary measures, as laid out in the following summary. ■

### SELECTED CONVERGENCE PROPOSALS BY THE SECRETARIATS OF INTEGRATION AND COMPLEMENTARY PROPOSALS BY ECLAC

AREAS	SECRETARIATS OF INTEGRATION	COMPLEMENTARY PROPOSALS BY ECLAC
Tariffs	Speed up tariff reduction	<b>ECLAC</b> supports this proposal.
Rules of origin	Harmonize rules agreements.	Gradual progress toward accumulating origin among intra-regional trade
Trade remedies	Maintain national provisions in accordance with WTO rules (antidumping and subsidies)	Eliminate antidumping measures for originating products in intrazone trade. Maintain countervailing duties in cases where subsidies are applied.
Safeguard measures	A general safeguard (trade safeguard) and another one applicable to a small group of agricultural products	Eliminate safeguards in intracommunity trade and maintain the mechanism during transition period. With respect to third parties, maintain WTO individual mechanisms.

# REMITTANCES, MIGRATION AND CARIBBEAN DEVELOPMENT



**T**he relationship between remittances from abroad and migration are intertwined and recent attempts to examine the former without considering the latter are mistaken. One important reason is that patterns of migration impact on the sustainability of remittance flows. In addition, cash remittances reflect only one aspect of the benefits received from the diaspora since the vast number of skilled emigrants can play a critical role in helping to build national systems of innovation in the Caribbean. For this reason a selected set of issues related to both migration and remittances are addressed.

The flow of remittances to the Caribbean is not new but in recent years the size of these flows, their stability and potential impact have occupied

the minds of stake holders including academics and policy makers in both the public and private sector (Conference on the Caribbean, 2007). It is estimated that global remittances sent by migrants living in host countries, to their countries of origin, reached US\$166.9b in 2005 (World Bank, 2006). The increase in global remittance flows between 2001 and 2005 was 73 percent which represented an annual growth rate of 14.6 percent. When the data are disaggregated by region, the largest share went to East Asia and the Pacific, followed by Latin America and the Caribbean, South Asian, the Middle East and North Africa, Europe and central Asia, and lastly Sub-Saharan Africa.

The share of remittances going to Latin America and the Caribbean as a percentage of all developing countries increased from 18.5 percent in 1990 to

25.2 percent in 2001 and 25.4 percent in 2005 (Ratha, 2005; World Bank, 2006a). While the level of remittance flow to Caribbean countries may be small relative to their Latin American counterparts, the importance of remittances to these economies cannot be understated.

There are three important reasons why remittances to the Caribbean are important.

The first is the fact that remittances are positively correlated with the stock of migrants and as a result the extent of future migration, and the continuing association of migrants with their home country will determine the sustainability of the current levels of remittances. Secondly, the Caribbean economies are now at a cross roads and must undergo a period of industrial restructuring if

**TABLE 1: REMITTANCE TO CARIBBEAN COUNTRIES, MILLIONS OF US DOLLARS**

COUNTRY	2000	2001	2002	2003	2004	2005
<b>OECS</b>						
Anguilla	5.7	5.8	5.9	6.0	6.2	6.4
Antigua and Barbuda	10.7	10.7	10.9	11.2	11.4	11.7
Dominica	12.9	12.9	13.9	14.2	18.5	19.0
Grenada	24.2	24.3	24.7	25.2	48.1	29.6
Montserrat	0.4	0.4	0.5	0.5	0.6	0.5
St. Kitts and Nevis	23.3	23.8	24.9	26.5	28.2	29.2
St. Lucia	23.8	24.1	24.5	25.0	26.2	28.8
St. Vincent & The Grenadines	19.2	19.3	19.7	20.1	20.8	21.3
<b>Total OECS</b>	<b>120.2</b>	<b>121.4</b>	<b>125.0</b>	<b>128.7</b>	<b>159.9</b>	<b>146.6</b>
<b>Other CARICOM</b>						
Bahamas, The	69.5	1.2	1.2	1.2	199.2	37.0
Barbados	102.0	118.0	109.0	114.0	109.0	125.0
Belize	51.6	41.2	..	73	77	81
Guyana	47	44	119	137	143	270
Haiti	578.0	624.0	676.0	811.0	876.0	1077.0
Jamaica	814.3	967.5	1229	1426	1497	1651
Suriname	...	...	15.1	23.5	21.3	21.4
Trinidad and Tobago	40.6	49.3	59.0	88.0	93.0	97.0
<b>Total Other Caricom</b>	<b>1703.0</b>	<b>1845.2</b>	<b>2208.3</b>	<b>2673.7</b>	<b>3015.5</b>	<b>3359.4</b>
<b>TOTAL</b>	<b>1823.2</b>	<b>1966.6</b>	<b>2333.3</b>	<b>2802.4</b>	<b>3175.4</b>	<b>3506.0</b>

..Not available

Source: Individual country balance of payments data and other statistical reports.

**TABLE 2: REMITTANCES PER CAPITA (\$US), 2000-2005**

COUNTRY	2000	2001	2002	2003	2004	2005
OECS						
Anguilla	227	227	494	493	497	471
Antigua and Barbuda	49	49	142	335	208	214
Dominica	38	39	50	50	72	67
Grenada	199	200	239	243	457	280
Montserrat	400	150	99	107	120	107
St. Kitts and Nevis	65	64	79	76	80	81
St. Lucia	17	15	25	27	19	13
St. Vincent & The Grenadines	12	12	32	36	35	37
Bahamas, The	230	4	4	4	621	114
Barbados	383	442	407	425	405	464
Belize	214	159	68	266	272	277
Guyana	53	63	159	182	190	166
Haiti	73	78	83	98	104	126
Jamaica	315	370	470	542	566	621
Suriname	..	..	35	54	48	47
Trinidad and Tobago	32	38	31	38	71	74

..Not available

Source: Individual country balance of payments data and other statistical reports.

they are to remain competitive. Several countries experience current account deficits in excess of 10% of GDP, rising debt and fiscal imbalances. This has been the result of the loss of preferential arrangements, the concentration on low technology exports, declining import productivity and a reduced market share in tradable services. The solution to these problems must be premised on a new paradigm of development based on the intense use of domestic capital<sup>1</sup> to improve competitiveness. Thirdly, while the regional integration model as expressed in the CSME relies on the integration of national markets and the free movement of labour and capital, policy makers have begun to recognise the need for establishing stronger links with the Caribbean diaspora. Such links involve tapping into not just financial, but human resources in order to help develop new areas of innovation and technology upgrade at the firm and industry level.

In light of these considerations the second part of this article examines the significance of remittances to Caribbean

economies, the third part examines how securitization can help to develop the market for remittances, the fourth part examines the emerging role of diaspora home-town associations while the fifth part examines approaches to utilising the skills of the diaspora in development.

### The Significance of Remittances to Caribbean Economies

Over the period 2000-2005 total remittances to the Caribbean increased from US \$1832.4 to US \$3506.4, an annual growth rate of 13.8 %. Of this amount, remittances to the OECS moved from US \$120.2 or 6.5% of the total in 2000 to US \$146.6 or 4.1% in 2005. This represented an annual growth rate of approximately 4% over the period. For the non-OECS countries, remittances increased from US \$1703.0 to US \$3359.4, a growth rate of 14.5 %.

Among the OECS countries the outstanding recipients were St. Lucia, St. Kitts and Nevis, Grenada and St. Vincent and the Grenadines, while for the non-OECS countries the major

recipients were Haiti, Jamaica and Barbados<sup>2</sup>. In 2005, Haiti and Jamaica received 78 percent of regional flows. Most of the remittances to the region come from a few major countries due to the concentration of migrants in these countries. For example, 65% of migrants were living in the United States and the rest in Canada, Great Britain, the Netherlands and Spain among others<sup>3</sup>.

Remittances per capita gives a better picture of the relative importance of remittances to the Caribbean. The results reflect some of the highest per capita remittances received in the world. (Table 2).

For Jamaica, Barbados and Anguilla remittance per capita was in excess of US \$400. The World Bank reports that in 2004 Jamaica, Barbados, Antigua and Haiti had the highest per capita remittances in Latin America and the Caribbean (World Bank, 2006b). ►

<sup>1</sup>Domestic capital is defined as the means of production created within a society (James 2006; Barclay et al 2006). This includes supporting institutions (for example education financial and technical) that expand the production capabilities of Caribbean society. This is differentiated from imported equipment and tools which represent capital created elsewhere.

<sup>2</sup>The remittances for Guyana and Suriname may reflect under-reporting due to remittances flowing through informal channels.

<sup>3</sup>Based on data provided by the United States Bureau of Census, of all foreign nationals living in the United States, 10 per cent are of Caribbean origin with the majority coming from Cuba (34 percent) and the Dominican Republic (25 percent) and more than 10 percent from Haiti and Jamaica. Of all migrants from the South American continent, each 10th is originally from Guyana.

Given the relatively small size of the countries, these per capita flows reflect the size of the emigrant populations and the frequency of remittances received by individuals in these countries<sup>4</sup>.

The ratio of remittances to merchandise exports is also examined. This is particularly important since Caribbean economies are open and rely heavily on exports (Table 3).

The results suggest that except for a few countries the remittances to exports ratio was quite significant. The ratio was particularly large for Haiti, Antigua and Barbuda, Grenada, Belize, Barbados and Guyana. The ratio of remittances to FDI was also examined and because of the volatility of FDI, the averages for the periods 2000-2003 and 2003-2005 were considered. FDI has been vibrant in the region and has been encouraged by a series of incentives over time while remittances recipients have received no special incentives.

The results are quite revealing as the ratios relatively large for several countries. Among these were Haiti, Jamaica, Guyana, Barbados, Grenada, Montserrat and the Bahamas.

In light of the large balance of payments deficits on the current account, these flows are vital sources of foreign exchange. As a result it is useful to explore ways in which remittances can be augmented for economic development. In the next section we examine the role of securitization in the remittance market.

### Securitization of Remittances

Remittances inflows have helped to improve credit worthiness of many countries which means increased access to international capital markets at reasonable rates of interest. A great deal of research has focused on influencing remittance flows through reducing costs of transfers and raising resources through diaspora bonds<sup>5</sup>, recently however, the securitization of remittances has been of interest (Ketkar and Ratha, 2001).

**TABLE 3: REMITTANCES AS A RATIO OF MERCHANDISE EXPORTS**

COUNTRY	2000	2001	2002	2003	2004	2005
<b>OECS</b>						
Anguilla	56.5	70.7	44.3	52.6	40.1	16.2
Antigua and Barbuda	25.4	25.4	73.5	166.9	100.0	97.8
Dominica	5.0	6.2	3.0	3.2	4.6	4.2
Grenada	26.1	37.6	23.4	22.4	64.8	33.4
Montserrat	107.3	82.2	11.4	10.0	4.9	13.1
St. Kitts and Nevis	5.2	5.6	2.3	2.4	2.7	4.3
St. Lucia	4.8	6.4	2.4	2.6	1.4	1.3
St. Vincent & The Grenadines	5.1	6.4	3.3	3.6	3.7	3.7
<b>Other CARICOM</b>						
Bahamas, The	15.0	0.3	0.3	0.3	41.7	7.1
Barbados	35.6	43.5	43.1	43.1	34.9	34.9
Belize	17.7	15.0		23.1	25.1	24.4
Guyana	9.3	9.1	24.0	26.7	24.3	45.8
Haiti	176.8					282.7
Jamaica	52.1	66.5	93.9	119.2	106.6	94.4
Suriname	...	...	4.1	4.7	2.4	2.3
Trinidad and Tobago	0.9	1.1	1.5	1.8	1.5	1.1
... Not Available						

Source: Individual country balance of payments data and other statistical reports.



**TABLE 4: AVERAGE RATIO OF REMITTANCES TO FDI, 2000-2002 AND 2003-2005**

COUNTRY	Average	
	2000-2002	2003-2005
Anguilla	5.1	10.2
Antigua and Barbuda	5.8	5.8
Dominica	15.3	6.1
Grenada	47.6	83.7
Montserrat	55.6	26.9
St. Kitts and Nevis	2.6	2.5
St. Lucia	6.6	1.1
St. Vincent & The Grenadines	8.5	2.4
Bahamas, The	9.9	27.9
Barbados	599.7	160.4
Belize	146.5	68.0
Guyana	139.7	451.4
Haiti	10437.4	11461.5
Jamaica	196.0	240.4
Suriname	52.2	52.2
Trinidad and Tobago	6.5	9.7

... Not Available

Source: Individual country balance of payments data and other statistical reports.

<sup>4</sup>The Jamaican population has been estimated to be twice as large as the local population. The Haitian net emigration rate is 1.68migrants/1000 population and with an estimated 420,000 Haitians in the US and 54,000 in Canada (Newland and Grieco 2004). For Guyana the net out-migration rate is 7.51/1000 population with diaspora population located in Canada, the US and UK, estimated to range from 300,000 to 7000,000.

<sup>5</sup>Israel has been issuing bonds since 1951 and India since 1991.

Banks in some developing countries have been able to raise longer term financing through securitizing future remittance

flows<sup>6</sup>. A stylized procedure based on (Ketkar and Ratha, 2001) is set out in (Chart 1).

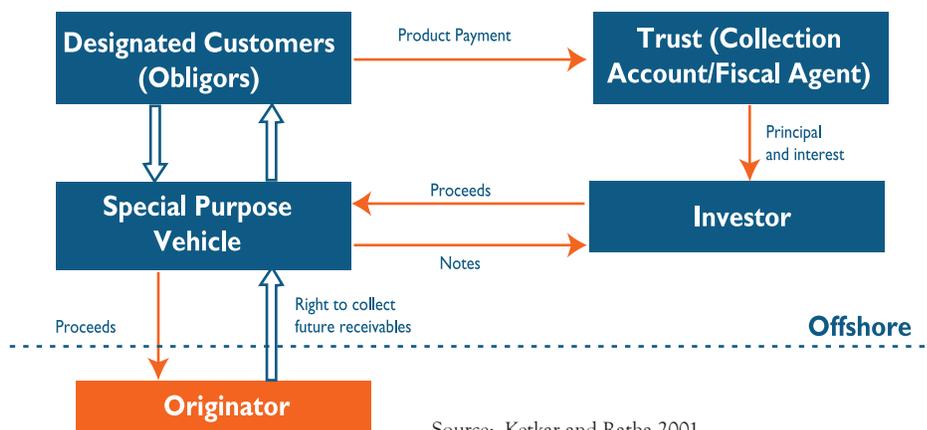
The approach is to have a bank pledge its future remittance flows to what is called an offshore special purpose vehicle (SPV) which then issues the debt. Designated banks are instructed to channel the remittance flow of the borrower through an offshore collection account which a trustee manages. The collector makes payments to the investors and the excess is sent to the borrowing bank. Note that because the remittances do not enter the issuer's home country, certain convertibility risks are reduced. The issuer now has a higher rating and can borrow from capital markets at lower rates with longer maturity.

A number of advantages can emerge from this arrangement and among these are the following:

- Securitization proceeds can be used to extend loans by local banks for productive purposes
- Banks should be able to pass on lower interest cost to its customers through longer term loans
- Banks may lower remittance transfer costs to encourage greater inflows of remittances.

Despite the advantages, the heavy legal costs especially flowing from investment banking and credit rating services can be prohibitive for small countries with relatively small flows. In instances when the pledged asset remains pledged in case of default this may restrict flexibility in managing government's external

CHART 1: STYLIZED STRUCTURE OF A TYPICAL FUTURE FLOW SECURITIZATION



Source: Ketkar and Ratha 2001.

payments (Ketkar and Ratha, 2001).

The relationship rests on the stability of remittance flows which could be affected by devaluation or changes in legislation which requires payments to be made to the central bank. Given the varying regional remittance flows there may be an advantage of pooling remittances at the regional level for securitization purposes to reduce costs and provide more leverage to enter international capital markets while extending credit for small and medium size enterprises at lower interest rates.

### The Role of the Diaspora: Home Town Associations (HTAs)

The activities of diaspora associations often referred to as HTAs<sup>7</sup> have been recognized in recent years as a result of awareness of the important role emigrants can play in regional economic development. Notwithstanding, there is yet to emerge a regional strategy to identify the role of Caribbean diaspora associations<sup>8</sup> although there are several national initiatives<sup>9</sup>. There are several

HTAs in the major destination countries and one estimate shows that in the case of Guyana, there were 64 associations in New York alone and some 33 in Scarborough and Ontario (Orozco, 2002). In a study of individuals involved in the diaspora movement in Miami, New York and Canada among Jamaicans, Guyanese<sup>10</sup> and Haitians<sup>11</sup> interesting insights emerged although the sample size did not permit generalizations. Respondents in the sample were part of at least one diaspora organization in which they had a leadership role. Interestingly, while respondents devoted more time to causes related to their country of residence more money was given to issues related to their country of birth. Their motivation to participate in an HTA was largely driven by the need to develop their community, family issues and development concerns in their country of birth. A significant number of respondents said their commitment could be higher if they were sure that their contribution was being used properly and if they had better information on governments' priorities for development. ►

<sup>6</sup>For example Mexico, Turkey and El. Salvador raised \$2.3b during 1994-2000.

<sup>7</sup>There are also Home Coming Associations HCAs in Jamaica that organize homecoming events at the parish level. There are also Returning residents Associations which advocate on behalf of returning Residents.

<sup>8</sup>Michael Reis(2007) argues that there is no one diaspora but diasporas of the Caribbean.

<sup>9</sup>Jamaica has been reaching out to its diaspora communities through the Minister of State in the Ministry of Foreign Affairs. A national Jamaica diaspora conference was held in 2004 with diaspora members from the US, Canada and the UK. As an outcome of the conference there was the creation of a website, the designation of June 16th as National diaspora Day and the creation of a Diaspora Advisory board and the Diaspora Foundation to coordinate research and the development of a skills data base among other things.

<sup>10</sup> In response to flooding in Guyana several groups came together. Fund raisers were done by Guyana Tri-State Alliance, Health and Education relief for Guyana, Inc; The Guyanese-American Cultural Association of Central Florida; The Guyana Flood Relief Organisation made up of the Guyana Cultural Association/Folk festival, Support Guyana Underprivileged and the Queens College of Guyana Alumni Association, among others.

<sup>11</sup>There are many Haitian HTAs. Among these are professional organizations such as the association of Haitian Physicians Abroad, investment associations as PromoCapital which promotes investment by the diaspora in infrastructure and job creation. There are also rights group as the National Coalition for Haitian Rights and those that target the diaspora generally as the Alliance of overseas Haitians.

The centre of diaspora activity was social and the main emphasis of their activity was in advancing education, although in the case of Haiti and Guyana political stability was recognized as important. HTAs tend to revolve around particular education and health related projects in the Caribbean. However, they have not emerged as strategic as the Mexican HTAs which are important in infrastructural and business development in local areas (Lapointe, 2004). In the Mexican example of the 3x1 program every dollar of the HTA is matched by each dollar from local state and national governments. Caribbean government through their embassies<sup>12</sup> have the resources to make contact with such associations but except for a few governments<sup>13</sup> they have not done so in a structured manner.

While the evolution of HTAs will always rest on the energies exerted by diaspora communities the Mexican model shows what is possible. Government policy could be central in articulating a framework on how HTAs may assist in the development process and pointing out areas of collaboration. Suspicions about the use of resources through government sponsored programs suggest that non-government organizations and the private sector should partner the process as well.

HTAs could participate in a wide range of areas in a more structured way and share information as to what each association is involved in. There are a number of areas of possible involvement of HTAs. These are:

- relief in the event of disasters such as hurricanes and severe flooding
- the construction and rehabilitation of infrastructure and public amenities such as schools, hospitals, police stations, parks, recreation facilities
- donation of books toys, clothing, etc.
- recruitment of persons who can give service in education and health related areas
- identification of persons who are highly skilled and are willing to contribute towards local technical upgrading

While it is the case that some HTAs are already involved in some of these activities, there has been no national policy to encourage such activities by introducing incentive schemes possibly through legislative changes both at home and abroad.



### How to Engage Skilled Migrants for Caribbean Development

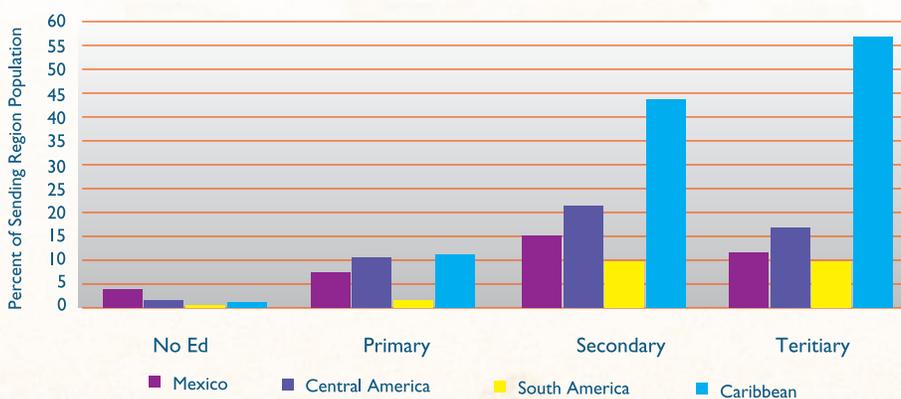
Remittances have been characterized as the return on human capital for investment in the home country and calculations have been made to determine the cost and benefits of remittances. Such an approach fails to recognize that migration may be a circular process and that emigrants may return depending on the kinds of conditions existing at home and abroad. Thus the paradigm of push and pull factors affecting migration flows, which tend to dominate the literature, fails to consider the fact that migration reflects the transnational nature of labour markets and the ability of migrants to continuously make decisions with changing circumstances.

A significant and sustained outflow of human capital, especially among the highly qualified, raises concerns about whether this affects the capacity to innovate in the sending countries. The data that exist show that relative to Latin America, Caribbean migrant populations are a significant proportion of their home populations. For Monsterrat it was 2%, Antigua .8% and for the rest it varied between .7 and .1 percent. (Orozco, 2007)

In addition when the level of education of migrants is examined it appears that the Caribbean has a higher percentage of persons living abroad by primary, secondary and tertiary education relative to Central America, South America or Mexico.

Estimates computed by Mishra (2006) for the Caribbean show considerable rates of migration of educated migrants. Migration rates to the OECD area between 1965-2000 by tertiary education level. Grenada, Guyana, Haiti, Jamaica and St. Vincent and the Grenadines show percentages in excess of 80%. The overall average for Caribbean countries was 70 percent. These results reflect a massive loss of human capital most of which has been even further augmented abroad. The issue then is how to continue to engage this group to help develop and upgrade local systems of innovation.

FIGURE I: PERCENTAGE OF POPULATION LIVING ABROAD BY EDUCATION LEVEL, 2000



Source: Pew Hispanic Center, University of Southern California

<sup>12</sup>Haiti has a Ministry of Diaspora Affairs. The Dominican Republic has Migration Division while Antigua and Barbuda have Diaspora Bureaux. St Kitts and Nevis have a secretariat for returning Nationals. Jamaica has a Department of Jamaicans Overseas under the Ministry of Foreign trade and Consular Affairs.  
<sup>13</sup>Dominica and Jamaica have established formal relationships with their diaspora communities.

In the literature a number of proposals have been discussed but two of the most useful are ways of resourcing skilled nationals and skills retention through sector policies.

### Resourcing skilled nationals

A strategy of resourcing skilled nationals implies a shift in perspective with respect to the benefits and costs of migration. This approach assumes that migration enhances human capital by adding to existing skills of migrants. Thus there may be an optimum level of migration consistent with national and regional development through a feedback effect. This approach also assumes that migration is a circular process in which the skills and expertise of migrants are always available to the domestic economy conditional on the level of inducements required to acquire such skill. These skills may be available for a short time or on a permanent basis if the migrant wishes to return.

There already exists some level of communication between migrants and their home country and these ties exist through human and financial networks. Governments must now create the institutional mechanisms to further develop such ties between diaspora communities and the universities, research institutions and the private sector by way of incentives. Some examples of existing programs are the UNDP and Thai Reverse Brain Drain networks which facilitate links between skilled migrants and projects at home. In the latter case, the government offers a coordinating information centre for information exchange.

The number of diaspora organisations of the highly skilled is not known but several organizations across the Caribbean have been involved with home country projects. Such networks ought to be encouraged through ICT technology, conference and other kinds of associations.

### Retention of Skills through broad economic development and sector policies

While there is the need to embrace



diaspora communities, clear national and regional policies aimed at retaining skilled personnel need to be articulated. As Lowell (2001) points out, retention of would-be return emigrants over the long run is possible when the difference between employment opportunities, remuneration and conditions of work between sending and receiving countries lessen.

A policy aimed at retention serves two purposes. First it helps to stem the extreme loss of skilled resources by creating a climate for workers to remain at home and secondly it creates an enabling environment that allows for spillover effects with diaspora networks. Such an environment allows local research institutions with world class skills to benefit from the outsourcing of research and development functions of transnational firms and businesses.

Creating better local condition also help to deflect the aggressive recruitment drives from developed countries which often lure workers to emigrate even when they may be relatively well-off.

Recent data suggest that in the United States foreign nationals were co-inventors of 25.6% of international patent applications and that 31% of startups in tech centers had an immigrant key co-

founder, including 52.4% in California's Silicon Valley<sup>14</sup>. These results suggest that the US government may not pursue policies, in the short run, that restrain skilled immigration since this will impact on the US competitive edge.

In a recent study of multinational firms in the Caribbean there was a concern that the quantity and quality of skilled labour in some countries was not adequate (World Bank, 2004). Lack of local expertise can often be filled by those in the diaphora who are willing to return but labour market information systems must be available to match skills with vacancies.

At the sectoral level retention also hinges on improving the conditions of employment in sectors such as education and health. In a study of the impact of emigration on the health sector in Trinidad and Tobago a number of concerns were raised about the problems of working in the local environment (ECLAC/CDCC 2003, p.4). While these related to nurses they also reflect concerns among teachers as well in many Caribbean countries, especially those countries experiencing economic difficulties. Among the issues were the following:

- a) **Inadequate remuneration and benefits**
- b) **Unfavorable working conditions**
- c) **Insufficient training and professional development**
- d) **Under-utilisation of acquired skills**
- e) **Lack of professional recognition**

The irony is that many governments as a consequence of emigration of skilled personnel are often forced to recruit persons from abroad at higher wages than are paid for local workers. The implication is that training has to be in excess of what is required for some sectors since increasing capability among individuals also creates greater opportunities for emigration<sup>15</sup>. Training can also be done in collaboration with host country institutions so as to manage the emigration of certain critical skills. ■

<sup>14</sup> Ewing Marion Kaffman Foundation. Intellectual Property, The Immigration Backlog and a Reverse Brain Drain (forthcoming).

<sup>15</sup> In the case of Jamaica which runs a students' loan schemes, students are made to repay loans as soon as they are finished their studies. Those who cannot find a job are often forced to migrate. Such programs should allow repayments only after employment.

# DISABILITY IN THE CARIBBEAN



The World Health Organization estimates that there are nearly 600 million people living with disabilities worldwide. The number of disabled is increasing due to aging populations, the escalating rate of chronic disease among the elderly, and injuries sustained from violence, car crashes and other incidents. Nearly 80 per cent of the disabled are found in low-income countries. They live in poverty and have little or no access to the basic services they require. To aid in improving conditions for the disabled worldwide, the United Nations General Assembly approved the Convention on the Rights of Persons with Disabilities in December of 2006. It is hoped that a legally binding document would encourage countries into taking action and also raise awareness of the issues faced by the disabled. As of March 2007, the treaty had been signed by eighty-six countries. Only six of these signatories were Caribbean states.

that experiences the most difficulties with daily activities and participation, such as working, going out, and dressing. Elderly women are also often economically and physically dependent upon family or friends, as many of them have outlived their spouses or partners. Furthermore, as traditional family structures have deteriorated to some degree, younger women may be also become caretakers for extended family.

Males, on the other hand, experience higher rates of disability in childhood and youth. Males are more susceptible to genetic diseases, therefore leading to higher rate of congenital disability among boys.

As they partake in more risk-taking behavior than females, they are also more likely to become disabled as the result of

an accident. Accordingly, young males in the countries examined have higher rates of limb impairments. Young males also generally have higher rates of learning, speech and behavioral disabilities. These observations support the results of a survey on the status of childhood and adolescent disability in the Caribbean conducted by UNICEF in 2000.

The differences between males and females in younger and older age groups can be seen in Table 1 and Table 2. Though the tables represent the census results from Saint Vincent and the Grenadines, similar results were found in the other countries examined in the report.

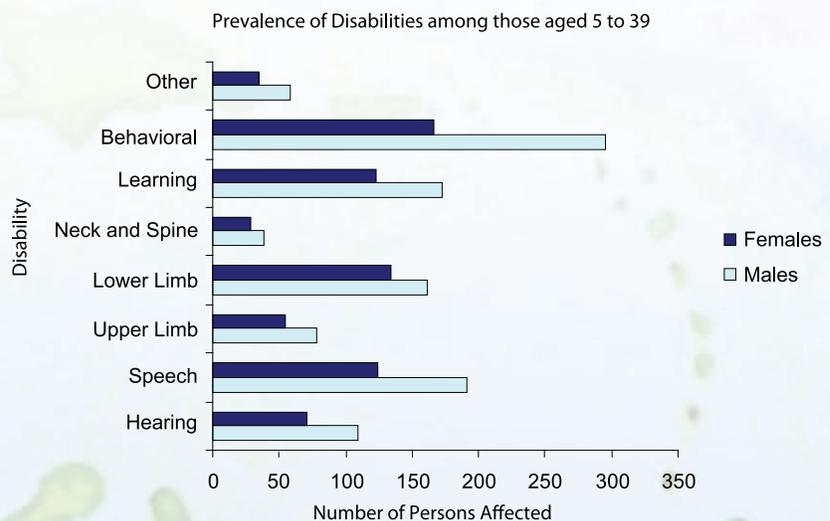
All of the four census questionnaires included questions on disease. Though the respondents to these questions were not necessarily also disabled, the results revealed some important trends. Elderly women have the highest rates of disease. The majority of these diseases are related to poor lifestyle choices, such an

## Causes of disability in the Caribbean

As in many other parts of the developing world, little is known or written about disability in the Caribbean. The Statistics and Social Development Unit of ECLAC has recently produced a report on the topic, which includes a literature review and an analysis of census data from four Caribbean countries<sup>1</sup>. The census data revealed some important trends. Illness is the primary cause of disability in the Caribbean and it appears as though most of these diseases are lifestyle-related and, therefore, preventable.

The elderly, especially women, have the highest rates of disability. The position of these women is especially precarious. As they experience the most disability, they are also the sector of the population

Table 1 – Prevalence of disabilities among those aged 5 years to 39 years in Saint Vincent and the Grenadines



<sup>1</sup>Antigua and Barbuda, Saint Lucia, Saint Vincent and the Grenadines and Trinidad and Tobago

unhealthy diet and inadequate exercise. In nearly all of the countries examined, elderly women represent more than 60 per cent of all cases of hypertension, diabetes, arthritis and heart disease. Children and youths are most affected by sickle cell anemia and asthma. As the average lifespan of a person with sickle cell anemia is forty years, the majority of respondents with the disease are young. Asthma also commonly afflicts the young, but is typically outgrown in adolescents. Therefore, not many adult respondents have the disease.

Few of the disabled in the islands examined seem to have access to assistive devices. Indeed, less than one third of the disabled in each country use assistive devices. As the majority of the disabled are female, females also use the majority of assistive devices. The majority of users of prostheses and crutches are male, possibly as a result of the high number of limb impairments retained in accidents.

The lack of readily available data and information on the prevalence and epidemiology of disability in the Caribbean impeded the proper analysis of the issue in this report. It is also one of the principal barriers to preventing disability and improving conditions

for those already disabled in the region. Beyond causing a lack of awareness among political leaders and the public regarding basic facts, the dearth of information sadly leads to a deficiency of appropriate policies and programs. It also assists in perpetuating ignorance, prejudice and social stigmas concerning the disabled.

### Recommendations on dealing with disabilities

Disability and the challenges faced by the disabled are issues which undoubtedly receive insufficient attention throughout the Caribbean. Programmes which encourage the education, employment, mobility and independence of the disabled are desperately needed.

There is also a need for campaigns to raise public awareness about disability and its causes. Most importantly, however, more countries need to implement legislation to protect the legal, social, political and economic rights of the disabled. This would be an essential step toward improving the lives of the disabled and their families without high financial costs. As the United Nations Convention on the Rights of Persons with Disabilities is legally binding for those countries which sign and ratify it, the Convention could assist countries in creating a comprehensive approach to disability, especially in ensuring non-discrimination, equal recognition before the law, liberty, security, accessibility, mobility, independent living, health, employment, education, and participation in political and cultural life for the disabled.

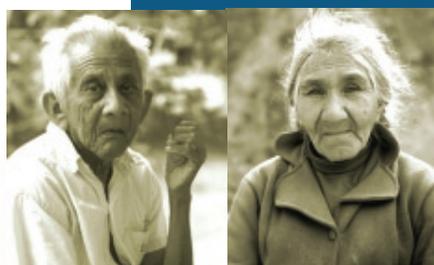
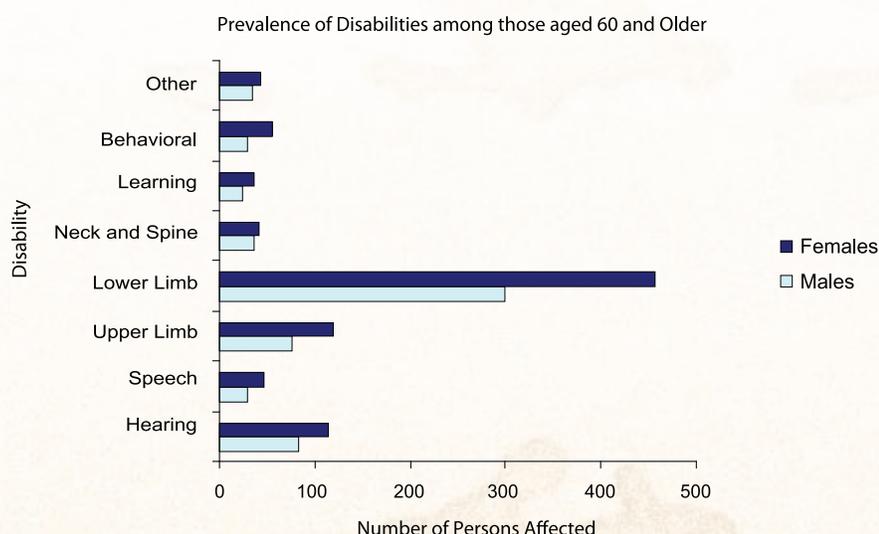


Table 2 – Prevalence of disabilities among those aged 60 years and older in Saint Vincent and the Grenadines



# GEOTHERMAL ENERGY IN THE CARIBBEAN



## The Global Sustainable Energy Islands Initiative (GSEII)

**The Global Sustainable Energy Islands Initiative (GSEII), a consortium of international NGOs and multi-lateral institutions, has been organized to support the members of the Alliance of Small Island States (AOSIS), potential private investors and donors by bringing renewable energy and energy efficiency projects, models, and concepts together in sustainable energy plans for small island nations. The GSEII seeks to showcase national efforts to significantly reduce greenhouse gas emissions.**

While Small Island Developing States (SIDS) produce only a tiny fraction of global greenhouse gas emissions, many, because of their location barely above sea level, are among the most vulnerable to the effects of climate change such as sea level rise and extreme weather conditions. Compounding their climate change challenge, small island nations struggle with expensive fossil fuel imports and an inability to supply electricity in rural areas. However, these nations are especially suited to utilize combinations of modern renewable energy technologies and energy efficiency due to the availability of renewable energy resources and current energy consumption patterns.

An Eastern Caribbean Geothermal Development Project exists in the Region and is a multi-island project and a direct outcome of the GSEII work in the Caribbean. GSEII supports SIDS in a range of issues from setting national goals and priorities for the use of sustainable energy systems for the electricity and transportation sectors to supporting policy and regulatory reform and capacity building. Their efforts are particularly focused on identifying and supporting the development of sustainable geothermal energy projects.

GSEII assists its partner countries in growing their sustainable energy project portfolios by specifically identifying commercially viable project opportunities, assessing needs and outlining interventions.

## Potential for Geothermal Energy

Geothermal resources that may be exploitable for commercial power generation have been identified in the island nations of Dominica, St. Lucia, and St. Kitts and Nevis. However, despite repeated attempts, efforts to prove these geothermal resources and develop commercial power in the Caribbean have been marked by setbacks.

To overcome the multiple challenges that stand in the way of successful regional geothermal development, a partnership including the small island nations, OAS, UNEP, AFD (Agence Francaise de Development) and others has been formed and grant assistance from the Global Environment Facility (GEF) was secured. The Geo-Caraïbes Vision as it is called, aims to create market conditions for the expansion of geothermal energy, aggregate demand to maximize geothermal development, and attract proven geothermal developers. By focusing on technical, policy, legal, and financial aspects, the Geo-Caraïbes vision has succeeded in laying the groundwork for successful geothermal project development.

Assessment of the resource and technical potential for several sites and an electricity interconnection scenario has reduced resource uncertainty and development risks. In addition, reform of legal frameworks and the development of local and regional capacity have lessened contract and policy uncertainties, expediting licensing and permitting and strengthening local inputs. Last, financial risks associated with initial commercial exploration have been reduced through the preparation of a geothermal drilling risk reduction tool.

With respect to the current status of the Geo-Caraïbes Vision, draft geothermal legislation has been prepared and strong institutional commitments have been secured from Governments, utility companies (DOMLEC, NEVLEC, SKN), and Partners (EDF, AFD/FFEM). Surface studies and interconnection pre-feasibility were positive and preliminary training and institutional strengthening have been achieved. While challenges remain, including GEF full project submission and attracting private developers particularly in Dominica and Nevis, the Geo-Caraïbes Vision has played a vital role in moving GSEII partner countries toward clean energy development.

In brief the steps may be summarised as follows:

- OAS/GTZ GeoCaraiibe initiative which is looking at quantifying the resources and development of geothermal energy in **St Kitts, Dominica, and St Lucia.**
- Draft geothermal Bill to look at regulation and legislation. (**St Kitts, Dominica, St Lucia.**)
- 4 MW Pilot geothermal plant since 1986 and expanding. - (**Guadeloupe**)
- MOU signed with company - United Network of the Eastern Caribbean to look at the exploration of geothermal energy (**St Lucia**).

Other islands believed to have potential for geothermal energy are St. Vincent, Grenada, Saba, Martinique and St. Eustatius.

## Potential for Geothermal Energy in Montserrat

Montserrat is located in the Caribbean Sea, southeast of Puerto Rico at latitude 16°45'N, and longitude 62°12'W. The total area of the island is 100 km<sup>2</sup> and the coastline is 40 km. It measures approximately 16 km (10 miles) long

and 11 km (7 miles) wide. The EEZ is 200 nm (370.4 km) and the territorial sea is 2 nm (5.556 km). Montserrat is a British Overseas Territory, with a British Governor and a locally elected government led by the Chief Minister. There is an executive council and a legislative council with nine elected members including four ministers of government. The capital, Plymouth was abandoned in 1997 due to volcanic activity. Interim government buildings have been built at Brades, in the Carr's Bay/Little Bay vicinity at the northwest end of Montserrat. The population (July 2005) is currently estimated at 4,700 with a density of 44 /km<sup>2</sup>. This is reduced from a former 12,000 as many residents went to live overseas at the height of the volcanic activity. Total GDP is \$29 million while per capita GDP is \$3,400.



### Climate and Topography

The climate is tropical; little daily or seasonal temperature variation. The topography is volcanic, mostly mountainous, with small coastal lowland. The highest point is Chances Peak (in the Soufriere Hills) 914 m. Natural resources are negligible. Land use is distributed as follows: arable land: 20%, permanent crops: 0%, permanent pastures: 10%, forests and woodland: 40% and other: 30% (1993 est.).

Severe hurricanes (June to November); volcanic eruptions (full-scale eruptions of the Soufriere Hills volcano occurred during 1996-97) are the natural hazards to which the island has been subjected. Land erosion occurs on slopes that have been cleared for cultivation.

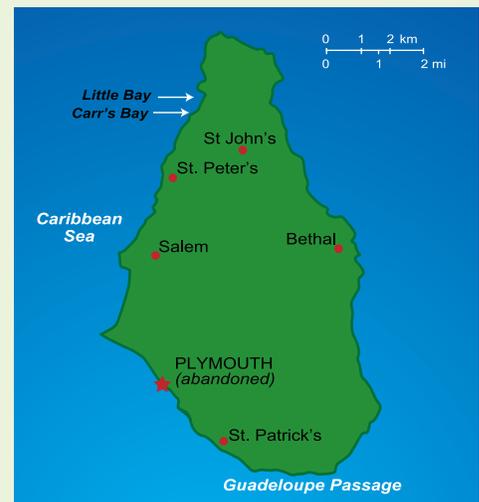


### Volcanic eruptions in 1990s to the present

Focusing more specifically on the volcanic eruptions, in July 1995, Montserrat's Soufriere Hills volcano, dormant throughout recorded history, rumbled to life and began an eruption which eventually buried the island's capital, Plymouth, in more than 40 feet (12 m) of mud, destroyed its airport and docking facilities, and rendered the southern half of the island uninhabitable. This forced more than half of the population to flee the island due to lack of housing. After a period of regular eruptive events during the late 1990s including one on June 25, 1997 in which 19 people lost their lives, the volcano's activity in recent years has been confined mostly to infrequent ventings of ash into the uninhabited areas in the south. However, this ash venting does occasionally extend into the populated areas of the northern and western parts of the island. As an example, on May 20, 2006, the lava dome that had been slowly building collapsed, resulting in an ashfall of about an inch (2.5 cm) in Old Towne and parts of Olveston. There were no injuries or significant property damage.

Currently, the French Department of Guadeloupe has a 15-megawatt geothermal electricity plant which they plan to expand. Montserrat will shortly hold discussions with their operators, and officials from Dominica, with a view to collaborating on the exploration of the geothermal source. The preliminary assessments are good, and approximately US\$1.5M investment will be required to prove the source. This investment has the potential of generating millions of dollars for the economy, as well as clean, cheaper, fossil-fuel-free electricity.

In 2006 the Government of Montserrat created an energy task force comprising 30 persons who were mandated to create a robust and sensible policy for Montserrat. The task force is also responsible for developing a policy for geothermal energy. A study done by the University of New Castle, had earlier advised government, that Montserrat has the best chance within the region for development of geothermal energy and that its geological structure and characteristics of the energy are similar to that of El Salvador, which produces



geothermal units up to 150 megawatts per day. It was estimated that with the energy Montserrat can produce electricity for 11 to 13 EC cents per kilowatt hour, compared to the then average EC\$1.20 with fuel.

Given that domestic demand for generated energy is low, Montserrat could export to Antigua. However, Antigua wants a reliable and secure supply soon and at a cheaper rate than the current cost. In order to transport this energy to Antigua an undersea cable would need to be built. The University of Newcastle study observed that the distance is not impossible and the weather should not be a deterrent.

The other way of utilising the generated energy is to encourage energy-intensive manufacturing industries, e.g. aluminium smelting and concrete and paper manufacturing. However, the environmental impacts would need to be assessed. Another option is to convert the energy into another form and export. This could be in the form of ethanol, using imported bagasse that could be sold on the European market as a fuel additive, or hydrogen that could be exported as a compressed gas or stored as metal hydride.

Although Montserrat seems to have tremendous geothermal potential, the quality and scale of the resource cannot be determined unless a test well is drilled. This will be a commercial risk and there are no guarantees. However, if it proves to be feasible then a tremendous amount of potential would be realised with benefits to the people of Montserrat. ■

## ABSTRACTS OF SELECTED RECENT ECLAC PUBLICATIONS

**Sustainable development from a human rights perspective and the challenges it represents for the Caribbean SIDS**

No. LC/CAR/L.123

June 2007

This report is commissioned by the Economic Commission for Latin America and the Caribbean (ECLAC) Subregional Headquarters for the Caribbean, with the overall purpose of examining the extent to which the pursuit of sustainable development in the Caribbean Small Island Developing States (SIDS) is guided by human rights considerations and, more specifically, to what extent human rights principles, norms, and standards are being integrated and mainstreamed in development programmes and projects, following a rights-based approach to development. For ECLAC itself, this is a relatively new approach, not much reflected yet in its economic and social policy work.

**The ECLAC associate member countries: meeting challenges and new opportunities of globalisation**

No. LC/CAR/L. 125

July 2007

This paper examines development challenges and new opportunities arising out of globalization in the tourism and financial services sectors, respectively in the ECLAC associate member countries.

**Report of the Caribbean subregional preparatory meeting for the tenth session of the regional conference on women in Latin America and the Caribbean**

No. LC/CAR/L.127

July 2007

The objectives of the meeting were to make recommendations and contribute updated information on their respective countries, as the Caribbean position, in preparation of the final document to be presented at the Tenth Session of the Regional Conference on Women in Latin America and the Caribbean.

**Report of the ECLAC expert group meeting on data sharing, data ownership and harmonization of survey datasets**

No. LC/CAR/L.131

August 2007

The objectives of the meeting were two-fold and sought to: (a) encourage the sharing of survey databases; and (b) discuss and forge a consensus on the harmonization/systemization of household data sets which will allow for comparability for data sets of other Caribbean countries.

**Report of the technical meeting on the status of gender indicators in the Caribbean**

The objectives of the meeting were to: (a) strengthen the relationship between users and producers of gender statistics; (b) define a set of basic indicators necessary for the completion of the situational analysis on women and men in the English-speaking Caribbean, and to some extent, also the Spanish-, French- and Dutch-speaking countries of the subregion; (c) evaluate the available gender-related data in the databases of the Caribbean organizations and the United Nations system; and (d) share national experiences regarding the production and use of gender statistics.

## UPCOMING MEETINGS

October to December 2007

**1-2 October****St. Kitts and Nevis**

A high level technical meeting of Caribbean authorities responsible for water resources management.

**30 October 2007****Port of Spain, Trinidad and Tobago**

A subregional meeting in follow-up to the Latin American and Caribbean Regional Plan of Action on Population and Development and the International Conference on Population and Development – focus on ageing

**9 November 2007****Cayman Islands**

A meeting of experts to assess migration data collection, management and sharing mechanisms in the Caribbean

**12-14 November****Port of Spain, Trinidad and Tobago**

Workshop to build the capacity of public sector officials in the area of bio-energy

**November 2007****Port of Spain, Trinidad and Tobago**

A meeting of experts to elaborate on the collection, dissemination and use of social statistics for evidence based social policy formulation

**10-12 December 2007****Port of Spain, Trinidad and Tobago**

Workshop on the use of the ECLAC methodology to assess the impact of natural disasters

## LIST OF RECENT ECLAC PUBLICATIONS

Listed by Catalogue Number, Title and Date

**No.LC/CAR/L.131 August/2007**

Report of the ECLAC expert group meeting on data sharing, data ownership and harmonization of survey datasets

**No.LC/CAR/L.130 August/2007**

Report of the technical meeting on the status of gender indicators in the Caribbean

**No.LC/CAR/L.127 July/2007**

Report of the Caribbean subregional preparatory meeting for the tenth session of the regional conference on women in Latin America and the Caribbean

**No.LC/CAR/L.126 July/2007**

Report of the Rio group technical meeting on “the treatment of asymmetries in the Context of regional cooperation”

**No.LC/CAR/L.125 July/2007**

The ECLAC associate member countries: meeting challenges and new opportunities of globalisation

**No.LC/CAR/L.124 July/2007**

The United States-Central America-Dominican Republic Free trade agreement (CAFTA)

**No.LC/CAR/L.123 June/2007**

Sustainable development from a human rights perspective and the challenges it represents for the Caribbean SIDS

**No.LC/CAR/L.122 June/2007**

Report of the Caribbean preparatory meeting of the annual ministerial review

**No.LC/CAR/L.121 June/2007**

Proposed work programme for the Caribbean Sea Commission

**No.LC/CAR/L.118 June/2007**

The contribution of women to the economy and social protection especially in relation to unpaid work performed by women in the Caribbean



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