Regional Assessment of Caribbean Diaspora and Information and Communication Technologies (ICT)

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RESEARCH STATEMENT

The study aims at identifying and classifying current and past Diaspora involvement in Information and Communication Technology (ICT)-related projects and initiatives in the Caribbean. Also included within the scope of this project is the identification of current strategies and approaches being applied in the development of ICT-related projects by the Caribbean Diaspora and other interested stakeholders in the region, as well as the identification of major areas/themes for new or continued involvement.

GENERAL OBJECTIVE

The general objective of this study is to provide 1) an overview of Caribbean-based ICT projects and initiatives in which the region's Diaspora is involved, as a measure of the dynamic impact of Caribbean transnationalism on social and economic development, and 2) a reference for the design of future ICT4D[1] projects by interested parties of the Diaspora and other stakeholders.

SPECIFIC OBJECTIVES

The study's specific objectives are to:

- Map current ICT initiatives that involve the Caribbean Diaspora, as well as the major agents or participants in these initiatives (i.e. ICT practitioners, Diaspora organizations, private and public sector institutions, civil society organizations, international donors).

- Identify the strategies and approaches that have been used by the Diaspora and in the Caribbean in the development of ICT-related projects.

- Identify priority areas and themes for potential ICT project development that will attract the Diaspora's involvement.

- Investigate differences, if any, in the operation of Caribbean Diaspora within and outside the region.

[1] 'ICT4D' refers to Information and Communication Technologies for Development

SUMMARY

The impact of transnational social networks on social and economic development in the Caribbean is becoming increasingly apparent. This study develops on a major element of the relationship between Diaspora and development- that of the capacity of the Diaspora to 'bridge the digital divide', i.e. increase its homeland's capacity to access and use ICTs, create and appropriate content and knowledge..

The study's major aim is to identify current and past ICT4D initiatives in the Caribbean that involve the Diaspora, as well as to identify other key related actors. Its contents are targeted to members of the Caribbean Diaspora, academic and socially engaged networks, non-governmental organizations, universities, governments and multilateral agencies in the region.

In addition to providing baseline information on the characteristics and depth of Diaspora involvement in ICT-related development initiatives in the Caribbean, the study suggests key areas and themes that could be considered by individuals or groups in the Diaspora and other local and regional practitioners that wish to have an impact on the region's development through the implementation of ICT projects and initiatives.

The study's primary research instrument was a seven-page questionnaire that covered the following themes: *Institutional Overview; Project Identification and Selection; Target Market/Beneficiaries; Networking and Partnerships; Financing and Implementation Challenges; Outlook and Best Practices.* Semi-structured interviews were conducted using a combination of contact methods to solicit information from respondents in academics and governmental institutions, entrepreneurs, NGOs, international organizations and the

Caribbean Diaspora in North America, France, the United Kingdom and various countries within the Caribbean. Over fifty (50) individuals/institutions were included in the study.

Additional qualitative and quantitative information was also sought through primary and secondary sources on connectivity, general economic and social conditions, and ICT-usage and adaptation in the Caribbean and its Diaspora. Working as a team, the consultants and program officer communicated mainly by electronic means and met briefly to compare data and structure the final presentation of the study to compare data and structure the final presentation of the study.

Various studies on diasporic relationships have revealed that the Diaspora provide its home country or region with a market for indigenous products and services (e.g. food, beverages, and entertainment services), a potential source of human capital, social and commercial networks, financial and investment capital, ideas, information and technology (see Pessar, 1996; Brinkerhoff 2003). In the area of ICT-related initiatives and development in the Caribbean, however, the potential for contribution by the Caribbean Diaspora appears to vastly outweigh its current involvement. .

The consultants visited over the course of the study (6 months) the following five Caribbean countries: Barbados, the Dominican Republic, Guyana, Haiti, and Jamaica. Though the design of study did not initially accommodate for-profit entrepreneurial ventures, the overwhelming response from the Diaspora members interviewed and surveyed suggests that future studies should focus on opportunities for trade and investment in the Caribbean that would be suitable to the Caribbean Diaspora in North America and Europe. Both empirical and anecdotal evidence indicates that

many in the Diaspora cannot be completely philanthropists and may in fact need support from their home countries even while they contribute money and expertise to the region. The feasibility and profitability, rather than the intrinsic potential for social impact, will most likely be the deciding factor in the Caribbean Diaspora's involvement in ICT-related initiatives.

The reports recommends greater co-ordination of the Diaspora's contribution to ICT-based development in the Caribbean region, the promotion by local and regional policy makers of an enabling environment for investment in ICT-related projects, including social marketing, the involvement of 'honest brokers' (institutions seen as disinterested or neutral players in the region) to minimise the political fallout of government-driven initiatives, and a focus on innovative applications of information and communications technology to commerce, education, and production to improve the quality and standard of life in the Caribbean and in its Diaspora.

Keywords: Information and Communications Technology (ICTs); Diaspora; Caribbean; Digital Divide.

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PROBLEM AND RATIONALE

During an address to the representatives of thirty-five (35) member countries at the official opening of CANTO's (Caribbean Association of Telecommunications Organizations) 21st annual general meeting at the Hilton Hotel in Kingston, Jamaica, Jacqueline Holding, President of Cable & Wireless Jamaica, stated that there was no doubt that Information and Communication Technologies (ICTs) were, in fact, the transformative technologies of the present age, with immense capacity to facilitate long-term economic and social improvement. However, she said, its potential in the Caribbean was still hugely under-exploited; she added that the young people of the region ought to be equipped to take full advantage of the global opportunities that these technologies present.

Holding's remarks are evidence that, at least at a general level, entrepreneurs, policy-makers and the international community have understood that information and communication technologies (ICTs) should be seen as a means to help meet existing development objectives, including the United Nations' Millennium Development Goals (MDGs)[2]. Two major factors in leveraging ICTs in the service of development objectives in the national and regional context are the investment of new resources, and the creation and maintenance of a local solid base of human capital. For most developing countries, and including those in the Caribbean, those two factors can be identified readily in a category of the population called the *Diaspora*.

[2] United Nations Millennium Goals website: http://www.un.org/millenniumgoals/

Indeed, Diasporas of developing countries include substantial numbers of highly-trained and well-educated human resources. As Bhagwati (2003) argues, the asymmetries of opportunities for professional advancement and education, including that of the offspring of migrating students would render it very difficult for the developing world to retain highly qualified personnel once trained abroad. Indeed, he notes that a high level of emigration usually occurs after study abroad. Estimates by the American Economic Association of the number of PhD students remaining in the United States are about 70% for foreign-born students. (Bhagwati, 2003: 100-101). Most developing countries have not recognized yet the full value of their local knowledge pool, nor rewarded it sufficiently. Therefore, skills tend to naturally flow outwards to countries where knowledge is viewed as an asset, and provides a greater value proposition for professionals (see Table 1 below). It is clear that in the digital age, where knowledge represents one of the global economy's greatest advantages, more and more highly-skilled professionals and others from the Caribbean are leaving their countries to migrate to North America. (OECD, 2004) In fact, varying studies (Cohen and Soto, 2000; Barro and Lee 2001) rank Guyana, Jamaica, Haiti, Trinidad and Tobago, and Barbados among the largest exporters of intellectual capital to the OECD among non-OECD member countries.

Percentages of total expatriates

	Cohen and Soto (2001)	Highly skilled aged 15+	Barro and Lee (2000)	Highly skilled aged 15+
15 non- OECD countries with the lowest percentage of highly skilled 15+ expatriates in OECD countries	Brazil	1.7	Brazil	1.2
	Myanmar	1.7	Thailand	1.4
	Indonesia	1.9	Indonesia	1.5
	Thailand	1.9	Paraguay	1.8
	Bangladesh	2.0	Argentina	1.8
	Paraguay	2.0	China	2.4
	Nepal	2.1	Myanmar	2.4
	India	3.1	Peru	2.7
	Bolivia	3.1	Nepal	2.9
	China	3.2	Bangladesh	3.0
	Jordan	3.2	Bolivia	3.1
	Venezuela	3.3	India	3.4
	Costa Rica	4.0	Egypt	3.4
	Syria	4.3	Venezuela	3.5
	Egypt	4.4	Swaziland	3.5
15 non-OECD countries with the highest percentage of highly skilled 15+ expatriates in OECD countries	Guyana	83.0	Guyana	76.9
	Jamaica	81.9	Jamaica	72.6
	Haiti	78.5	Guinea-Bissau	70.3
	Trinidad and Tobago	76.0	Haiti	68.0
	Fiji	61.9	Trinidad and Tobago	66.1
	Angola	53.7	Mozambique	52.3
	Cyprus	53.3	Mauritius	50.1
	Mauritius	53.2	Barbados	47.1
	Mozambique	47.1	Fiji	42.9
	Ghana	45.1	Gambia	42.3
	United Rep. of Tanzania	41.7	Congo	33.7
	Uganda	36.4	Sierra Leone	32.4
	Kenya	35.9	Ghana	31.2
	Burundi	34.3	Kenya	27.8
	Sierra Leone	33.3	Cyprus	26.0

1. Two different sources for the educational attainment of non-OECD countries have been used. They are identified at the top of each column. See Box 3 and bibliography for the detailed references.

Table 1: Highly-skilled expatriates resident in OECD countries
(Source: Dumont and Lemaître, 2004)

The relationship between ICT and the Diaspora is further galvanised by the fact that ICTs represent a major element of the infrastructure for the Caribbean's transnational relationships (social, economic and political) with its Diaspora. To provide a brief definition, the Caribbean Diaspora represents a collection of individuals and institutions that have affective and effective ties via kinship or ancestral relations to the Caribbean region. This rubric usually includes Caribbean citizens residing outside of their home countries as well as their offspring. Transnationalism, in turn, can be defined as the "processes by which [migrants] forge and sustain multi-stranded social relations that link together their societies of origin and

settlement." (Basch et al, 1994: 7) These social processes, usually affected over large distances, make substantial use of information and communications technologies such as e-mail, international telephony, video and audio streaming, text messaging and Voice over Internet Protocol (VoIP) telecommunications. The relationship between ICT-based economic and social growth and the Caribbean transnationalism needs to be studied thoroughly. Further, as many highly skilled and professional migrants consider themselves to be a community overseas notwithstanding loyalties to their adopted countries, any ICT strategy in the Caribbean countries should take into account the networks, investment potential and human/knowledge resources offered by the Diaspora.

As economist Charles Kenny (2002) points out, overcoming the Digital Divide[3] involves four (4) major elements:

1. Infrastructure
2. Education and skills
3. Appropriate applications and content
4. Broader institutional context (including financial resources)

Diasporas, especially those located in environments that have higher degrees of connectivity and technological development, are seen to be capable of contributing in each of these four major areas. While the repatriation of highly trained personnel has been a focus of several international

[3] Digital Divide- According to Wikipedia (http://en.wikipedia.org/wiki/Digital_divide), "the digital divide is a social/political issue referring to the socio-economic gap between communities that have access to computers and the Internet and those who do not. The term also refers to gaps that exist between groups regarding their ability to use ICTs effectively, due to differing levels of literacy and technical skills, as well as the gap between those groups that have access to quality, useful digital content and those that do not." As is noted by the UNIFEM statement at the WSIS Gender Caucus (2003), the digital divide mirrors and magnifies other social divides, such as economic opportunity, human rights, and gender equality.(www.unifem.org/pressreleases.php?f_page_pid=6&_pritem_pid=153) In a historical context then, the Digital Divide is another expression of an underlying logic of uneven development of which Information and Communications Technologies, perhaps in practice more than in direct intent, are now constitutive.

programmes such as the United Nations Development Programme's Transfer of Knowledge Through Expatriate Nationals (TOKTEN) programme (www.tokten.org), non-circulatory overseas citizens have also been regarded as possessing the ability to 'remit' these technical and technological advantages to their home country via donations of equipment, infrastructural development, specialised training, or strategic information (e.g. sources of low-priced computers or accessories).

To date, several international agencies (e.g. United Nations, World Bank) have identified a need to integrate ICTs into each aspect of regional development plans. Indeed, current ICT/Diaspora initiatives such as the donation of used equipment by alumni associations to secondary school computer laboratories have been intended to assist in bridging the digital divide via the incorporation of ICTs into the educational, economic and financial activities of societies in the Caribbean. If co-ordinated and properly funded, these initiatives and projects may serve as a mode of repatriating the accumulated knowledge of citizens abroad. Some early attempts have been made to combine the potential of ICT with that of the Diaspora for local development. Of particular note is the UN-sponsored DDN-C (Diaspora Digital Network- Caribbean)[4] initiative, which adapts a model already in use on the African continent (DDN-Africa). Launched in 2003, this initiative has seen little in the way of follow-up by participating organizations, however.

Changes in information and communications technology, demographic trends, and the organization of production are interrelated causes/effects of international migration. (See Goulbourne 2002; Grosfoguel and Guzman-

[4] For more information on the DDN-C initiative, see www.unicttaskforce.org/ddnc/DDN-C%20Final%20report1.pdf

Cordero 1998) While the Caribbean has been the site of numerous waves of human migration[5], the concurrent advance in the speed and accessibility of transport (especially the development of commercial jet travel) and ICTs has expanded the range of possibilities for interaction and collaboration among Caribbean people within and outside the region. (Levitt & Nyberg-Sorensen, 2004).

The increasing variety of applications of ICT (such as programs for free VoIP telephony, on-line chat groups and listservs) can also be seen as facilitating further skill or knowledge repatriation by allowing virtual collaboration among members of the Caribbean Diaspora and Caribbean-based individuals and institutions, and even reducing the need for emigration (or increasing circular migration[6]) by enabling collaboration between in-country and overseas professionals, and lastly by providing highly-skill services remotely. (Lanfranco, Interview) A prime example of this collaboration is the CIVIC (Caribbean ICT Virtual Community)[7], a virtual platform sponsored by IDRC/ICA (Institute for Connectivity in the Americas) which allows researchers, IT specialists, international organisations, and regional Ministries and Government functionaries to share ideas on ICT-related topics. Over the period of the study, several instances of collaboration in project development were observed in this forum.

[5] Indigenous/Amerindian immigration; Modern immigration (1498-); Post-Industrial/Emancipation immigration (1838-); Early 20th Century (1907- primarily intra-regional); Post-World War II (1948- primarily extra-regional).

[6] Circular migration refers to a variant of international migration which involves frequent travel between the country of origin and destination.

[7] Launched in 2002, CIVIC is currently being strengthened with additional funding from the CARISNET project. For more information, see http://www.icamericas.net/index.php?module=htmlpages&func=display&pid=210#Third

Although the degree and impact may vary depending on the physical, demographic and economic size of each country, significant international migration, transnationalism and Diaspora populations are social phenomena now affecting all countries in the Caribbean region. Several scholars have produced studies on diasporic communities in the global North focussing on their impact on the region as well as the economic and political experiences in their countries of destination[8]. Kasinitz (1992) and Byron (1994), for example, concentrate on the involvement of Caribbean immigrant communities in the political arenas of the United States and United Kingdom respectively. Authors such as Yon (1990) and Henry (1994) also point to the issues of age, race and gender in the incorporation of Caribbean migrants, and the complexity of diasporic identities among the offspring of Caribbean migrants to Canada.

Despite a recent explosion of sociological and anthropological research on Caribbean transnational social relationships (see Goulbourne 2002), the role of Diasporas in technology transfer in the Caribbean, especially in regards with the introduction of ICTs and their various applications, has received limited attention. Research on Caribbean migration and Diaspora in North America and Europe indicates a clear division between an emerging underclass comprised of transmigrant guest workers, illegal immigrants, low-wage labourers and their offspring and a well-developed middle class comprised largely of professionals. While the volume of remittances to the Caribbean demonstrates an active role for transnational households in the Caribbean economy, the reliance of the region on workers in flexible, low-paid, and dangerous occupations is a source of concern, and does not

[8] While many Caribbean peoples migrate throughout the Americas and beyond, most, if not all, of these diasporic outreach initiatives have been directed at diasporas in the global North (i.e. North America, Europe), as these are seen to be the most capable of contributing to development due to factors such as greater size and concentration and, partly as a result of the preceding, greater visibility.

suggest that the Diaspora's capacity to contribute to ICT-based development in the region is substantial. Though Caribbean migrants may live in areas with more favourable access to ICTs, this does not automatically imply that they themselves enjoy this type of access. The digital divide, like many others, exists among members of the same society and is subject to cross-cutting factors such as race/colour, ethnicity, gender, social/economic class, and educational levels. In light of a crisis of economic outcomes for second-generation (foreign-born) Caribbean diasporic citizens (Kunz, Milan and Schetagne, 2000), as well as the dominance of consumption-related remittances in Latin America and the Caribbean, the question as to ***whether the Caribbean Diaspora can, in practice, contribute to bridging the digital divide, and in which areas of focus***, is indeed a serious one. It is possible that these facts have served to deflect attention from the actual contribution of the Caribbean Diaspora to ICT-based initiatives and projects in the Caribbean region.

This study will explore the issue by identifying the various political, economic and cultural elements that surround the involvement of the Caribbean Diaspora in ICT-related investment, educational and other initiatives. One of the main contributions of the analysis will be to provide general theoretical and empirical recommendations to the design, social marketing, and implementation of ICT-based projects and initiatives in the region involving the Caribbean Diaspora.[9]

[9] As was noted in the introduction to the International Institute for Communication and Development (IICD)/International Institute of Infonomics study "Conditions for ICT-adoption in Developing Countries": "The complex relationships between social, cultural, economic, organisational, political, educational, infra-structural, legal and technological aspects (so-called socio-cultural aspects) need careful and strategic consideration to achieve a successful adoption of ICT."
(see http://www.iicd.org/projects/articles/IICDprojects.import20).

METHODOLOGICAL OVERVIEW

Using Information and Communications Technologies

In designing a research methodology that caters to the complex transnational dynamics of the Caribbean and its Diaspora(s), several competing demands and complementary situations were taken into account. As a scoping study with finite resources and a limited time frame, the non-evaluative fieldwork conducted made use of an eclectic mix of traditional land-line telecommunications, VoIP[10] communications, e-mails, Internet messaging, participant observation, and face-to-face interviews. The qualitative, empirical research undertaken in this study provides a means for simultaneous analysis of aspects of the infrastructure, structure and flows of the fast-evolving relationship between the Caribbean and its Diaspora.

Field Visits

Field visits represented the second major source of primary information on ICT/Diaspora activity in the Caribbean. In terms of target respondents, a concerted attempt was made to secure interviews with representatives of each of the following key sectors:

1. Non-governmental organisations
2. Private sector (ICT-related sectors)
3. Government (Regional/National/Local)
4. Donor institutions (incl. Diaspora organisations)

[10] Voice over Internet Protocol (VoIP) - Sometimes referred to as 'IP telephony' or 'Voice over the Internet (VOI)'. VoIP enables people to use the Internet as the transmission medium for telephone calls. (see www.itilpeople.com/Glossary/Glossary_v.htm)

In order to identify strategies and approaches to the development of ICT-related initiatives within the Diaspora and in the Caribbean, semi-structured interviews were conducted with sixty-five (65) respondents from the Caribbean and its Diaspora in the five countries selected for in-depth study (Barbados, Dominican Republic, Guyana, Haiti and Jamaica) as well as other Caribbean and extra-regional territories.

As a baseline/scoping study, it is not expected that the exercise identifies all individuals who are actively involved in ICT/Diaspora initiatives in the Caribbean. However, the document aims at including an indicative sample of practitioners to help highlight the main issues, needs and concerns for the analysis of the subject. In light of this goal, interviewees and other individuals/organisations contacted in the course of the study were asked to suggest other individuals who may have some involvement or knowledge of actors involved in ICT/Diaspora initiatives in the region.

While primary sources were given priority due to the relative lack of literature on the issue, the use of web-based and other secondary sources was also considered essential, both in the lead and follow-up phases of field visits. The investigation of secondary sources included:

- Identification of key websites for background information on connectivity and ICT for development in countries of primary focus, as well as contact information for prospective interviewees.
- Review of key documents and web pages from previous initiatives.
- Contact with regional and diasporic media houses in order to glean references to research and other work done on the issue. On-line versions of major ethnic/diasporic and national newspapers were also consulted for indications of ICT-related activities of Caribbean diasporic citizens.

Supplementary information was then sought to provide a contextual background to the information and opinions of selected respondents. Secondary sources included conference proceedings, websites, journal articles, as well as the archives of CIVIC and other relevant digital networks/listservs.[11] In mapping current ICT initiatives and actors that involve the Caribbean Diaspora, an effort was made to contact academics involved in research on the issue, as well as consultants who had worked on migration and/or ICT-related themes in the past. These contacts were our prime sources for establishing a chronology and overview of activities in the area. Initial semi-structured interviews with practitioners/scholars were conducted face-to-face, electronically and via telephone in Toronto, Montreal and New York, serving in the testing and revision phase for the primary research instrument (see Annex I/II). In addition to data specific to the aims of the study, general country information was also collected prior to and during the field visits, in particular on:

1. Level of connectivity/ ICT infrastructure
2. Number of ICT service providers etc.
3. Inclusion of ICT in country's current development plans.
4. Ministries responsible for/involved in ICT-based initiatives.

This background information contributed to the overall presentation of the findings, interpretation of the data and final analysis. The identification of areas and themes for potential ICT project development involving the Diaspora implies an assessment of key obstacles the Caribbean development faces, as well as the dynamics of diasporic relationships in various geo-political areas. Questionnaire responses by individuals and institutions in

[11] These included the Global Development Network, Global Knowledge Partnership, World Bank's Global Information and Communication Technologies Department (GITC), Development Gateway, and the Digital Divide Forum.

the region, the Diasporas in Canada and the United States, as well as selected countries in Western Europe were prime indicators of possible areas of Caribbean involvement.

Questionnaire Structure and Administration

A. INSTITUTIONAL OVERVIEW

B. PROJECT IDENTIFICATION AND SELECTION
- B1. Project Identification
- B2. Project Motivation/Criteria
- B3. Description of output (services/products offered etc.)
- B4 Intended impact
- B5 Impact
- B6 Time Frames/Time Lines

C. TARGET MARKET/BENEFICIARIES
- C1. Location
- C2. Gender, Age, Disability Considerations
- C3. Education/Income Level

D. NETWORKING/ PARTNERSHIPS
- D1. Digital and Human Networks
- D2. Transnational/Local Partnerships
- D3. Partnerships within the Caribbean Diaspora

E. FINANCING & IMPLEMENTATION CHALLENGES
- E1. Identification of Major Funding Sources
- E2. Accessibility of Funding for ICT4D/Diaspora
- E3. Funding/Sustainability Challenges
- E4. Implementation Challenges
- E5. Areas for Improvement

F. OUTLOOK & BEST PRACTICES
- F1. Key themes for future initiatives/projects
- F2. Respondents' Outlook
- F3. Referral (projects, donors, organisations)
- F4. Best/Good Practices

Selection of interviewees

While targeting respondents who would be able to give the fullest account of ICT/Diaspora activities in the Caribbean or the Caribbean Diaspora over the past decade, the study did not seek to be exhaustive. Interviewees were selected on the basis of their visibility, expressed interest, and work done on the subject, i.e. participation in conferences, existence of websites or other forms of information on their activities, or referrals by previous interviewees.

For volunteers who offered their contribution to the study, the initial qualification questions included in the first part of the questionnaire were used as a measure of the prospective respondent's involvement in the area. It was expected, however, that given the rhizomic nature of Caribbean society and Diaspora, even volunteers with little direct involvement in the ICT/Diaspora would have interesting insights and could identify other individuals or organizations more suitable to respond to the questionnaire. Various approaches and technologies were employed to collect information from individuals/organisations targeted for the study. Potential respondents were identified by internet searches, personal referrals, and literature reviews, then contacted by phone/e-mail or via information available through diasporic publications and virtual communities. Questionnaires were then sent copies in anticipation of a full interview.

Recording and Transmission of Data

Face-to-face interviews were recorded and submitted along with this report as annexes. Relevant information obtained from phone interviews was recorded on the Answer Sheet designed by the consultants and are also included as annexes.

COUNTRY AND DIASPORA PROFILES

While the countries of the Latin America/Caribbean region share the challenge of improving ICT access and use, there remain important differences in physical size, demography, economic attributes, language and political conditions between and among the countries that warrant sensitivity and, in some cases, alternative approaches. Within the Caribbean alone, historical, cultural, political and economic divergences abound. (Lozano, Interview) Thus, the five countries selected (Barbados, Dominican Republic, Guyana, Haiti and Jamaica) were chosen to balance and capture the various geographical, social and economic differences within the region and among its Diasporas.

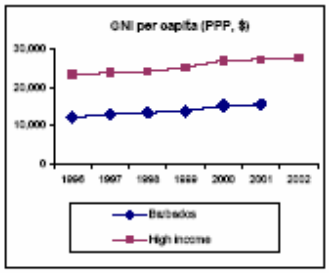
Barbados

Similar to other territories of the English-speaking Caribbean, Barbados has a century-long history of intra- and extra-regional migration. (Fletcher, 1980; Richardson, 1985) While the actual involvement of the Barbadian Diaspora in ICT-based initiatives is yet to be determined, the Barbadian government has expressed its intention to include the Diasporas in North America and Europe in the formulation of national policy in the ICT sector. (Goddard, Personal communication) However, further discussions revealed a significant degree of difficulty in mobilizing support and participation among the Barbadian Diaspora, owing in part to the realities of their working and personal lives in the country of immigration. In the absence of significant remuneration or return-on-investment, members of the Diaspora were often reluctant to contribute their time, capital and expertise to ICT-based policy or project development.

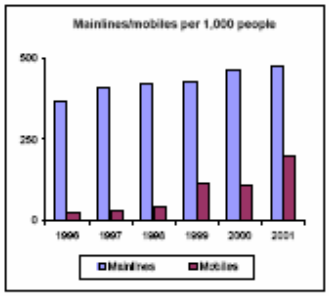
ICT at a glance
Barbados

10/3/2003

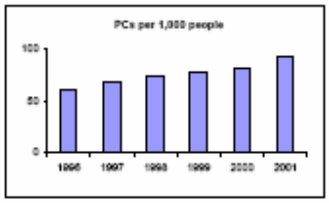
Country background information	Barbados 1995	Barbados 2002	High income 2002
Population, mid year (millions)	0.26	0.27	964.7
Poverty (% of population below $1 a day)	..	..	..
Adult literacy rate (% ages 15 and over)	99.5	99.7	..
Urban population (% of total population)	47.3	51.1	77.7
GNI per capita (Atlas method, $)	6,640.0	*9,750.0*	26,310.0
GNI per capita (PPP, $)	11,910.0	*15,560.0*	27,590.0
GDP growth (1990-95 and 1995-2002, %)	-0.2	*3.9*	2.5
Scientists and engineers in R&D (per mill. people)	..	..	*3,281.3*
Expenditures for R&D (% of GDP)	..	..	*2.6*



ICT infrastructure & access	1995	2001	2001
Telephone mainlines			
Per 1,000 people	345	476	592
In largest city (per 1,000 people)	287	..	..
Waiting list (thousands)	2	1	..
Revenue per line ($)	1,739	1,379	*1,338*
Cost of local call ($ per 3 minutes)	..	..	0.11
Mobile phones (per 1,000 people)	18	196	607
International telecommunications			
Outgoing traffic (minutes per subscriber)	355	625	204
Cost of call to U.S. ($ per 3 minutes)	..	4.05	*0.89*
Daily newspapers (per 1,000 people)	155	200	*284*
Radios (per 1,000 people)	889	*749*	*1,267*
Television sets (per 1,000 people)	287	325	*676*



Computers & the Internet	1995	2001	2001
Personal computers			
Per 1,000 people	57.5	92.3	416.7
Installed in education (thousands)	..	..	..
Internet			
Users (thousands)	0.0	15.0	389,451.6
Monthly off-peak access charges			
Service provider charge ($)	..	..	13.3
Telephone usage charge ($)	..	..	10.62



ICT expenditures	1995	2001	2001
Total ICT ($, millions)	..	..	..
ICT as % of GDP	..	..	..
ICT per capita ($)	..	..	..

ICT business & government environment *(ratings from 1 to 7; 7 is highest/best)*	1995	2002	2002
Broadband Internet access availability	..	..	5.0
Local specialized IT services availability	..	..	5.7
Competition in ISPs	..	..	5.3
Government online services availability	..	..	5.1
Laws relating to ICT use	..	..	4.8
Government prioritization of ICT	..	..	4.9
Secure servers	..	14 [a]	*116,091* [a]

Notes: Figures in italics refer to an earlier year. a. Data refer to 2001.

Sources: **Country background information**, UNESCO and World Bank; **ICT infrastructure and access**, ITU and UNESCO; **Computers and the Internet**, ITU and WITSA; **ICT expenditures**, WITSA; **ICT business & government environment**, World Economic Forum's *Global Competitiveness Report 2002-2003* and *Global Information Technology Report 2002-2003* (ratings) and Netcraft (secure servers). See Definitions and Sources for more complete information.

Development Data Group, World Bank

Ranking among the first three in the region in teledensity[12] (46.29 mainlines per 100 persons in 2000 against a regional average of 27.70 in 2000), Barbados has been recognised as one of the region's leaders in the development of ICT-related industry, focussing its efforts on the

[12] Teledensity, usually measured in the number of telephone connections per 100 persons, is a measure of access to telecommunications

development of call-centres and other outsourcing, software development initiatives. Given its size and economic characteristics, Barbados's case is representative of both the smaller territories and the more aggressive ICT-industry participants in the Caribbean.

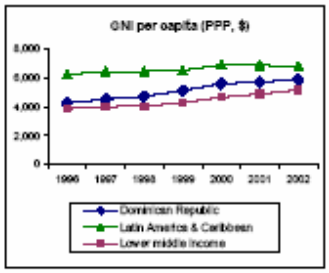
Dominican Republic

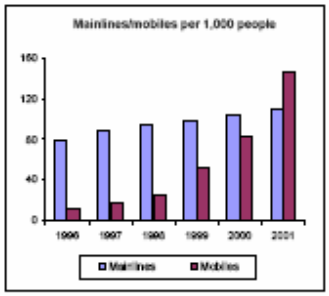
The Dominican Republic was selected as a country representative of the Hispanophone Caribbean, as well as its position as the largest recipient of remittances in the region. Remittances from the Dominican Diaspora are now estimated at just under $3 billion USD per year. (MIF, 2004) By 1998, Puerto Ricans (46%) and Dominicans (15%) comprised 61% of New York's Latino population. (Tharp, 2001: 133) The Dominican Diaspora has emerged as the most vibrant ethnic constituencies in the United States and is also a significant presence in Europe (Spain) and in other Caribbean countries such as Puerto Rico and St. Maarten, where it represents close to 50% of the island's population (Lozano, interview). At the same time, the Dominican Diaspora has emerged over the past decade as one of the pillars of the Dominican economy. (Pessar, 1996) However, very few initiatives involving Diaspora in ICTs were identified in enquiries in both the Dominican Republic and New York. Though references to the use of technology by the Dominican Diaspora do exist in recent literature (La Iniciativa, 2004), respondents overwhelmingly underplayed the direct involvement of the Dominican Diaspora in ICT-related projects or initiatives in the Caribbean.

ICT at a glance
Dominican Republic

10/3/2003

Country background information	Dominican Republic		Latin America & Caribbean	Lower middle income
	1995	2002	2002	2002
Population, mid year (millions)	7.7	8.6	526.7	2,410.7
Poverty (% of population below $1 a day)	..	*2.0*	..	..
Adult literacy rate (% ages 15 and over)	81.7	84.4	89.5	86.6
Urban population (% of total population)	62.1	66.5	76.2	49.4
GNI per capita (Atlas method, $)	1,410.0	2,320.0	3,280.0	1,390.0
GNI per capita (PPP, $)	3,970.0	5,870.0	6,750.0	5,130.0
GDP growth (1990-95 and 1995-2002, %)	4.4	6.6	2.0	3.7
Scientists and engineers in R&D (per mill. people)	..	..	*286.6*	*807.5*
Expenditures for R&D (% of GDP)	..	..	*0.5*	*0.9*
ICT infrastructure & access				
	1995	2001	2001	2001
Telephone mainlines				
Per 1,000 people	75	110	163	146
In largest city (per 1,000 people)	*116*	*129*	*175*	524
Waiting list (thousands)	*13*	..	*4,403*	*27,675*
Revenue per line ($)	..	..	*827*	283
Cost of local call ($ per 3 minutes)	..	..	0.09	0.04
Mobile phones (per 1,000 people)	7	146	160	110
International telecommunications				
Outgoing traffic (minutes per subscriber)	147	*213*	87	58
Cost of call to U.S. ($ per 3 minutes)	..	*3.90*	*3.20*	*4.50*
Daily newspapers (per 1,000 people)	34	*27*	*70*	..
Radios (per 1,000 people)	179	*181*	*410*	*345*
Television sets (per 1,000 people)	90	*97*	*274*	292
Computers & the Internet				
	1995	2001	2001	2001
Personal computers				
Per 1,000 people	..	..	59.3	28.1
Installed in education (thousands)	..	..	..	..
Internet				
Users (thousands)	1.4	186.0	25,666.9	68,936.9
Monthly off-peak access charges				
Service provider charge ($)	..	18.0	..	16.7
Telephone usage charge ($)	..	..	..	0.23
ICT expenditures				
	1995	2001	2001	2001
Total ICT ($, millions)	..	..	..	..
ICT as % of GDP	..	..	..	..
ICT per capita ($)	..	..	..	..
ICT business & government environment				
(ratings from 1 to 7; 7 is highest/best)	1995	2002	2002	2002
Broadband Internet access availability	..	4.0	4.0	3.6
Local specialized IT services availability	..	5.0	4.5	4.3
Competition in ISPs	..	4.5	4.0	4.2
Government online services availability	..	3.3	3.3	3.1
Laws relating to ICT use	..	3.8	3.3	3.3
Government prioritization of ICT	..	3.8	3.4	4.0
Secure servers	..	8 [a]	*2,103* [a]	*2,769* [a]





Notes: Figures in italics refer to an earlier year. a. Data refer to 2001.

Sources: **Country background information**, UNESCO and World Bank; **ICT infrastructure and access**, ITU and UNESCO; **Computers and the Internet**, ITU and WITSA; **ICT expenditures**, WITSA; **ICT business & government environment**, World Economic Forum's *Global Competitiveness Report 2002-2003* and *Global Information Technology Report 2002-2003* (ratings) and Netcraft (secure servers). See Definitions and Sources for more complete information.

Development Data Group, World Bank

While the involvement of the Dominican Diaspora in ICT-related projects has only recently been studied empirically (Iniciativa de Comunicación, 2004), the demand for communication by the Diaspora has led to the significant improvement of communications infrastructure in the country (Kirkman, 2002). As is the case of several larger territories in the region, the

Dominican Republic faces a number of serious challenges in overcoming its internal digital divide, in particular disparities in rural-urban conditions and income distribution. A recent study reported that information infrastructure in the country was fairly developed in its urban areas, but noted also very low levels of Internet use outside of Santo Domingo and Santiago, the nation's two largest cities. (Kirkman, 2002).

Guyana

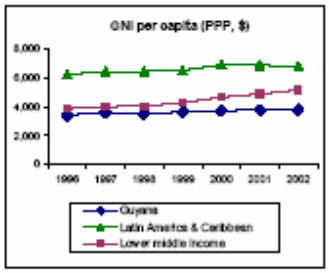
The Guyanese Diaspora, like other Caribbean overseas communities, has shown a willingness to respond to natural disasters with donations of cash, clothing, food and equipment. While the Caribbean Disaster Emergency Response Agency (CDERA) does have a mandate for co-ordinating the 'external response' to Caribbean natural disasters (which includes financial and technical support from the Diaspora), and is currently in the process of upgrading its member states' disaster response capacity via ICTs, no projects were identified using ICTs to co-ordinate the response of the Guyanese or other Caribbean communities in North America/Europe in the event of natural disasters.

Although internal conditions in Guyana have discouraged international investors, diasporic investment in the Guyanese economy has continued in areas of small business investment, real estate. This involvement includes an ICT component as the Guyanese government, via the Guyana Office for Investment or GoInvest (www.goinvest.gov.gy) has recently begun attempts to promote investment in ICT-based industries, especially outsourcing of ICT services. ("Government Opposes", July 2002) However, as indicated earlier, no special incentives have been offered to diasporic investors.

ICT at a glance
Guyana

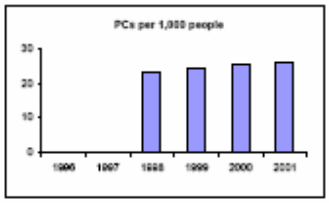
10/3/2003

Country background information	Guyana		Latin America & Caribbean	Lower middle income
	1995	2002	2002	2002
Population, mid year (millions)	0.74	0.77	526.7	2,410.7
Poverty (% of population below $1 a day)	..	*2.0*	..	..
Adult literacy rate (% ages 15 and over)	97.9	98.7	89.5	86.6
Urban population (% of total population)	34.5	37.1	76.2	49.4
GNI per capita (Atlas method, $)	700.0	840.0	3,280.0	1,390.0
GNI per capita (PPP, $)	3,140.0	3,780.0	6,750.0	5,130.0
GDP growth (1990-95 and 1995-2002, %)	5.5	1.7	2.0	3.7
Scientists and engineers in R&D (per mill. people)	..	..	*286.8*	*807.5*
Expenditures for R&D (% of GDP)	..	..	*0.5*	*0.9*



ICT infrastructure & access	1995	2001	2001	2001
Telephone mainlines				
Per 1,000 people	54	92	163	146
In largest city (per 1,000 people)	101	*101*	*175*	524
Waiting list (thousands)	*30*	*76*	*4,403*	*27,675*
Revenue per line ($)	2,944	1	*827*	283
Cost of local call ($ per 3 minutes)	*0.01*	..	0.09	0.04
Mobile phones (per 1,000 people)	1	87	160	110
International telecommunications				
Outgoing traffic (minutes per subscriber)	462	242	87	58
Cost of call to U.S. ($ per 3 minutes)	..	..	*3.20*	*4.50*
Daily newspapers (per 1,000 people)	52	*75*	*70*	..
Radios (per 1,000 people)	552	*558*	*410*	*345*
Television sets (per 1,000 people)	42	*81*	*274*	292

Computers & the Internet	1995	2001	2001	2001
Personal computers				
Per 1,000 people	..	26.4	59.3	28.1
Installed in education (thousands)	..	..	..	..
Internet				
Users (thousands)	..	95.0	25,666.9	68,936.9
Monthly off-peak access charges				
Service provider charge ($)	..	3.0	..	16.7
Telephone usage charge ($)	..	0.02	..	0.23



ICT expenditures	1995	2001	2001	2001
Total ICT ($, millions)	..	..	..	..
ICT as % of GDP	..	..	..	..
ICT per capita ($)	..	..	..	..

ICT business & government environment *(ratings from 1 to 7; 7 is highest/best)*	1995	2002	2002	2002
Broadband Internet access availability	..	..	4.0	3.6
Local specialized IT services availability	..	..	4.5	4.3
Competition in ISPs	..	..	4.0	4.2
Government online services availability	..	..	3.3	3.1
Laws relating to ICT use	..	..	3.3	3.3
Government prioritization of ICT	..	..	3.4	4.0
Secure servers	..	..	*2,103* [a]	*2,769* [a]

Notes: Figures in italics refer to an earlier year. a. Data refer to 2001.

Sources: **Country background information**, UNESCO and World Bank; **ICT infrastructure and access**, ITU and UNESCO; **Computers and the Internet**, ITU and WITSA; **ICT expenditures**, WITSA; **ICT business & government environment**, World Economic Forum's *Global Competitiveness Report 2002-2003* and *Global Information Technology Report 2002-2003* (ratings) and Netcraft (secure servers). See Definitions and Sources for more complete information.

Development Data Group, World Bank

Guyana features the highest rate of ICT access (Internet Users per 10,000 inhabitants) with an average twice that of the regional average (Nurse, 2003). Guyana's Diasporas in the United States and Canada have grown significantly over the past three decades. Contrasted to the case of the

Dominican Republic, where high-skilled migration is a relatively recent phenomenon, Guyana's experience of political and economic instability has resulted in a migration rate of almost 80% among the highly educated segment of its population. (Nurse, 2004, 7) In fact, Guyana holds the dubious distinction of losing the greatest proportion (84%) of its highly-skilled population to OECD countries such as the United States of America, Canada and the United Kingdom. (OECD, 2004) In spite of the highly skilled Diaspora population, the exact involvement of the Guyanese Diaspora in the area of ICT-related initiatives is yet to be measured.

Haiti

Haiti occupies a territory of 27,750 square kilometres on the western third of the Caribbean island called "L'Ile d'Haiti", sharing a border to the East with the Dominican Republic. Columbus encountered the island of Hispaniola inhabited by Arawak Amerindians in 1492. These indigenous populations were virtually annihilated by the Spanish settlers 25 years later. Early in the 17th century, France established its presence on Hispaniola, and in 1697, the western third of the island – Haiti, was ceded to the French by Spain. Through the heavy importation of African slaves, the French colony, based on forestry and sugar-related industries, became one of the wealthiest islands in the Caribbean. Following the legendary Bois-Caiman ceremony in 1793, the African slave revolution under the command of Toussaint Louverture resulted in the abolition of slavery in 1803. On January 1st of 1804, Haiti celebrated its independence from France. The nearly half million slaves had created the first black republic of the world. Since then, Haiti has known little political stability and economic development. Internal conflicts and external forces have plunged Haiti into political chaos for most of its history.

While Creole is the language of communication between most of its Diaspora and those who reside in the island, Haiti is officially a bilingual (French and Creole) country. Large-scale emigration from Haiti to the United States began with members of Haiti's educated upper and middle classes in the 1950s. Trained professionals such as doctors, lawyers, teachers, and engineers resettled in such US cities as New York, Chicago, and Boston. In the 1960s, Haiti's 'brain drain' grew in size as economic opportunities in Haiti diminished and political repression increased. Two different waves of migrants could be identified: skilled professionals such as doctors and teachers fled to the African continent, while semi-skilled people from the middle and lower urban classes departed en masse to the United States and Canada.

In 1972, a new wave of migration from Haiti to the US began with the arrival of sailboats carrying Haitians into South Florida. The new migrants were more likely to be poorer Haitians who could not find a visa. They paid for the transportation by selling their possessions or land. With the Diaspora's growth, a two-way flow has emerged, with first-, second-, and even third-generation Haitians in North America returning 'home' to visit family and friends, and to explore options for contributing to the country's development. Members of the Haitian Diaspora send cash transfers in excess of USD 600 million to Haiti every year (source: Ministry of Haitians Living Abroad). For many in Haiti, these remittances have become a critically important component of their budget, and are used to pay for rent, tuition, health care, and to purchase basic necessities. In 1972, a new wave of migration from Haiti to the US began with the arrival of sailboats carrying Haitians into South Florida. The new migrants were more likely to be poorer Haitians who could not find a visa. They paid for transportation

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The current Haitian population is estimated at 8 million. The 1918 and 1919 surveys indicated that there were about 1.9 million people in the country. Haiti today suffers from rampant inflation, a lack of investment, and a severe trade deficit, carrying a trade deficit of USD 302.3 million with its primary economic partner, the United States, on an aggregate trade figure of USD 673.7 million for the year 2004. The trade deficit with the Dominican Republic (DR) is even more dramatic since there are no significant exports from Haiti to the neighbouring republic while Haitians rely heavily on food and beverage imports from the DR.

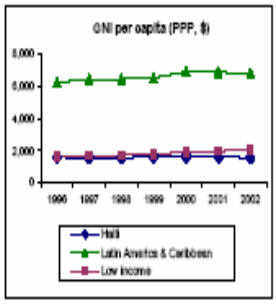
In 1991, after the overthrow of the then democratically elected president, Jean-Bertrand Aristide, the international community imposed an economic embargo that officially remained in effect until the end of 1994. This embargo had a destructive effect on the Haitian economy. Following the legislative elections of May 2000, in which gross irregularities were documented, international donors - including the United States and European Union- suspended almost all aid to Haiti. The economy shrank by 1.2% in 2001 and 0.9% (estimated) in 2002. Suspended aid and loan disbursements totalled more than $500 million at the start of 2003. The

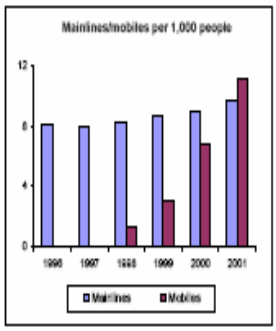
resumption of aid flows from all donors will alleviate but not end Haiti's bitter economic problems, because today's extensive civil strife has added to the many challenges facing the nation.

ICT at a glance
Haiti

10/3/2003

Country background information	Haiti		Latin America & Caribbean	Low income
	1995	2002	2002	2002
Population, mid year (millions)	7.2	8.3	526.7	2,495.0
Poverty (% of population below $1 a day)	..	..	..	..
Adult literacy rate (% ages 15 and over)	44.7	51.9	89.5	62.7
Urban population (% of total population)	32.6	37.0	76.2	30.5
GNI per capita (Atlas method, $)	310.0	440.0	3,280.0	430.0
GNI per capita (PPP, $)	1,570.0	1,580.0	6,750.0	2,040.0
GDP growth (1990-95 and 1995-2002, %)	-4.5	1.3	2.0	3.9
Scientists and engineers in R&D (per mill. people)	..	..	*286.8*	..
Expenditures for R&D (% of GDP)	..	..	*0.5*	..
ICT infrastructure & access				
	1995	**2001**	**2001**	**2001**
Telephone mainlines				
Per 1,000 people	8	10	163	26
In largest city (per 1,000 people)	17	..	*175*	130
Waiting list (thousands)	40	*100*	*4,403*	3,663
Revenue per line ($)	1,310	*1,457*	*827*	258
Cost of local call ($ per 3 minutes)	..	..	0.09	0.05
Mobile phones (per 1,000 people)	..	11	160	10
International telecommunications				
Outgoing traffic (minutes per subscriber)	*426*	*204*	87	114
Cost of call to U.S. ($ per 3 minutes)	..	*7.10*	*3.20*	5.27
Daily newspapers (per 1,000 people)	3	*3*	*70*	*40*
Radios (per 1,000 people)	53	18	*410*	*139*
Television sets (per 1,000 people)	5	6	*274*	91
Computers & the Internet				
	1995	**2001**	**2001**	**2001**
Personal computers				
Per 1,000 people	..	..	59.3	5.9
Installed in education (thousands)	..	..	..	..
Internet				
Users (thousands)	..	30.0	25,666.9	15,332.3
Monthly off-peak access charges				
Service provider charge ($)	..	..	..	33.8
Telephone usage charge ($)	..	..	..	0.36
ICT expenditures				
	1995	**2001**	**2001**	**2001**
Total ICT ($, millions)				





The Digital Access Indicator (DAI), a measure of the possibility for the people living in a country to access and use ICTs[13], has been computed by the Observatoire sur la Pénétration des Technologies de l'Information et de

[13] For information on the DAI and the methodology used in its calculation http://www.itu.int/ITU-D/ict/dai/material/DAI_ITUNews_e.pdf

la Communication en Haïti (OPTICH). Its value in Haiti is 0,25. By way of comparison, Cuba is 0,38, the Dominican Republic is 0,42, Jamaica is 0,53 and the USA is 0,78. There has been very rapid development of internet cafés (*cybercafés*) in Haiti to compensate for the lack of computers in households and schools. A 2002 survey by the Accompagnement d'Haiti dans la Société de l'Information (AHSI- http://www.ht.undp.org/tic/ahsi/) project of the United Nations Development Programme (Haiti) showed 156 *cybercafés* in the national capital, Port-au-Prince. The number of mobile telephone users in Haiti is approximately 368,000 while the number of fixed line users is about 132,000 (MTPC – Direction of Communications). There is no clear estimate of the number of users of the Internet. Depending on the sources, estimates vary from 15,000 to 80,000.

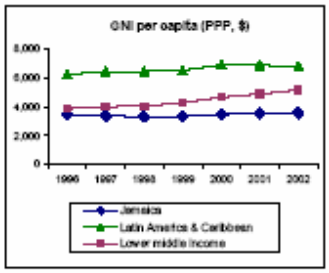
Jamaica

Jamaica's three-pronged Diaspora (UK, United States and Canada) has long been a source of income and other forms of support for Jamaican residents. The Jamaican Diaspora also ranks among the highest remitting communities in the Caribbean; the per capita remittance is the highest for the region. Jamaican Diasporas also feature highly sophisticated institutional development in the major areas of emigration, as well as fairly high skill content (Carrington and Detragiache, 1998). Despite the depth of Jamaica's diasporic linkages, the strategies and approaches used in the Diaspora's involvement in ICT initiatives are yet to be studied. Contact with the Jamaican Diaspora and trade representatives in Canada and the United States revealed that ICT-based initiatives among the Jamaican Diaspora in North America were generally individualised. This was confirmed by discussions with key stakeholders in the ICT4D area in Jamaica.

ICT at a glance
Jamaica

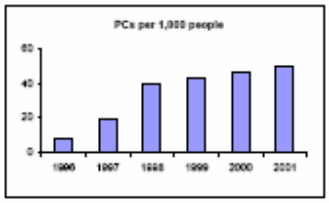
10/3/2003

Country background information	Jamaica 1995	Jamaica 2002	Latin America & Caribbean 2002	Lower middle income 2002
Population, mid year (millions)	2.5	2.6	526.7	2,410.7
Poverty (% of population below $1 a day)	..	*2.0*	..	..
Adult literacy rate (% ages 15 and over)	84.8	87.6	89.5	86.6
Urban population (% of total population)	53.7	57.1	76.2	49.4
GNI per capita (Atlas method, $)	2,050.0	2,820.0	3,280.0	1,390.0
GNI per capita (PPP, $)	3,480.0	3,550.0	6,750.0	5,130.0
GDP growth (1990-95 and 1995-2002, %)	1.4	0.0	2.0	3.7
Scientists and engineers in R&D (per mill. people)	..	..	*286.6*	*607.5*
Expenditures for R&D (% of GDP)	..	..	*0.5*	*0.9*



ICT infrastructure & access	1995	2001	2001	2001
Telephone mainlines				
Per 1,000 people	116	197	163	146
In largest city (per 1,000 people)	*170*	..	*175*	524
Waiting list (thousands)	168	*209*	*4,403*	*27,675*
Revenue per line ($)	1,108	*940*	*827*	283
Cost of local call ($ per 3 minutes)	0.05	*0.06*	0.09	0.04
Mobile phones (per 1,000 people)	18	269	160	110
International telecommunications				
Outgoing traffic (minutes per subscriber)	214	*144*	87	58
Cost of call to U.S. ($ per 3 minutes)	..	*5.20*	*3.20*	*4.50*
Daily newspapers (per 1,000 people)	63	*62*	*70*	..
Radios (per 1,000 people)	435	*796*	*410*	*345*
Television sets (per 1,000 people)	160	*194*	*274*	292

Computers & the Internet	1995	2001	2001	2001
Personal computers				
Per 1,000 people	5.2	50.0	59.3	28.1
Installed in education (thousands)	..	..	..	..
Internet				
Users (thousands)	2.7	100.0	25,666.9	68,936.9
Monthly off-peak access charges				
Service provider charge ($)	..	49.3	..	16.7
Telephone usage charge ($)	..	..	..	0.23



ICT expenditures	1995	2001	2001	2001
Total ICT ($, millions)	..	..	..	..
ICT as % of GDP	..	..	..	..
ICT per capita ($)	..	..	..	..

ICT business & government environment *(ratings from 1 to 7; 7 is highest/best)*	1995	2002	2002	2002
Broadband Internet access availability	..	2.5	4.0	3.6
Local specialized IT services availability	..	4.2	4.5	4.3
Competition in ISPs	..	4.7	4.0	4.2
Government online services availability	..	3.3	3.3	3.1
Laws relating to ICT use	..	3.3	3.3	3.3
Government prioritization of ICT	..	5.5	3.4	4.0
Secure servers	..	5 [a]	*2,103* [a]	*2,769* [a]

Notes: Figures in italics refer to an earlier year. a. Data refer to 2001.

Sources: **Country background information**, UNESCO and World Bank; **ICT infrastructure and access**, ITU and UNESCO; **Computers and the Internet**, ITU and WITSA; **ICT expenditures**, WITSA; **ICT business & government environment**, World Economic Forum's *Global Competitiveness Report 2002-2003* and *Global Information Technology Report 2002-2003* (ratings) and Netcraft (secure servers). See Definitions and Sources for more complete information.

Development Data Group, World Bank

In terms of ICTs, Jamaica features the highest number of Internet subscribers among the English-speaking Caribbean countries, and has the largest number of Internet Service Providers. (Nurse, 2003) Jamaica has had some success in the commercial use of ICT, especially in the customer service (call centre) and ICT training sectors. (Ratnathicam and Coore, 2002)

Major disparities in access to Information and Communications Technologies remain, however, in rural areas, as well as among the growing numbers of Jamaica's urban poor[14].

Caribbean Diaspora (North America and Europe)

While Caribbean migration was already an important phenomenon by the turn of the 20th century (Patterson, 1991: 500), post-World War II reconstruction and industrial development would feature a marked expansion of the trend of Caribbean migration to the global North. Countries in Europe and North America began to import labour to fill service posts in construction, domestic work, as well as some high-level skilled personnel. By the late 1950s, economic patterns had also shifted in the Caribbean. Between 1948 and 1968, almost 300,000 Jamaicans migrated legally to Great Britain, the United States of America and Canada, with "ten of thousands more [choosing] undocumented existence in the slums of Brooklyn and Brixton over life in Jamaica." (Headley, 1996: 24) This scene was repeating itself throughout the region as a generalised decline in agricultural prices and increased mechanisation exacerbated unemployment, making extra-regional migration an even more significant option at this point for Caribbean households.

In the 1960s, as service exports such as tourism became key elements of the regional economy, international (or extra-regional) migration, which had previously been a strong feature of the Anglophone Caribbean, became a

[14] For additional information, consult the ICT4DJamaica website: (http://www.ict4djamaica.org/content/home/detail.asp?iData=18&iCat=271&iChannel=2&nChannel=Articles

generalized phenomenon. Following political and economic crises, Cuban, Haitian, Surinamese, Guyanese, and Dominican migration to North America and Europe began in earnest. (Bulmer-Thomas, 2001:11)

Migration in this period also had a clear role in the political economy of the Cold War. For example, the US policy of allowing Caribbean immigration in the 1960s was motivated not only by changes in the organization of production at the global level (increasing internationalisation of production, importance of tertiary or service industries), but also by the sharpened competition with the Soviet state for influence at this juncture.[15] The relaxation of restriction in Caribbean immigration policy was thus used strategically by the United States of America as a means to "support economic partnerships with regional allies and to protect clear spheres of influence by providing access to channels of legal immigration." (Bach, 1999: 162-163). In 1965, therefore, the Hart-Cellar Immigration Reform Act reversed racist provisions imposed in 1952 by the United States government.

Between 1960 and 1993, Patterson estimates that a total of 845,588 persons arrived in the United States from the Anglophone Caribbean. (Patterson, 2000: 501) By the late 1970s, the content of Caribbean migration flows had begun to involve family migration. For example, 51% of the almost 20,000 (19,714) Jamaican migrants admitted to the United States in 1979 were family reunifications. (Niles, 1995: 209). Also important in the formation of the Caribbean North American Diaspora was the 'lateral' migration of Anglophone West Indians who, compelled by official and popular hostility

[15] Among those groups also implicated in the Cold War's migration trends were the victim/labour diasporas of Southeast Asia e.g. Philippines, Cambodia, Vietnam and Laos. These communities would leave their countries for North America (and Europe) because of political and economic instabilities, largely caused or facilitated by ongoing rivalry among the larger powers (China, USSR, and USA). (Live, 2002: 41)

in Great Britain, crossed the Atlantic again to the United States and Canada. (Bonnett, 1990: 140)

The decline of Soviet influence and the end of the Cold War weakened the strategic value of the United States' relatively open immigration policy. As geopolitical paradigms shifted in various ways during the decade of the 1990s, migratory and diasporic processes in the Caribbean-North American sphere would also experience significant changes. While its exports continue to grow in economic, cultural and geo-strategic importance (especially highly-skilled labour, entertainment services, oil and natural gas), the Caribbean's traditional (i.e. state-to-state) geo-strategic importance is at its nadir. In the post Cold War context, even as the recruitment of skilled labor continues unabated, Caribbean nations such as Haiti have begun to demand attention in policymaking circles by dint of their poverty, political instability and the subsequent security threat of mass migration to richer states. (Meissner, 1993:94)

Race and Class in the Caribbean Diaspora

Even within Caribbean national Diasporas, differences of class, immigration status/citizenship, gender, colour and religion, create a significant challenge for the researcher seeking to identify clear trends and patterns of behaviour. The Caribbean Diaspora in North America features an emerging division between a working underclass comprised of transmigrant guest workers, illegal immigrants, low-wage labourers and their offspring, and a well-developed middle class comprised largely of professionals and tertiary-level students.

Differential incorporation in a new context is important to the explanation of the Caribbean Diaspora's social profile in North America. Smith's

concept of differential incorporation in 'complex pluralities' such as North America and Britain holds that while some groups benefit from universal incorporation[16], others groups are incorporated in "less favorable and inequitable ways." (Goulbourne, 2002: 21). The experience of 20th century Caribbean migrants to North America was largely conditioned by the differential incorporation of 'blacks' or 'non-whites' in North American society[17]. This theme of negative racial discrimination in the fields of education and employment would both inform the practice of diasporic identity and the dimensions of the Caribbean diasporic economy by geographical and professional location within society[18].

Gender and Generational Gaps in ICT-based Projects and Initiatives

Gender, among the major factors in the formation of labour markets, affects the location, duration and rewards of work, the nature of hierarchy in the working environment and, perhaps most importantly, the gendering of professions. (Brah, 1996: 128; see also Freeman, 2000). Biological differences among men and women have been continuously re-inscribed and re-interpreted in response to changing social and economic imperatives. The making and marketing of gender is one of the major factors in determining what is consumed and produced by males as opposed to females. Gender issues within the scope of work division became apparent in digital global economy. From highly-skilled executives assistants and

[16] Differential incorporation is part of Smith's three-part typology that also includes u*niversal incorporation*- where the society confers the same rights across ethnicities, and *segmental incorporation*- where ethnicities are incorporated in different but roughly comparable or equivalent ways.

[17] The same also applied to parts of Europe. As Brah notes, African-Caribbean and South Asian people who migrated to states such as Britain in the post-war (WWII) period occupied a "broadly similar structural position" in unskilled or semi-skilled occupations and on the lowest echelons of the economy (Brah, 1996: 96)

[18] In North America and Europe, while ethnic or colour differences may be mitigated to some extent by the umbrella of 'non-white' status, the Caribbean Diaspora has now become separated by socio-economic differences as "education, income and occupational achievement replace skin colour." (Henry, 1994: 269-270)

educators to semi-skilled and unskilled textile and domestic workers, the education sector and employment market usually privileges individuals based on the qualities associated with their gender.

The general replacement of low-skilled occupations (both 'masculine' and 'feminine') by technological advances has provoked a crisis in the balance of 'productivity' and 'employment'. Drastic changes are being noted in the concept of work itself and in the criteria of competence or competitiveness. With the emergence of the ICT-based society and economy, dominated by intellectual capital and tertiary-level activity, physical effort has been demoted to even lower importance than in earlier stages of capitalism. As ICTs continue to redefine labour in terms of mental adaptability and technological appropriation, gender roles are again being re-inscribed at various level of the global economy.

The gendering of Caribbean labour migration is central to the phenomenon of transnationalisation of Caribbean households and the subsequent social and psychological effects on youth and the Diaspora. While the male sojourner pattern continued into the 1960s with Caribbean migrations to England and the United States, at the advent of the post-Fordist period (1972-1979), "at least fifty-one percent of the immigrants to England and the United States from Trinidad and Tobago, Barbados, Guyana, Jamaica, St. Kitts-Nevis, and Antigua were women." (Bonnett, 140) Starting in 1965, female immigrants entered occupational roles such as custodians, domestics, factory hands, sales personnel, secretaries and paraprofessionals in the public service agencies. (Bryce-Laporte, 1981: ix) Legal immigrants from 1966 to 1978 in the United States featured a 2:3 male-to-female ratio (2,891,925 women of a total of 4,409,802). For example, as Bolles (1981) suggests, 58% of Jamaican migrants to the United States between 1962 and

1976 were women. By the early 1980s, though, both Bolles (1981) and Gordon (1981) reported that a majority semi-skilled and unskilled Caribbean Diaspora still featured a vast majority of women, mostly employed in low-skill occupations. (Gordon, 1981: 31).

The re-gendering of Caribbean labour migration then has important implications for the capacity of the Diaspora to support ICT-based development initiatives both in their countries of origin and places of residence. For example, many women in the Diaspora would have significant experience in sectors linked to the development of telework (see above) and may be well equipped to develop innovative applications that can serve communities in the Caribbean in the search for solutions to poverty and un/underemployment. One must consider, however, the gender politics involved in the acceptance of the contribution of these members of the Diaspora. In other words, to what extent will the societies of the Caribbean allow for the reintegration or remote involvement of female subjects in the development of ICT4D projects and initiatives?

In terms of project selection and beneficiaries, gender considerations were found to be specifically included in the definition of ICT for Development projects in the cases of Jamaica and Haiti. This inclusion was observed to be determined not only by the importance of the gender issue *per se*, but also by dint of the requirements for funding by international donors. This type of inclusion does not guarantee that specific considerations have been made to gender in project implementation. In Guyana, Barbados and the Dominican Republic, little evidence of gender-specific ICT-based project development by/with the Caribbean Diaspora was found. Beneficiaries were mostly identified by location, academic institutions, income level or profession. While this scoping study does not claim to include an

exhaustive examination of the gender-based content of ICT development plans in the region, the study does suggest that issues of gender have political and economic correlations that would alter its impact on different countries in the region.

Age also plays a major role in determining social and economic outcomes in the Caribbean. The impact of generational gaps is also important in analysing the role of gender and ICTs in Diaspora-led development. Among Caribbean youth, prime movers in the adoption of ICTs, Ms. Elizabeth Terry of ICT4D Jamaica pointed out a widening digital divide between males and females. While other sources suggest that the structural impediments to access to ICTs and ICT-based training is greater among women and girls (see CIVIC 2003), the crisis of outcomes among young males, especially but not exclusively those in lower economic classes, may represent an area for potential development and contribution by the Caribbean Diaspora. The creation of an environment conducive to the development of higher-level ICT-based skills and ICT-based economic activities among youth (both female and male) in the Caribbean requires serious dialogue on concepts and images of masculinity and femininity in the context of the school, home and workplace in the Caribbean. Since many low-income households in the Caribbean, as indicated earlier, are transnational, this dialogue may also need to be transnational.

As indicated in the CIVIC's 2003 contribution to the World Summit on the Information Society[19] (WSIS) Gender Caucus (www.genderwsis.org), the "digital divide" in the Caribbean is particularly exacerbated as it relates to the differential levels of access and participation of women, and rural

[19] The World Summit on the Information Society (WSIS) is a United Nations-led discussion on the implications and opportunities presented by information and communications technologies and their integration into the global society and economy for the achievement of the UN's Millennium Development Goals (MDGs).

women in particular in the ICT sector. This disparity is also visible across generations among both women and men. Given the transnationalisation of its households, in particular the growing participation of women in migration-based occupations, chief caretakers in a large number of cases in the region may be grandparents. Paradoxically, the exposure of young children to Information and Communications Technologies may thus require sensitisation and orientation among Caribbean senior citizens.

As Bolles (1999) argues, "gender…analysis can actually deepen the understanding of Caribbean reality, as well as point the way towards what needs to be done[20]." (25) However, in the words of Arthur Conan Doyle, "the more featureless and commonplace a crime is, the more difficult it is to bring home." Gender represents such a pervasive and fundamental force in the social and economic dynamics of Caribbean identity that its use in analysis of the 'reality' usually requires a profound and incisive analysis. Fortunately, the issue of migration and Diaspora provide exactly the angle require for such an analysis.

[20] The contribution of gendered migration patterns to family structures in the Caribbean (and its Diaspora) is also an important issue, especially in light of findings by researchers such as Welch (1994), Craton (1993) and Higman (1984) that displace matrifocality as an endemic feature of Caribbean African slavery.

QUESTIONNAIRE FINDINGS AND ANALYSIS

A. Institutional Overview

In examining institutional structures and project identification practices among respondents of the questionnaire, which was designed to identify strategies and trends in the development of ICT-based projects and initiatives among the Caribbean Diaspora, the concept of a formal project (as an expressly planned series of events and initiatives with a clearly defined set of objectives and methodologies) was alien to many ICT-practitioners in the Diaspora. While formal institutional development was more prevalent within the Caribbean, most initiatives in the Diaspora were, at their origin, ad-hoc responses to the immediate needs of their communities, peer-groups or alma mater. In this sense, many ICT-based initiatives involving the Caribbean Diaspora may need to be addressed as an extension of general remitting-behaviour.

B. Project Identification and Selection

Several respondents central to Diaspora affairs in Canada, the United States and within the Caribbean were unable to identify current projects involving the Caribbean Diaspora and ICT-based projects developed or implemented either by themselves or by individuals or institutions known to them. In defining the basis of project identification among respondents, most initiatives were, at their origin, forms of secular or community remittances. It is here that we see a link between the concept of remittances and ICT-Diaspora initiatives.

C. Target Market/Beneficiaries

While Diaspora-initiated projects were found to serve rural, urban and semi-urban areas of the Caribbean, it was also found that the major of ICT-related initiatives (e.g telecentres, donations of computers and other ICTs by alumni associations) were centred in major cities and usually national capitals. Communication with relatives/friends abroad dominate the function of telecentres in Guyana, Barbados and the Dominican Republic[21], and this could be considered as targeting members of transnational households, though transnationalisation among Caribbean households is ubiquitous. There was no evidence in any of the countries visited of price discrimination or market segmentation (e.g. 'exclusive' telecentres for higher income customers).

D. Networking/Partnerships

The history of the Caribbean and its migration patterns has served to create a series of global economic networks based on family and kinship relationships, alumni and religious associations, and increasingly, virtual communities. A major theme captured in the interviews and survey responses was the centrality of alumni and other personal networks, which were then converted into virtual and professional communities, usually upon the migration of one or more members of the network. Alumni networks (though not necessarily formalised associations) were also central to the identification of needs in the Caribbean. Among the main challenges for network development is the reconciliation of differences in priorities, methodologies and language among government, international agencies and civil society organisations.

[21] In many cases, while other services were provided within the telecentre (a communications hub, usually equipped for paid internet access, long-distance telephony and printing/photocopying/desktop publishing), actual observed use of ICTs was dominated by long-distance communication (via VoIP).

Key Institutions

One of the objectives of this study was to identify a number of institutions that have explicitly included ICT-related initiatives in their operational strategies, or work with the Caribbean Diaspora in areas that include or may easily involve ICT/Diaspora synergies in the development of ICT-related projects and initiatives in the Caribbean.

ICT AND DIASPORA IN THE CARIBBEAN

KEY INSTITUTIONS

1. Regional and Diasporic Academic Institutions

E.g. UWI, UTech (Jamaica), UG (Guyana), FLACSO

2. National ICT Programme Co-ordination Institutions

E.g. ICT4D Jamaica

3. Diasporic Media (including internet-based media)

E.g. HardBeatNews (USA), Indo-Caribbean World (Canada)

4. ICT-based International Agencies and International NGOs

E.g. United Way International (UWI) and Institute for Connectivity in the Americas (IDRC/ICA)

5. Professional International Organisations/Networks

E.g. Association of Caribbean University and Institutional Libraries (ACURIL)

6. Multilateral Agencies

E.g. Pan-American Development Fund (PADF), Caribbean Centre for Development Administration (CARICAD)

7. United Nations Institutions and Programmes

E.g. UNDP-TOKTEN (Transfer of Knowledge Through Expatriate Nationals), UNIFEM, UNCTAD, FAO.

8. Religious and Voluntary Associations

E.g. Rotary International, Seventh-Day Adventist Church, Alianza ONG, Scouting Movement

9. Trade, Investment and Industrial Promotion Agencies.

E.g. Credit Union Movement; GoInvest (Guyana); TIDCO (Trinidad and Tobago); JamPro (Jamaica); Strategis/Industry Canada (Canada); PromoCapital (Haiti), Caribbean and Caribbean Diasporic Chambers of Commerce.

E. Financing and Implementation Challenges

Most ICT-based projects implemented by the Diaspora, whether for-profit initiatives led by the private sector, ad hoc philanthropic initiatives from community or alumni groups, or projects featuring a combination of both for profit and non-for-profit principles, are self-capitalised, with sources of funding usually emanating from fundraising by community or alumni groups. However, cases emerged in the study where diasporic individuals mobilised resources from their workplaces to provide equipments to schools or e-literacy training programmes in the Caribbean. The issue of locating sustainable funding, therefore, was relatively unimportant, as the initiative tended to be a 'one-time', individualised effort using private networks and relatively little formal institutional structure. Among respondents in the Caribbean, however, some established ICT initiatives were identified. Several of these appeared to have been developed by those who return home. Having returned and settled permanently in the region, these individuals appear more willing to invest in longer-term ICT-based projects.

Several respondents pointed to a lack of information-sharing among the research community as an obstacle to co-ordination and collaboration. A possible consequence of the ad hoc nature of many ICT-based initiatives, the absence of such collaboration and information-circulation in turn forces institutions and individuals to rely heavily on their own human and information resources. As a result, many opportunities for targeted, co-ordinated action are lost.

F. Opportunities and Lessons Learned

A series of opportunities, challenges and lessons for planning and implementation were identified in the course of the study. It was clear that these elements could not be addressed in isolation. Any integrated ICT strategy for the Caribbean requires close attention to existing and potential uses of information and communications technologies in the region and the Diaspora, and will take into account the needs of local citizens as well as those of intra- and extra-regional Diasporas and their representative organisations.

Cultural Industries,[22] Intellectual Property and Entertainment Services

The use of ICT tools in the marketing and distribution of intellectual property-based products (e.g. musical recordings, novels, recipes and specialty foods, and video/film productions) is seen by some of the respondents as a key area for action. The development, protection and conservation of intellectual property may emerge of one of the key areas for co-operation between Diaspora and home communities in the Caribbean.

[22] Definitions of 'Cultural Industries' abound. According to the United Nations Education, Scientific and Cultural Organisation, the term applies to those industries that combine the creation, production and commercialization of contents which are intangible and cultural in nature. These contents are typically protected by copyright and they can take the form of goods or services. Depending on the context, cultural industries may also be referred to as "creative industries", sunrise or "future oriented industries" in the economic jargon, or content industries in the technological jargon. (see www.traditionalknowledge.info/glossary.php .

Strategis Canada defines cultural industries as activities involving the publication, distribution, or sale of books, magazines, periodicals or newspapers in print or machine readable form but not including the sole activity of printing or typesetting any of the foregoing; the production, distribution, sale or exhibition of film or video recordings; ;the production, distribution, sale or exhibition of audio or video music recordings; the publication, distribution or sale of music in print or machine readable form; or radiocommunications in which the transmissions are intended for direct reception by the general public, and all radio, television and cable broadcasting undertakings. (see strategis.ic.gc.ca/epic/internet/inait-aci.nsf/en/il00003e.html)

Cultural industries may also play a significant role as magnets for ICT users in the Caribbean and its Diaspora. As Demas and Henry (2000) note:

> "While telecommunications and information technologies are intriguing in their own right, public acceptance and demand for advanced communications and information processing technology is driven by content-what consumers can do, learn and enjoy when they go on-line."

Music (including now ubiquitous ring tones), film, sport and other forms of cultural content can be used to attract attention to the value of ICTs in everyday life, and if consciously and strategically included as part of ICT-based initiative, can form the foundation for ICT-based development in the Caribbean. The engagement of cultural producers in the ICT4D movement is also necessary for the creation of appealing and culturally-relevant content for use by Caribbean peoples.

Although cultural production is a cornerstone of Caribbean life, the development of cultural industries has been limited. Cultural industries represent an area of visible competitive advantage for the region due to the extraordinary international success of recording artists such as Bob Marley and the Wailers. The involvement of Caribbean diasporic businesses in the marketing of Caribbean products (foods, textiles, and educational services) has a ready fit with the emergence of Caribbean festivals such as Miami's Calle Ocho, Notting Hill Carnival (UK) and Toronto's 'Caribana' celebration throughout North America and Europe.

Attention should be paid, however, to the current economic activities of the Diaspora since they constitute a major measure of the value of the diasporic entrepreneur as a strategic resource for Caribbean cultural industries. In

examining this factor, it is also possible to ascertain the possibilities for the transfer of technological and managerial know-how and the Diaspora's capacity for direct investment into the home economy.

As Henry (1994) notes in response to discrimination in the mainstream workforce, many Caribbean people have undertaken entrepreneurial ventures that cater largely to the needs of their own communities.

MAJOR ENTREPRENEURIAL ACTIVITIES IN THE CARIBBEAN DIASPORA[23]
• Communications and Remittances Services • Media and Entertainment Services incl. performance, retail, production, booking and promotion services. • Food and Beverage (Catering, Restaurants, and Specialty Groceries). • Clothing and Textiles (Manufacturing and Retail) • Grooming (Barbering, Hairdressing and Cosmetics) • Travel (usu. Travel Agencies) • Ground Transport (Taxis) • Insurance Services • Real Estate Services • Legal/Immigration Services • Freight Services (usu. between the Caribbean and North America)

In considering the involvement of the Caribbean Diaspora in ICT-based projects, it may be useful to focus on the applicability of ICTs to these current areas of concentration. One interesting example of potential uses of ICTs is the emergence of co-habitation arrangements. For example, in Toronto, vendors of Caribbean music and video products can be found co-habiting Jamaican restaurants. Thus far, the potential for the integration of ICTs into these services is not clearly defined.

[23] These major areas of operation were noted in the course of current research on the Caribbean Diaspora as well as secondary sources such as Henry (1994).

Though governments see themselves as essential players in the development of information and communications technologies, this may not be the case in leveraging the contribution of Diaspora in the area of ICT. Both in structure and in practice, the dynamics of Caribbean government and that of Diaspora are not immediately compatible, in the sense that direct intervention or involvement by a government may act as a disincentive to many in the Caribbean Diaspora, due to the perception of bias or corruption among government officials in the region. There should be a non-partisan alterative which would allow for the engagement of expatriates in the ICT4D area.

A potential alternative is through organizations such as the UWI- United Way International. A relatively new presence in the Caribbean region, United Way International (www.uwint.org) provides a strong 'non-partisan' brand easily recognisable by businesses in the region and members of the Caribbean Diaspora. In addition to its involvement in the Caribbean region (presence in Jamaica, Puerto Rico, Trinidad and Tobago and the US Virgin Islands), the United Way organisation has expertise in the area of private-sector/NGO partnerships for technology transfer and community ICT-based development as evidenced by its US-based Teaming for Technology (T4T) programme (see http://www.t4t.uwsepa.org). The planning and implementation of similar initiatives in the Caribbean involving the Caribbean Diaspora may be feasible

Networking Diasporas and their Communities of Origin

One of the most interesting opportunities that ICTs offer is the possibility to facilitate communication and discussion for people who share a common geography as well as those with common cultural interests. Community members are afforded the opportunity to participate in the decision-making process for community development (including road construction, public spaces such as playgrounds and sports facilities, and other community services). Online discussion groups, blogs (web-based diaries), and webcasts constitute an important tool for the participation of the Diaspora in communities and facilitate their integration and re-integration into the home society. The fact that Diasporan's recommendations may be discussed, examined thoroughly along with those of local community members and may facilitate the development of ICT4D projects and initiatives in which the Diaspora benefits and participates actively.

International Infrastructure and Transnational Governance

Any complete study regarding the development potential of the Diaspora should include an appraisal of the transnational financial system, as well as of the quality and cost of the communications and transport infrastructure that underpin a diasporic relationship, as this set of factors affects the nature, rate and intensity of interactions among the various actors or elements of a transnational relationship. Furthermore, while economic factors may predominate, the political relationship between the Caribbean countries and the countries of destination/habitation of its Diaspora can also play a major role in shaping the possibilities for project development. A prime example is the challenge experienced by Caribbean diasporic entrepreneurs in using ICTs for remittance services. Increased scrutiny by

governmental institutions in Canada, the United States and the United Kingdom has complicated the process of money transfer and the range and price of services that these entrepreneurs and institutions provide. Discussions on governance for the Information Society will need to consider the impact of transnationalism and Diaspora on the use of and access to ICTs and the importance of reconciling priorities that may be differ among Caribbean nations and between Caribbean states and international institutions.

Partnering for Health and Disaster Prevention and Response

The Caribbean Diaspora in general has shown a willingness to respond to requests for funding for Caribbean residents requiring medical supplies or medical procedures unavailable or prohibitively expensive in the region as well as requests for donations of cash, clothing, food, equipment and expertise in response to natural disasters. The integration of the Diaspora into health-care and disaster-preparedness planning, however, is limited.

One example of this lack of integration is provided by the Caribbean Disaster Emergency Response Agency (CDERA), whose main function is to make an immediate and coordinated response to any disastrous event affecting any participating State. CDERA's other functions include channelling information to interested governmental and non-governmental organizations. While CDERA (www.cdera.org) has a mandate for co-ordinating the 'external response' to Caribbean natural disasters (which includes financial and technical support from expatriate communities in North America/ Europe), contact with the organisation revealed that no projects using ICTs to co-ordinate the Diaspora's response were identified. The Diaspora's consistent response to medical emergencies and natural disasters indicate the opportunity for the development of a mutually-

beneficial, sustainable, well co-ordinated prevention and response mechanism that involves the private and public sector in Caribbean countries, regional and international organisations, and the Caribbean Diaspora.

Agriculture, ICTs and E-commerce

Diasporic investment may also be directed towards the diversification and conversion of agricultural single crop economies or industries in the Caribbean. Major needs in this area include financing for start-up, technological assistance, business management and marketing, and group strengthening. (Henderson-Brewster, 1994: 48)

Despite the actual and potential contribution of overseas nationals and their offspring, the Caribbean Diaspora's individualised approach may be ill-suited to areas such as the diversification of capital intensive traditional industries (e.g. plantation agriculture). However, agriculturally-based cottage industries using appropriate technologies, or the marketing of local products, may represent an area for effective contribution/investment by the Diaspora. Micro-financial support, facilitated by local and national government agencies, could provide resources to local communities to successfully undertake projects such as the cottage production of downstream (banana chips, dried fruit) or alternative products (high-revenue exportable crops such as cashews). In this context, the Diaspora's skills and access to ICTs may contribute to economic development in the region by providing valuable information on growing techniques to *peyizan* (used here to refer to the agriculturally-dependent poor), rural commercial farmers and small-scale manufacturers, as well as in facilitating access to wider diasporic and international markets via e-commerce and ICT-enabled marketing such as advertising on Caribbean-related cable television programmes.

Diaspora Skills Bank

Much as in the case of remittances, the inability to pool and co-ordinate resources leads to lower levels of impact and misallocation of resources. A primary mean of addressing this would be the development of skill rosters and databases for expatriate Caribbean nationals and their offspring. Long ago, an idea which has circulated in government circles, the implementation of a Diaspora skills bank was seen as key to collaboration among institutions in the Caribbean, the Diaspora and international donor agencies. No concrete plans for roster development were identified in any of the countries surveyed. In the absence of these facilities, institutions and individuals tend to rely heavily on their own resources- both in terms of networks and finance- and many opportunities for targeted, co-ordinated action are lost.

ICT and Outsourcing

Another key area for potential involvement and investment by the Diaspora is the outsourcing of production and services. This section analyses ICT-based outsourcing as a largely unexplored option in the Caribbean, in particular in the context of Haiti. The Caribbean is well known for its high rate of absorption of outsourcing activities from North American concerns. Caribbean countries have extensive experience in the production of PC-boards as well as harnesses and cables that are part of electronic appliances. The late 1980s saw the emergence of an increasing number of clothing factories as well. After government agencies, outsourcing is the biggest employment sector in Haiti.

Outsourcing in the Caribbean has not been limited to electronic components and clothing, however. Telework has begun to play an important role in the employment market. In September 2004, a study by Vittorio di Martino on Telework in Latin America and the Caribbean revealed that the introduction of ICTs in the region was advancing at varying paces among countries in the region. The study noted that "it is likely that the final destiny of telework in the region will depend on its success or failure in key highly populated and ICT advanced countries, particularly Brazil. However, less populated countries, particularly in the Caribbean, that already have higher penetration rates, could play an important role of anticipation and pave the way to a full-scale development of telework in the region."

The study, however, did not elaborate on the role that the Caribbean Diaspora could play in the telework market. As noted previously, the Caribbean Diaspora includes a segment of highly trained persons, in permanent contact with the service industry that is a main provider of employment. Some of them are also part of the decision-making process in their respective organizations. This Caribbean Diaspora could then serve as catalysts to influence local and regional decision-makers who could have an impact on the employment market. In the case of Haiti, the Diaspora could play a powerful role in addressing the need for job creation through outsourcing and particularly telework.

In the Haitian context, ICT4D is closely linked to the issue of job creation and the provision of job opportunities, as it is crucial to national and regional development. Improving the quality of life in Haiti and addressing the country's major social and economic problems through the promotion of equity and wealth-creation are essential for a stable and democratic political environment. It is thus important that measures be taken to

promote economic development using ICTs. Telework could be one good such instrument as it requires relatively small investments in infrastructure. Today, telecommunications facilities are mobile and can be installed anywhere. Call centres are booming throughout Latin America and the Caribbean. Data-entry activities, for example, continue to be an important source of income for a significant number of people in the region. Referring to the success of call centres, Vittorio di Martino states that:

"The main reason lies in cost savings that could run up to 50%, and even 75% for "offshore" call centres in Southern Africa, Asia, the Caribbean and Latin America."

Haiti presents all of the characteristics of a country with excellent telework potential. Haiti's use of the French language represents an important comparative advantage for call centres that target French-speaking customers. Haitians with a secondary education also speak English and Spanish. It is puzzling that given these assets a country like Haiti has not been able to exploit the opportunities available from telework and outsourcing in general. The primary reason seems to be the near absence of an institutional and regulatory framework that would provide relevant information to potential investors. Call centres use voice facilities, especially VoIP. In the absence of clear rules, many investors shy away from this type of operation for fear of infringing the law. Potential investors are often discouraged by the potential legal nuisances from the regulatory agency.

In addition, since the state has controlled all telecommunications-related fields in the past, market penetration in this area was very difficult. This has now changed: telecommunications are managed by a regulatory state agency that issues licenses to private concerns. However, implementation of the

law has changed very little. As a result, people still feel at risk because there are no real limits to the authority exercised by the regulatory institution.

Telework may represent an accessible instrument of economic relief. Since very little infrastructure is needed, an improved supply of electricity would allow for the installation of facilities in secured areas outside of Port-au-Prince. Raw data and final telework product could be transferred electronically to any other part of the country without risk for the investor. Preference could be given to the use of laptops, given their use of renewable and portable energy sources.

The promotion of telework-related strategies in the Caribbean requires a transnational strategy that combines the efforts of various stakeholders, from ICT practitioners locally and abroad to policy makers. It needs advocacy on the part of local people who are convinced of the excellent opportunities telework provides, including those who are part of the decision-making process, as well as the active support and involvement of the Diaspora, especially those who are part of the decision-making processes in their countries of residence and who want to engage in the economic rebuilding of their country of origin.

CONCLUSION

The Caribbean Diaspora provided the context for the early exposure of the Caribbean to the Internet and earlier electronic information and communications technologies such as the electronic Bulletin Board Systems (BBS) and Minitel. While the emergence of the Internet has reinforced the links between the Diaspora and home countres, in most cases the Diaspora is no longer the primary link between ICT and the home country. However, it does have the potential to become the major catalyst of strategies for improved utilisation of ICTs for development in the Caribbean.

The Internet and ICTs are information-based. The technologies, by facilitating reducing spatial constraints to the flows and storage of information, has opened spaces of autonomy and facilitated the development of new strategies and means of interaction among its users. The Internet and its attendant ICTs have created a new concept of virtual proximity via communities of interest and practice that complement and compete with earlier concepts of geographical proximity. Indeed, these flows of information and their attendant effect on other flows (especially capital and ideas), have redefined the relationship between the Diaspora, the country of residence and the homeland to produce what is today referred to as transnationalism.

Technological expertise and funding are for the most part available in the global North, in which a large part of the Caribbean Diaspora is resident. The need for expansion or penetration, proper application and usage, innovation and better use, and sustainable development via education and proper infrastructure, are characteristic of the global South, including the Caribbean. These needs, in many cases, are also characteristic of the Caribbean Diaspora within the Caribbean and Latin America[24]. The link between the Caribbean Diaspora, ICT and home countries is the link between the ability to formulate proposals based on these needs and the ability to offer the financial and technical means to convert these needs into mutually-beneficial and practical programmes.

[24] Based on interviews with respondents in Guyana, Barbados and the Dominican Republic, the authors found that, the Caribbean Diaspora within the Caribbean, while often willing to assist, and responsible for important financial contributions to the welfare of their home countries, are often hamstrung by similar difficulties in terms of access to information and communications technologies as counterparts in their country of origin. This area of study remains ill-defined, however, and deserves closer examination given widening social and economic differential within the region.

A report entitled ICTs and Economic Growth in Developing Countries (2003), by Professor David Souter of the University of Strathclyde, examined evidence for links between ICTs, productivity and economic growth. Souter's report discusses the relevance of these findings for developing countries and concludes with recommendations for action by policy-makers on issues such as infrastructure and access, liberalization and deregulation, and human capital that could facilitate ICT project implementation and generate positive policy developments.

Souter's comments provide context for the contribution of this study to improving our understanding of the impact and importance of the role of ICTs in the management of social and economic change in the region, including the impact of Caribbean Diaspora and transnationalism, a phenomenon indicated only partially by the growing volume of remittances to the region.

- "Developing countries and development agencies have to balance policy and investment options regarding ICTs against other socio-economic objectives."

This study recommends that, rather than balancing 'ICTs against other socio-economic objectives' as suggested by Souter, entrepreneurs, policy-makers and the international community consider information and communication technologies (ICTs) as a means to help meet existing development objectives, especially those relating to poverty reduction, education, health, wealth and job creation and the environment. Further, the welfare of the migrant/diasporic citizen should be considered in the development of any cogent plan for the development of information technology in the region, as many of the productive uses of these tools in the region are directly related to the transnational nature of Caribbean societies.

- "Hurdles that developing countries must overcome in order to reap the full benefits of ICT investment involve issues of economic structure (for example, the preponderance of agriculture and low income levels) and policy (including restrictive regulatory environments, low levels of human capital)."

This study has shown that agriculturally-based societies need not abandon their resource base to adopt ICT. Rather, ICTs may be considered as a new agricultural technology and provide rural and agricultural communities with new markets and information for diversification through the improved applications of existing knowledge. Responses from the field indicate that the Caribbean Diaspora may find ready alliances in rural and agricultural areas if goals and benefits are clearly defined and understood.

Networking, Infrastructure and Governance

As transnationalism is based on continuous communication, the development of a reliable, efficient and inexpensive ICT infrastructure is necessary for the Diaspora to enjoy and improve its relationship with their country of origin and the Caribbean in general while taking advantage of the opportunities offered by their country of residence. In terms of the development of integrated technological, development and Diasporic relations policies, as Souter himself notes, government policy priorities should aim at reducing the factors that inhibit the effective use of ICTs, and take positive steps that will enable maximisation of the benefits that can be derived from them, integrating ICT policy more effectively into overall national socio-economic development strategies. In the case of the Caribbean Diaspora, this may require Caribbean and other governments to

revise or redefine their role in the largely private, intra-household/community development efforts of Caribbean citizens.

Investment Opportunities (Cultural Industries, Intellectual Property and Entertainment Services; Agriculture, ICTs and E-commerce; ICT and Outsourcing)

As indicated earlier in this study, opportunities for investment and involvement by the Caribbean Diaspora are available in several areas, in particular the development and marketing of cultural and agricultural products through the use of the Internet and its attendant technologies. The Diaspora represents a major source of information on the Caribbean as well as a body of expertise for the provision of appropriate technical support that would allow greater penetration by the Caribbean into the markets for knowledge-based products and services, and the restructuring of primary industries. The Caribbean Diaspora also represents a major market for these product and services e.g. on-line educational services and educational/heritage tourism. While current approaches by the Caribbean Diaspora have been largely individualised, the pooling of resources via targeted investment programmes may allow the Diaspora to enjoy access to industries and investment opportunities which may be prohibitive in the country of residence

Diasporic cultural festivals such as Caribana and Calle Ocho are evidence of the interplay of change and continuity in the Caribbean Diaspora and its relationship to the region. These festivals also represent a key opportunity for demonstrating the value of ICTs as a means of reducing communications, transportation and other transaction costs inherent in Caribbean transnationalism. The adoption and adaptation of technologies by the Caribbean Diaspora may have a significant demonstration effect on communities in the Caribbean.

Information, Health and Disaster Preparedness

The Diaspora has an opportunity to reduce the costs incurred by themselves and the governments of Caribbean countries during burdensome rescue, treatment and reconstruction operations by investing in ICT-based initiatives in the area of health and disaster preparedness. By reducing the impact of natural disasters and promoting healthcare and healthy lifestyles in the Caribbean, these ICT-based investments, whether technical or financial, may provide greater human and environmental security and reduce costs to the Diaspora and the region as a whole over the medium- to long-term.

Diaspora Skills Bank

The potential presented by the Diaspora is mitigated by a lack of information on its location, skills and capacity to participate in the development of the homeland. The tools offered by ICTs represent a means of tracking would-be migrants, established Diasporans, and their offspring. It also represents a major means of developing and maintaining working relationships by or with the Diaspora across geographical space, either through intermittent physical presence or through the application of the ICT-based techniques used in the development of telework.

With the new era of intellectual capital and service industries, ICT brings yet another dimension to the gender divide based not only on inequality of access, but the differential quality of appropriation and adaptation based on gender-based socio-economic characteristics. The transnationalisation of households in the Caribbean also brings another dimension to the importance of improving access to communications technologies and reducing the cost of 'keeping in touch'. Indeed, the quality of this access may have implications for the quality of life of individuals whose households are divided among Caribbean countries or along the North-

South divide, and have serious implications for general social outcomes in the region. Gender will also be a determining factor in the development of ICT-based communities of practice and interest.

ICTs represent an important shift in the context of the Caribbean's development. The response to this change will determine the quality of outcomes for the Caribbean and its people. This study advocates the inclusion of ICTs in a wide framework of productive investment by Caribbean countries and their Diaspora in the transnational dimension of Caribbean society. ICT-based initiatives can only be fully effective in the presence of a general engagement by Caribbean countries to facilitate already existing initiatives and practices of their citizens. ICT expansion or proper application in the Caribbean require an examination of the elements mentioned in Professor Souter's study as well as the inclusion of a close consideration of the need to integrate efforts in the region and the Diaspora.

More than ever, the depth of the challenges implied by combination of ICTs and Diaspora in the advance of transnationalism needs to be further explored in order to take advantage of the benefits offered. The study has indicated several emerging areas for further research. Other promising areas such as the use of ICTs in promoting transnational research and development among the Diasporas of various countries in the Caribbean Basin in concert with the region itself are worthy of attention. This study also signals the need to investigate other types of Diaspora or transnationalism (e.g. the European, Indian, Chinese, African and Indigenous Diasporas of which many in the Caribbean are a part) in the context of the engagement of an international pool of multi-stakeholders, the value of the concept of Diaspora for ICT for development initiatives for the global community

ANNEXE I : QUESTIONNAIRE (Fr.)
Evaluation Régionale de la Diaspora Caraïbéenne et les Technologies de l'Information et de la Communication (TIC)

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Officier de Programme :
Angélica Ospina
aospina@idrc.ca

Date:

INFORMATION DU REPONDANT (A remplir par l'interviewer)

Nom du Répondant :
Nom de l'Organisation:
Poste/Fonction:

Website Adresse (s'il y en a):
Téléphone (1):
Téléphone (2):
Fax:

Adresse en Amérique du Nord (1):

Adresse en Amérique du Nord (2):

Adresse dans la Caraïbe (s'il y en a):

Déclaration de Mission de l'Organisation:

Court Résumé de l'Histoire de l'Organisation:

Glossaire

Diaspora

- Le mot Diaspora, tel qu'utilisé dans cette étude, fait référence aux ressortissants des pays de la Caraïbe vivant à l'étranger et leur progéniture.

Organisations de la Diaspora

- Ce terme inclut les groupes et individus de la Diaspora Caraïbéenne qui sont impliqués dans la contribution au développement social et économique de la région.

TIC- ***Technologies de l'Information et de la Communication***

- Ceci réfère généralement à l'Internet, mais peut aussi être utilisé pour les technologies qui s'y rattachent telles la téléphonie et la radio.

ICT4D- ***Information and Communication Technology for (4) Development (Technologies de l'Information et de la Communication pour le Développement)***

- Cet acronyme fait référence aux activités impliquant l'usage des TICs aux fins de développement (par exemple, l'éducation, la promotion de petites et moyennes entreprises, les soins de santé).

Objectif Général

Fournir une vue d'ensemble des initiatives et projets ICT4D dans la Caraïbe qui impliquent la Diaspora Caraïbéenne en tant que guide du développement de projets conjoints futurs, au sein des acteurs majeurs du secteur de l'ICT4D.

Objectifs Spécifiques

Les objectifs spécifiques de cette étude (enquête) sont :

- Répertorier (Cataloguer) les initiatives courantes ICT4D qui impliquent la Diaspora Caraïbéenne, de même que les différents acteurs (secteur privé et organisations non gouvernementales, Organisations de la Diaspora, les agences gouvernementales et les institutions donatrices) oeuvrant dans le domaine des TIC et les projets de la Diaspora dans la région de la Caraïbe.

- Identifier les stratégies et les approches qui ont été développées par les acteurs sus-mentionnés pour aider à mettre en œuvre les projets et articuler les efforts.

- Identifier les principaux défis et obstacles auxquels font face les acteurs impliqués dans la mise en œuvre des TIC et des projets de la Diaspora dans la région.

- Identifier les domaines et thèmes prioritaires pour le développement de projets potentiels ayant rapport aux TIC et impliquant la Diaspora.

Résumé

L'impact des dynamiques transnationales sur les conditions sociales et économiques au sein de la Caraïbe, devient de plus en plus évident (apparent). Ce questionnaire vise à identifier les priorités, les stratégies, les approches, les tendances, les défis, dans le développement de projets ICT4D mis en œuvre par ou avec la collaboration de la Diaspora Caraïbéenne. A cette fin, il nous faut analyser (investiguer) les domaines suivants :

A. Vue d'Ensemble Institutionnelle
B. Sélection de Projets
C. Marchés Cibles/Bénéficiaires
D. Networking (Réseaux)/Partnership (Partenariats)
E. Les Défis du Financement et de la Mise en Oeuvre
F. Perspective et Meilleures Pratiques

Mots-Clés: Technologie de l'Information et de la Communication, Diaspora, Caraïbéen.

A. VUE D'ENSEMBLE INSTITUTIONNELLE

A1. Votre institution est-elle impliquée, d'une façon quelconque, dans des projets ou initiatives ICT4D au sein de la Caraïbe, ayant rapport avec (qui visent, sont mis en œuvre ou en collaboration avec) la Diaspora Caraïbéenne ?

A2. Les ICT4D dans la Caraïbe constitue-t-elle une composante fondamentale de la mission et des stratégies de votre institution ? Veuillez spécifier le(s) pays où vous avez actuellement des projets.

A3. Quel est le pourcentage du portefeuille de votre organisation alloué à des projets impliquant les TIC et la Diaspora au sein de la Caraïbe?

B. IDENTIFICATION ET SELECTION DE PROJETS

B1. Identification de Projet
Veuillez indiquer les noms et thèmes des projets actuels (en cours) et passés impliquant les TIC et la Diaspora, au sein de la Caraïbe.

B2. Motivation/Critères de Projet
Veuillez indiquer votre motivation ou critères dans l'élaboration/sélection d'une initiative ou projet TIC et de la Diaspora, dans la Caraïbe.

B3. Description des résultats (services/produits offerts etc.)
Veuillez décrire le(s) type(s) de résultat(s) sur le(s)quel(s) se concentre votre projet ou initiative TIC et de la Diaspora, dans la Caraïbe.

i. Industries culturelles/propriété intellectuelle
ii. Education
iii. Santé et Assistance Socio-Psychologique (Counselling)
iv. Entreprise Industrielle (ex : Cybercafé)
v. Media
vi. Télécommunications à Valeur Ajoutée (ex : VoIP)
vii. Connectivité (ex : Wireless Networks (Réseaux Sans-Fil), ISP)
viii. Remise de fonds
ix. Agriculture
x. Accès Communautaire (ex : Télécentres)
xi. e-Gouvernement (veuillez spécifier _____)
xii. Cadre Régulateur
xiii. Autres _____

B4 Impact Visé

En conceptualisant/élaborant votre initiative/projet, quels sont les résultats majeurs que vous envisagez ?

B5 Impact

A votre sens, quels sont les résultats majeurs obtenus dans la pratique?

B4 Périodes / Délais

Veuillez identifier les périodes de vos projets ICT4D/Diaspora en cours ou passés, dans la Caraïbe, si c'est le cas.

i. 1990-1995
ii. 1995-2000
iii. 2000-2004
iv. 2004-

C. MARCHES CIBLES/BENEFICIAIRES

C1. Lieu

Quelles sont les zones de la Caraïbe visées par votre projet/initiative TIC (rurales, urbaines, semi-urbaines?

C2 Considérations de Genre, Age et Handicap

i. Votre projet/initiative, vise t-il à assister (supporter) un groupe spécifique de la population (genre, âge, handicap) ?
ii. Des considérations de Genre ont-elles été incluses dans l'élaboration de votre projet/initiative ?
iii. Les membres de votre groupe/bénéficiaires cible sont-ils impliqués dans le processus d'élaboration et de mise en œuvre du projet (genre, âge) ?

C3 Education/Niveau de Revenu

i. Quel est le niveau moyen d'éducation/alphabétisation de vos bénéficiaires ou population cible ?

ii. Quel est le niveau moyen de revenu de vos bénéficiaires ou population cible ?

iii. L'analphabétisme représente t-il un obstacle au développement de notre initiative/projet ?

iv. Votre stratégie TIC inclut-elle la formation en alphabétisation ou d'autres types de programmes d'éducation ?

D. NETWORKING/ PARTNERSHIPS (RESEAUX/PARTENARIATS)

D1. Réseaux Digital et Humain

Veuillez indiquer les stratégies et/ou canaux utilisés par vous/votre organisation dans le développement de projets TIC et de la Diaspora (sélection, recherche, financement, personne, mise en œuvre) dans la Caraïbe. Décrivez-en l'importance et l'étendue de l'usage.

a. Organisations Professionnelles de la Diaspora (y compris les Communautés / Listservs On-Line)

b. Associations Alumni (y compris les Communautés/Listservs On-line)

c. Contacts/Réseaux Personnels (y compris les réseaux familiaux ou de parenté)

d. Associations/Conférences Académiques (y compris les Communautés / ListServs On-Line)

e. Conférences/Ateliers sur le Commerce

f. Business Associations (d'Affaires) (y compris les Communautés / Listservs On-line)

g. Autres Réseaux de Collaboration Virtuels (ex : CIVIC- Caribbean TIC Virtual Community – *Communauté Virtuelle Caraïbéenne*)

D2. Partenariats Transnationaux/Locaux

Votre organisation, travaille t-elle en partenariat avec d'autres organisations dans votre (vos) pays cible(s) au sein de la Caraïbe ? Si oui, comment votre organisation identifie t-elle ou sélectionne t-elle ses partenaires locaux ?

D3. Partenariats au sein de la diaspora Caraïbéenne

Votre organisation a t-elle collaboré avec (d'autres) groupes / organisations de la diaspora ? Si oui, veuillez décrire les termes du partenariat.

E. DEFIS DE FINANCEMENT & DE MISE EN ŒUVRE

E1. Identification des Sources Majeures de Financement

Veuillez identifier vos investisseurs/donateurs/sources de financement pour les projets TIC et de la Diaspora dans la Caraïbe.

E2. Accessibilité au Financement pour ICT4D/Diaspora

Veuillez identifier les trois (3) sources de financement les plus accessibles pour le financement de projets TIC et de la Diaspora, dans la Caraïbe.

E3. Défis du Financement / Durabilité

Quels sont les défis identifiés en termes d'obtention et de maintien (continuité) du financement pour des projets TIC et la Diaspora, dans la Caraïbe ?

E4. Défis de Mise en Œuvre

Veuillez identifier les défis et obstacles clés que vous avez rencontrés dans la mise en œuvre de vos initiative / projets, dans la Caraïbe.

E5. Domaines de Perfectionnement (Amélioration)

Quels sont les domaines clés à améliorer pour faciliter la mise en œuvre d'initiatives futures TIC et de la Diaspora dans la Caraïbe ? Donnez-en une brève description.

F. PERSPECTIVES & MEILLEURES PRATIQUES

F1. Thèmes clés pour les initiatives/projets futurs

Veuillez identifier deux (2) domaines/thèmes clés pour le développement futur de projets TIC et de la Diaspora dans la Caraïbe.

F2. Perspectives des Répondants

Quels sont les plans de votre organisation, s'il y en a, concernant des projets ou initiatives futures impliquant les TIC et la Diaspora, dans la Caraïbe ?

F3. Autres Concernés (projets, donateurs, organisations)

Existe t-il d'autres institutions, projets ou initiatives que vous considérez comme utiles à inclure dans cette étude (enquête) ? Pourquoi ? Pourriez-vous nous en fournir les contacts ?

F4. Meilleures/Bonnes Pratiques

Veuillez identifier trois (3) meilleures pratiques de projets TIC et de la Diaspora dans la Caraïbe.

ANNEX II: QUESTIONNAIRE (English)
Regional Assessment of Caribbean Diaspora and Information and Communication Technologies (ICT)

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RESPONDENT INFORMATION (To be filled out by interviewer)

Name of Respondent:
Name of Organisation:
Post:

Website Address (if any):
Telephone (1):
Telephone (2):
Fax:

Address in North America (1):

Address in North America (2):

Address in Caribbean (if any):

Organisation's Mission Statement:

Short Background of Organisation:

Glossary

Diaspora

- As used in this study, Diaspora refers to nationals of Caribbean countries living abroad and their offspring.

Diaspora Organisations

- This term includes groups and individuals in the Caribbean Diaspora who are involved in contributing to social or economic development in the region.

ICT- *Information and Communication Technology*.

- This usually refers to the Internet, but can also be used to refer to related technologies such as telephony and radio.

ICT4D- *Information and Communication Technology for (4) Development*.

- This acronym refers to activities involving the use of ICTs for development purposes (e.g. education, facilitating small and medium enterprise, delivery of health care)

General Objective

The general objective of this study is to provide an overview of ICT4D initiatives and projects in the Caribbean that involve the Caribbean Diaspora as a guide to the development of future collaborative projects among major actors in the ICT4D sector.

Specific Objectives

The study's specific objectives are to:

- Map current ICT4D initiatives that involve the Caribbean Diaspora, as well as the actors (i.e., private sector and non-governmental organisations, Diaspora organisations, governmental agencies and donor institutions) working on ICT and Diaspora projects in the Caribbean region.

- Identify strategies and approaches that have been developed by the actors mentioned above to help implement projects and articulate efforts.

- Identify main challenges and obstacles faced by actors involved in implementing ICT and Diaspora projects in the region.

- Identify priority areas and themes for potential ICT-related project development involving the Diaspora.

Abstract
The impact of transnational dynamics on social and economic conditions in the Caribbean is becoming increasingly apparent. This questionnaire aims to identify priorities, strategies, approaches, trends, challenges in the development of ICT4D projects by or in collaboration with the Caribbean Diaspora. To this end, the following areas are to be researched:

G. Institutional Overview
H. Project Selection
I. Target Market/Beneficiaries
J. Networking/Partnerships
K. Funding & Implementation Challenges
L. Outlook & Best Practices

Keywords: Information and Communications Technologies, Diaspora, Caribbean.

A. INSTITUTIONAL OVERVIEW

A1. Does (Has) your institution have (had) any involvement in ICT4D projects or initiatives in the Caribbean that involve (targeted to, implemented by or in collaboration with) the Caribbean Diaspora?

A2. Is ICT4D in the Caribbean a core component of the mission and strategies of your organisation? Please specify the country (ies) in which you currently have projects.

A3. What percentage of your organisation's portfolio is dedicated to the projects involving ICT and Diaspora in the Caribbean?

B. PROJECT IDENTIFICATION AND SELECTION

B1. Project Identification
Please indicate the names and themes of current and past project(s) involving ICT and Diaspora in the Caribbean.

B2. Project Motivation/Criteria
Please indicate your motivation or criteria in designing/selecting an ICT and Diaspora initiative or project in the Caribbean.

B3. Description of output (services/products offered etc.)
Please describe the type(s) of output on which your ICT and Diaspora project or initiative focuses in the Caribbean.

i. Cultural industries/intellectual property
ii. Education
iii. Health and Counselling
iv. Industrial enterprise (e.g. Cybercafe)
v. Media
vi. Value-added Telecommunications (e.g. VoIP)
vii. Connectivity (e.g. Wireless Networks, ISP)
viii. Remittances
ix. Agriculture
x. Community Access (e.g. Telecentres)
xi. e-Government (Please specify _____)
xii. Regulatory framework
xiii. Other _____

B4 Intended impact

In conceptualising/designing your initiative/project, what are/were the major results you envisage(d)?

B5 Impact

In your view, what were the major results achieved in practice?

B4 Time Frames/Time Lines

Please identify the time frame for your current/past ICT4D/Diaspora project(s) in the Caribbean, if any.

v. 1990-1995
vi. 1995-2000
vii. 2000-2004
viii. 2004-

C. TARGET MARKET/BENEFICIARIES

C1. Location

What type of areas in the Caribbean does your ICT project/initiative target (rural, urban, semi-urban?

C2 Gender, Age, Disability Considerations

i. Is your project/initiative to assist a specific group of the population (gender, age, disability)?
ii. Have gender considerations been included in the design of your project/initiative?
iii. Are members of your target group/beneficiaries (gender, age) involved in the project design and implementation process?

C3 Education/Income Level

ii. What is the average education/literacy level of your beneficiaries/target population?

ii. What is the average income level of your beneficiaries/target population?

iii. Does illiteracy represent an obstacle to the development of your project/initiative?

iv. Does your ICT strategy include literacy training or other types of education programmes?

D. NETWORKING/ PARTNERSHIPS

D1. Digital and Human Networks

Please indicate which of the following you/your organisation use in the development of ICT and Diaspora projects (selection, research, funding, staffing, implementation) in the Caribbean. Describe importance and extent of use.

a. Diaspora Professional Organisations (incl. On-line Communities/Listservs)

b. Alumni Associations (incl. On-line Communities/Listservs)

c. Personal contacts/networks (incl. family/kinship networks)

d. Academic Associations/Conferences (incl. On-line Communities/ListServs)

e. Trade Conferences/Workshops

f. Business Associations (incl. On-line Communities/Listservs)

g. Other Virtual Collaboration Networks (e.g CIVIC- Caribbean ICT Virtual Community)

D2. Transnational/Local Partnerships

Does your organisation work in partnership with other organisations in your target country or countries in the Caribbean? If so, how does your organisation identify/select local partners?

D3. Partnerships within the Caribbean Diaspora

Has your organisation collaborated with (other) Caribbean diasporic groups/organisations? If so, please describe this partnership.

E. FINANCING & IMPLEMENTATION CHALLENGES

E1. Identification of Major Funding Sources

Please identify your major investors/donors/sources of funding for ICT and Diaspora projects in the Caribbean.

E2. Accessibility of Funding for ICT4D/Diaspora

Please identify the three (3) most accessible sources of funding for ICT and Diaspora projects in the Caribbean.

E3. Funding/Sustainability Challenges

What challenges have you identified in terms of obtaining and maintaining funding for ICT and Diaspora projects in the Caribbean?

E4. Implementation Challenges

Please identify key challenges and obstacles that you have encountered in the implementation of your projects/initiatives in the Caribbean.

E5. Areas for Improvement

What are the key areas for improvement to facilitate the implementation of future ICT and Diaspora initiatives in the Caribbean? Please give a short description.

F. OUTLOOK & BEST PRACTICES

F1. Key themes for future initiatives/projects

Please identify two (2) key areas/themes for future development of ICT and Diaspora projects in the Caribbean.

F2. Respondents' Outlook

What are your organisation's plans, if any, for future projects or initiatives involving ICT and Diaspora in the Caribbean?

F3. Referral (projects, donors, organisations)

Are there other institutions, projects or initiatives that you would consider useful for inclusion in this study? Why? Could you provide contact information for these institutions?

F4. Best/Good Practices

Please identify three (3) best practices in ICT and Diaspora projects in the Caribbean.

REFERENCES

Ahmad, Nadim. (2003). *Measuring Investment in Software.* Paris, Directorate for Science, Technology and Industry, OECD.

Barro Robert J. and Jong-Wha Lee. (2000). *International Data on Educational Attainment : updates and implications* NBER Working Paper 7911, Washington D.C., NBER. *(http://www2.cid.harvard.edu/ciddata)*

Basch, Linda, Nina Glick-Schiller, and Cristina Szanton-Blanc. (1994) Nations Unbound: Transnational Projects, Postcolonial Predicaments and Deterritorialized Nation-States Amsterdam, Gordon and Breach Publishers.

Carrington, William J. and Enrica Detragiache. (1998). *How Big is the Brain Drain?* International Monetary Fund, Washington D.C.

Casimir, Jean. (1997). La invención del Caribe ('La Caraibe, Une et Divisible' trad. Isabel Laboy Llorens). San Juan, Editorial de la Universidad de Puerto Rico.

CIVIC (Caribbean ICT Stakeholders Virtual Community). (2003). *Towards a Vision of a Caribbean Information Society: A Contribution to the WSIS*, CIVIC (*http://www.icamericas.net/workshops/caribbean/*)

Cohen, Daniel and Marcelo Soto. (2001). *Growth and Human Capital: good data, good results* OECD Development Centre Working Paper 179 *(http://www.oecd.org/dataoecd/33/13/2669521.xls)* Paris, OECD.

DAC Network on Poverty Reduction. (2004). *ICTs and Economic Growth: The OECD Experience and Beyond.* Paris, OECD

Dumont, Jean-Christophe and Georges Lemaître. (2004).*Counting Immigrants and Expatriates in OECD Countries: A New Perspective.* OECD Social, Employment and Migration Working Papers, Paris, OECD *www.un.org/esa/population/publications/ittmigdev2005/P09_Dumont&Lemaitre.pdf*

Fletcher, L. P. (1980). *Barbados Emigration Policy from Emancipation to Independence, 1838 to 1936*. Fifth Annual Conference of the Caribbean Studies Association, Curacao, Netherlands Antilles.

Goulbourne, Harry. (2002). Caribbean Transnational Experience. London, Pluto Press.

Grosfoguel, R., Héctor Guzmán-Cordero. (1998). *"International Migration in a Global Context: Recent Approaches to Migration Theory."* Diaspora **7**(3): 351-368.

Guyana Monthly Update. "*Government Opposes GT&T Monopoly*" *http://www.guyana.org/Update/july2002.html*
Accessed: 04 March, 2005

Henry, Frances. (1994). The Caribbean Diaspora in Toronto: Learning to Live with Racism. Toronto, University of Toronto Press.

International Institute for Communication and Development-IICD. *IICD supported project: Conditions for ICT adoption in developing countries* *http://www.iicd.org/projects/articles/IICDprojects.import20* Accessed: 21 Feb, 2005

Iniciativa de Comunicación. (2004). *Communications Landscaping: North and Latin American Transnational Communities* Report prepared for the Rockefeller Foundation.

Kenny, Charles. *Presentation to WIDER Conference on the New Economy in Development*. Helsinki, Finland, May 10-11, 2002
http://www.wider.unu.edu/conference/conference-2002-1/conference2002-1.htm

Kirkman, Geoffrey. *Country Profile- Dominican Republic.* In Geoffrey Kirkman et al, Eds. The Global Information Technology Report 2001-2002: Readiness for the Networked World (2002) Oxford, Oxford University Press. *http://www.cid.harvard.edu/cr/profiles/DominicanRepublic.pdf*

Kunz, Jean Lock, Anne Milan, and Sylvain Schetagne, M. (2000) *Unequal Access: A Canadian Profile of Racial Differences in Education, Employment and Income*. Toronto, Canadian Race Relations Foundation (CRRF).

Levitt, Peggy and Ninna Nyberg-Sorensen. *The Transnational Turn in Migration Studies*. Global Migration Perspectives, no. 6 Global Commission on International Migration, October 2004

Live, Y.-S. (1993). *Chine-Diaspora: Vers l'intégration à l'économie mondiale.* Hommes et Migrations(no. 1165): 39-43.

Ministry of Public Administration and Information. (2003). *Connecting to the Future: Trinidad and Tobago's National ICT Strategy*, Port-of-Spain, Ministry of Public Administration and Information.

Multilateral Investment Fund (MIF), Inter-American Development Bank. (2004) *Sending Money Home: Remittance Recipients in the Dominican Republic and Remittance Senders from the US*.
http://www.iadb.org/mif/v2/files/studyremit_NYNov04.pdf

Nurse, L.A.. (2003). *Digital Diaspora Network for the Caribbean and ICT Development in the CARICOM Countries.* Discussion Paper prepared for the Meeting on Bridging the Digital Divide for the Caribbean.

Nurse, Keith. (2004). *Diaspora, Migration and Development in the Caribbean.* Ottawa, Canadian Foundation for the Americas (FOCAL) *http://www.focal.ca/pdf/migration_caribbean.pdf*

OECD. (2001). *ICT Investment and Economic Growth in the 1990s*: *Is the United States a unique case? A Comparative Study of Nine OECD Countries* Paris, OECD.

OECD Ministerial Council. (2003) *The Policy Agenda for Growth: An Overview of the Sources of Economic Growth in OECD Countries.* Paris, OECD.

Pessar, Patricia R. (1996). *Dominican Transnational Migration: Uneven Benefits Back Home and the Contingency of Return.* In Emilio Betances and Hobart A. Spalding Eds. The Dominican Republic Today: Realities and Perspectives. New York, Bildner Center for Western Hemisphere Studies**:** 154-170.

Pilat, Dirk and Frank C. Lee (2001) *Productivity Growth in ICT-Producing and ICT-Using Industries*: Paris, Directorate for Science, Technology and Industry, OECD.

Ratnathicam, Indran and Daniel Coore, *Country Profile- Jamaica.* In Geoffrey Kirkman et al, Eds. The Global Information Technology Report 2001-2002: Readiness for the Networked World (2002) Oxford, Oxford University Press. *http://www.cid.harvard.edu/cr/profiles/Jamaica.pdf*

Richardson, Bonham C. (1985). Panama Money in Barbados, 1900-1920. Knoxville, TN, University of Tennessee Press.

Saunders, Warford and Bjorn Wellenius. (1993) Telecommunications and Economic Development 2nd Ed., Baltimore, Johns Hopkins University Press.

Souter, David. (2003) *ICTs and Economic Growth in Developing Countries.* Report prepared for the OECD.

Tharp, Marye C. (2001). *Marketing and consumer identity in multicultural America.* Thousand Oaks, CA, Sage Publications.

Wellenius, Bjorn. (2002) .Closing the Gap in Access to Rural Communications: Chile 1995-2002 Washington D.C., World Bank.