

RATIONALE FOR THE SUB-THEMES AND CARIBBEAN SPECIFIC ICT INDICATORS

At the 2nd Meeting of the ICT Sub-Committee on Statistics held in Barbados February 2009, the members identified some Caribbean Specific Themes along with issues and concerns. Some of the themes identified were:

- Information Literacy
- Poverty Alleviation
- Health
- Security
- Policy and Regulatory Framework
- Governance
- Social Inclusion
- Agriculture

In order to measure the impact of the ICT sector on the various themes identified, a core set of indicators had to be identified. Whilst some of these indicators are already established in the form of the “*Partnership Indicators*”¹, the sub-committee on ICT also attempted to develop new Caribbean Specific ICT Indicators out of the issues and concerns raised at that 2nd meeting.

These indicators are required to measure the access, use, and impact of the ICT sector on the various themes identified. The statistics collected will in turn inform and guide policies that are likely to result in benefits that extend beyond economic ones to include other areas in which ICTs could play a pivotal role, such as poverty eradication, improved education and governance, and environmental monitoring.

¹ Partnership on Measuring ICT for Development-Core ICT Indicators 2010
http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-ICT_CORE-2010-PDF-E.pdf

Poverty Alleviation

In developing the indicators under this theme, the questions was asked: *“How can ICT4D impact Poverty Alleviation?”*. This led to the obvious question: *What is poverty?*

Definition

Poverty is defined *"a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services."* (World Summit on Social Development in Copenhagen in 1995)

The poor essentially lack the basic capacity to participate effectively in society. They cannot take advantage of opportunities and their options and choices are therefore limited. The definition above encompass a variety of human needs which if not met becomes the issue(s) or concern(s) of the poor. The justification of the following sub-themes therefore arise out of the need to address:

- Information Deprivation
 - Communication and Community access
 - Type of E-information received
 - Quality of E-information accessible
- Education Deprivation
- Income/ Consumption/Affordability
 - Food deprivation
 - Health deprivation

Information Deprivation

This sub-theme addresses the issue of access to and availability of a radio, telephone (land and mobile), television (or broadcast media) and Internet-based communications. The likely benefit and impact of ICT would be the facilitation of both access to and receipt of information that can

affect personal decision-making relative to employment, access to services and education that can bring them out of the state of poverty. It can therefore improve the number of households and individuals (including ethnic minorities/indigenous groups) who have access to information.

Communication and Community access

Improved access to information can also improve an individual's ability to earn a better income as reflected in their change of occupation, employment status and income.

The proposed indicators under this theme measure the proportion of households/ population below the poverty line by access to radio/telephone/internet. Some of the factors addressed are the:

- level of communication via ICT in both the household and in the community.
- Cost – affect affordability and therefore access to services as well as time spent on the internet
- Type and quality of service provided and the time spent on the internet and purpose for which the internet is used. This will determine speed of the information and the reliability of the service.

The indicators proposed are:

1. Proportion of households below the poverty line with access to other forms of telephony e.g. radio telephony
2. No. of public internet access areas (eg. hot spots, libraries) by region/parish.
3. No. of internet cafés by service provided and region/parish.
4. Cost of service provided in internet cafés.
5. No. of computers per household (by type).
6. No. of households with an internet subscription (by type of service).
7. Cost of internet subscription (by type).
8. No. of internet service providers (by type of service provided).

9. No. of subscribers (by type of service subscribed to).
10. Total No. of hours spent using the internet per week by type of use.

Indicator Relevance

No.	Proposed Caribbean Specific Indicators	Justification
HH14	Proportion of households below the poverty line with access to other forms of telephony ²	Facilitates access to information in the absence of the traditional communication IT services in remote areas.
HH17	No. of computers per household (by type)	More computers whether private or public and subscribers will cater for the demands of users al more accessibility of information
HH15	No. of public internet access areas (eg hot spots, libraries) by region/parish.	
HH16	No. of internet cafés by service provided and region/parish	
HH18	No. of households with an internet subscription (by type of service)	
HH19	No. of internet service providers (by type of service provided)	
HH20	Cost of internet subscription (by type)	
HH21	Cost of service provided in internet cafés	Cost will affect time spent on internet and affect one's ability to access the information when needed. Eg an unemployed youth looking for a job may need to access information on how to prepare for an interview.
HH22	Total No. of hours spent using the internet per week by type of use	Depending on what the internet is being used for, and the ability of the person to access and apply the information needed; more time spent could translate into greater access and receipt of information and services enabling decision-making.

Type and quality of E-information received

² Other forms of telephony include: Radio telephony is a device using telephones in which audible communication is established by use of a two-way radio transmitter and receiver. Also called wireless telephone.

Internet Telephony: is the use of the Internet rather than the traditional telephone company infrastructure and rate structure to exchange spoken or other telephone information. Since access to the Internet is available at local phone connection

There are no guarantees that improved access to ICTs leads to poverty reduction. It takes more than processing and communicating information. The information presented should be timely as well as both easily and readily accessible and understood. Whilst much e-information on almost any topic is available on the internet, there needs to be a deliberate effort to customize the information to suit the needs of the various target groups taking into consideration their level of literacy, skills, educational level, interest and their specific information needed to affect personal decision-making relative to employment, access to services and education that can bring them out of the state of poverty.

The justification of this theme therefore, lies in the need for the information to be relevant and appropriately presented in a format that is useful and beneficial to the poor.

Specific questions could be asked about the usefulness and relevance of the information disseminated and the time taken to access the information required. The indicators proposed under this sub-theme are:

- The number of local radio and television programmes targeting the poor

Education Deprivation

The poor can also be defined as those who are deprived of education such as the illiterate and those who either never attended school or who did not complete primary school. Therefore if the poor cannot access education it will affect the type of jobs they can access and by extension their income level and livelihood. Hence the justification of this theme.

Through the use of GIS technology³, ICT can be used to gather critical information on the poor such as where they are located and what their needs are.

For ICT to impact this area, it must also address some of the reasons why children and adults are deprived of at least a primary-level of education. Much of these reasons are linked to what the

³ Use of GIS Technology can aid the development of Poverty maps can aid developers, planners, researchers in analysis and identify levels of poverty in different areas. Which villages and communities are more in need of social programmes,etc.

household can afford given the income level and the basic consumption needs such as food and water, shelter, clothing, transportation vs the services they can access. These unmet needs along with other social and family issues can lead to truancy and children forced to into work rather than attending school. Other reasons might be the lack of basic health care and sanitation facilities, availability and accessibility of schools and trained teachers. Poor performance also increases the chances of school drop-outs. ICT can provide improved access to education up the primary level and remedial schooling, vocational training for adults who were deprived of education.

Indicator Relevance

No.	Issue/Causes	Indicator	Justification for this indicator/measure
	Education Deprivation		
ED11	<ul style="list-style-type: none"> Improving literacy and numeric skills 	Proportion of pupils/students using audio/visual aids at home to develop skills in reading and computation skills.	The use of audio and visual aids whether at school or home can improve literacy and cognitive development
ED12		No. of hours spent using the computer at home by type of use?(playing educational computer games)	
ED13	<ul style="list-style-type: none"> Income (this issue is addressed more extensively under the sub-theme Income/Consumption Deprivation) 	No of new ICT jobs created by sector and skill level required	Availability of new jobs in ICT can reduce youth unemployment. Emerging small businesses eg. phone card vendors, computer technicians, internet café attendants can contribute to the income of the household to buy food and insure children are in school
ED14		No of youths trained/ graduated in ICT related fields	Training and qualification in ICT related fields can increase the chances of employment.
HLT	<ul style="list-style-type: none"> Health and Sanitation 	No of Health care institutions with internet access	Can lead to a reduction in cost of health care whilst improving access and reach.
		Easier Access to and retrieval of information,patient referrals; facilitate use of health insurance cards; processing of claims.	

Income Deprivation

Traditionally the poor are found in regions with limited agricultural potential and far from main national markets. Their livelihoods include subsistence farming, waged work and industrial related type jobs. They typically rely on work which is insecure, low paid, unhealthy and unsafe. Many work in the informal sector.

ICT can improve the agricultural potential of rural areas and production by reducing cost whilst improving yield per acre. It can also improve on traditional farming methods.

Indicator Relevance

No.	Issue/Causes	Indicator	Justification for this indicator/measure
	Improving on the characteristics of the jobs of the poor		
LIV15	Access to Information	No of farmers receiving information on the weather by type of communication device.	Timely e-information (e-weather, e-agriculture) is critical for decision making in the field and can make the difference in quantity and quality of production and hence the income the farmer can receive. It allows the farmer to remain competitive whilst ensuring he gets the best possible price for his produce.
LIV16	Distance of main markets	No of farmers receiving information on the market prices by type of communication device	
LIV17		Proportion of persons accessing information (that enable them to make decisions to enhance their livelihood) by type of information.	
	Insecure		Creating new jobs
	Low paid		ICT can provide increase access to and opportunity for training, education advancement, information and knowledge sharing
	Unhealthy and unsafe		Improve occupational health and safety on the job

