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RECENT DEVELOPMENTS IN MEASURING HOUSEHOLD, INDIVIDUAL AND BUSINESS ICT ACCESS & USE INDICATORS – CENTRAL STATISTICAL OFFICE – TRINIDAD & TOBAGO

BACKGROUND

In **January 2009**, representatives from the national statistical offices, telecommunication regulators, agencies with an interest in ICT met in Port of Spain (POS) Trinidad for the '**First Capacity Building Workshop on Information Society Measurement in the Caribbean**' which was held from the 26th to 30th January 2009.

This workshop was organized jointly by UNECLAC, ITU and UNCTAD. It was host by UNECLAC and the Ministry of Public Administration, Government of Trinidad & Tobago.

The purpose of this workshop was a Training course on measuring ICT access and use in households and businesses.

The course was aimed at improving the capacity of official data producers in the Caribbean countries to produce internationally comparable statistics on ICT access and use in households and by individuals, ICT use by businesses , the ICT sector and international trade in ICT goods.

The training course offered to Caribbean countries an opportunity to get to know ICT statistics and the importance of measuring ICT in a harmonized way for better policy making and addressing the digital divide. At the same time, the importance of quality and reliability when carrying out surveys and producing statistics was addressed.

Approximately 12 islands were represented with a majority of the participants from regional NSO's. Other participants came from ICT policy making bodies with 1 representative from a telecommunications authority.

Some of the outcomes of this meeting were:

- a) Those NSO's who lacked experience in collecting ICT data showed high interest in topics like survey implementation in both household and business sectors as well as on survey design and data sources.
- b) This training course was useful in bringing together ICT policy makers and ICT data users around the table. On the issue of measuring ICT statistics, the training was a good opportunity to promote this interaction, which helps to encourage NSO's to measure ICT statistics.

In view of the latter, invitations were also sent to all NSO's in the CARICOM territories for a representative to attend the '**5th Regional Workshop on Information Society Measurement In Latin America and the Caribbean**' in Rio de Janeiro April 6th – 8th 2009. This workshop was organized by the Observatory for Information Society in Latin America & the Caribbean (OSILAC), ECLAC, Canada's International Development Research Centre and the European Commission @LIS.

Trinidad & Tobago was represented by Mr. Tyrone Gopaul, Statistician I from the Central Statistical Office. There were no other representatives from the Caribbean region.

The agenda was dominated by the Latin American countries present at the meeting. They presented their most recent progress on the implementation of:

- a) ICT Indicators in Business Surveys and the ICT sector
- b) ICT access & use indicators in household surveys

And the development of indicators on:

- c) The use of ICT for e – government
- d) The use of ICT for education.

Other worthwhile topics discussed were the:

1. Advances, challenges and perspectives in measuring ICT
2. Revised ICT Core List Indicators for Households – Methodological discussion on harmonization challenges
3. Revised ICT Core List Indicators for Businesses – Methodological discussion on harmonization challenges

Together with topics on:

4. Using ICT indicators for the development of public policies
5. Analysis of ICT indicators for designing public policies.

At the 5th workshop, Trinidad & Tobago CSO did not present on any of the above topics because at the time it was not involved in the actual measurement of these indicators.

WORK CURRENTLY BEING DONE TO MEASURE ICT INDICATORS IN THE CSO.

This was a direct result of the 5th workshop in Rio de Janeiro (April 2009) and the first capacity building workshop in Port-Of-Spain (Jan 2009).

A) Inclusion of a section in the Population and Housing Census questionnaire re : Individual Use of Information & Communication Technology

Initially, all 6 questions from pgs 94 to 96 of the ‘**Manual for measuring ICT access and use by Households & Individuals**’ 2009 Ed were proposed for inclusion into the questionnaire.

Because of the total number of questions to be included in the questionnaire (70), it was agreed that only the first 3 questions (Pg 94) can be placed on the form. There was also change in the reference period from 1 year to **3 months** and a change in the age group to be measured from 14 to 74 years (which was the stipulation in the manual) to **3 years and over**.

These changes in age and reference period were made to facilitate policy interests by the government. For international reporting purposes, the number of individuals aged 14 to 74 can be tabulated after the conclusion of the census for these 3 questions.

The questions included in this Section 10 of the questionnaire and their response categories are:

1. Did you have use of a mobile telephone during some or all of the **last 3 months**?
2. Have you used a computer from any location in the **last 3 months**?
3. Have you used the internet from any location in the **last 3 months**?

The response categories are: 1. Yes 2. No 3. Not stated

The response rate is expected to be high because: a) Problem of recall is low b) Not many response categories.

B) Household Use of Information & Communication Technology

The household section of the questionnaire also contains questions on ICT. These are:

1. Does the household have internet? 1. Yes 2. No
2. What type of internet access services is used? Multiple Responses Allowed

These are:

- a) Analogue b) Other Narrowband c) DSL d) Cable Modem
e) Other Fixed Broadband f) Mobile Broadband g) Don't Know

Question 2 above may require the enumerator to explain and / or decipher what are the applicable types of internet access since some household heads may not know the answer to this question.

Explanations are provided in the enumerator's manual for the census to assist enumerators.

FUTURE WORK – HOUSEHOLD & INDIVIDUAL USE ICT INDICATORS

The 2011 Census would be undertaken during the period January 9th to February 20th 2011.

When completed it would provide an ICT household and individual population frame. This can be used to collect more detailed information on ICT from individuals and households. Questionnaires can then be mailed or field interviewers employed to ascertain the following information in follow up surveys: **(See Manual for measuring ICT Access and Use by Households & Individuals) 2009 Ed ITU Pgs 95 – 96**. These questions are:

INDIVIDUAL USE OF ICT

1. Where did you use the internet in the last 12 months?
2. How often did you typically use the internet during the last 12 months (from any location)?
3. For which of the following activities did you use the internet for private purposes in the last 12 months (from any location)?

With respect to 3. above, these categories have one additional activity since the first publication in 2009. The entire list of activities can be seen in the publication **CORE ICT INDICATORS 2010** – Partnership on Measuring ICT for Development Pg 23 & 24.

C. BUSINESS ICT ACCESS & USE QUESTIONNAIRE

This is an ICT instrument that was designed from the '**Manual for the Production of Statistics on the Information Economy**' 2009 Rev Ed UN. It is patterned on the UNCTAD Model Questionnaire on Pages 125 – 127.

It contains the 12 core business indicators recommended by the Partnership on Measuring ICT for Development.

A project proposal was prepared in **April 2010** with a budget for the conduct of this first ICT Business Surveys Census.

It was primarily designed to collect benchmark ICT data and at the same time obtained firm specific data that can be used to update the firm's records on the Business Register.

In **October 2010**, the Ministry responsible for the CSO allocated a total of \$100,000 TT or approximately \$ 15,750 US for this project. These monies are to be used from October 1st 2010 to September 30th 2011.

This UNCTAD manual states that businesses with **10 or more employees can be considered the 'in scope population'**. In the CSO Business Register of establishments, this would equal to approximately 15,000 businesses from various economic classifications and localities.

It was originally planned to do a complete census of business establishments (estimated at 30,000 firms) but the amount of funds allocated would not be able to satisfy this goal.

In fact, the level of funding provided would mean this survey would have to be carried out by **primarily by mail**.

The questionnaire can also be emailed to firms for completion. Interviews can be done by telephone with some personal interviews on the field at the firm's location.

The administration of this survey would have to be conducted in ways that are not customarily used at present in the CSO. For example:

1. The questionnaire can be published in its entirety in the national newspapers with an invitation for firms to complete and submit by a specific deadline date.

The estimated response rate using this procedure can be assumed to be low, since there is no incentive for firms to submit the questionnaire. But the cost to print the entire questionnaire in the newspaper would be low compared to the 'circulation' of the papers i.e. the proportion of the in scope businesses that can be reached in any one day.

2. The questionnaire can be administered with the assistance of another government organization. For eg:
 - a) the Board of Inland Revenue. At the point where businesses have to pay their quarterly taxes four times per year. While waiting in line, the survey can be administered.
 - b) the National Insurance Board. At the point where businesses have to pay their monthly contributions for number of employees employed. Same procedure applies above

In both cases, the administration of the survey can temporarily be placed in these organizations because it is a 'legal' obligation for firms to pay taxes and insurance contributions.

Note: This would require these organizations to want to collaborate with the Central Statistical Office.

The cost of the provision of this service would be free to all parties because it is different arms of the state.

The business would have to **complete the questionnaire only once** and not every time a visit is made to these government agencies.

3. The questionnaire can be administered simultaneously with the Population and Housing Census questionnaire.

In theory, while this would be practical to do, in reality it is very onerous to implement.

The census enumeration is aimed at getting specific information about individuals in the household and characteristics of households. The only information collected on businesses in Trinidad & Tobago in the Census Visitation Record is: Name, Address, Economic Activity and No. of persons employed.

To do an additional survey together with the Census questionnaire targeted to businesses may seem burdensome on the part of the enumerator.

The final strategy for the administration of the Business ICT survey has not been finalized but options 1 & 2 above would be looked at earnestly when the final proposal is completed.

This Business ICT project is tentatively scheduled to begin after the census is completed i.e. Feb 2010. It would most likely be administered in the 3rd quarter of the 2011 i.e. July to September 2011.

FUTURE WORK - BUSINESS ICT INDICATORS

Once the Business ICT survey has been completed, periodic surveys every two or three years can be done. A time series can then be produced. Based on these outcomes, the progress of the 12 ICT business indicators can be monitored to see if there would be increased use and access of ICT in Businesses in Trinidad & Tobago and its effect of the development and prosperity of the business community.

CONCLUDING REMARKS

The overall status of Trinidad & Tobago - Central Statistical Office (CSO) with respect to the collection of the ICT indicators is in its infancy.

This office has benefited tremendously from the training offered by international and regional agencies with respect to the: 1. Design of the survey instruments 2. The collection and inclusion of ICT statistics in the work program of the National Statistics Office and 3. The results from different countries in Latin America with respect to their own country experiences and their shortfalls and problems identified with these surveys. For e.g. these would be low response rates, misinterpretation of questions on the survey instrument etc.

The 8th World Telecommunication/ICT Indicators meeting in Geneva would be a gathering of world experts and best practices in the areas of Households, Individual and Business ICT Indicators. Since Trinidad & Tobago CSO would be making a bold step in the measurement of these indicators, it is hoped that the experiences gained in this seminar can be used and implemented during the administration of the ICT survey questions & instruments in 2011.

Also, Trinidad & Tobago has taken the lead in the CARICOM region with respect to the inclusion of an entire section on Individual ICT Indicators in the Population & Housing Questionnaire and the administration of a stand alone Business ICT Indicators Survey.

Our experiences with these survey questions would be shared with other Caribbean islands in the future with the intent to encourage each one of the 18 islands in the region to incorporate ICT surveys / censuses in the work programs of their various National Statistical Offices.

Regards

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