# PROMOTING STATISTICS LITERACY: NEW OPPORTUNITIES FOR THE TRAINING OF INSTITUTIONAL RESEARCH PROFESSIONALS ®

# Linda Hewitt Centre for Interdisciplinary Research and Development Trinidad and Tobago

Institutional Research aims to enhance the operations of institutions through the production of data and information that are used to improve the effectiveness of the organization. Statistical organizations are well positioned in the nature of their operations to benefit from the pursuit of institutional research activity. Since such research employs a variety of statistical concepts and methods in its practice, the training of institutional research professionals is dependent upon the outcomes of education and training and the methods adopted in the teaching of statistics. This paper examines the existing functions and areas of operations as well as the new and emerging demands for statistics and indicators, which pose challenges for National Statistical Organizations (NSO'S), in the 15 member states of the Caribbean Community (CARICOM) region. The author identifies some of the critical areas in which the practice of institutional research can be established and pursued and suggests that the training of professionals in this area will be a desirable support function at time of increasing statistical demand.

#### INTRODUCTION

The Caribbean Community (CARICOM) comprising 15 member states was established by the 1973 Treaty of Chaguaramas, to provide opportunities for the development of products and the conduct of free trade among countries of the English speaking Caribbean Region. The movement towards an increasingly liberalized and global international environment sent signals to the heads of governments of the region that there should be further deepening of integration and strengthening of regional economies to achieve a single market economy and sustained development. The idea of a Single Common Market and Economy (CSME) was therefore conceived, proposed and accepted in 1989 and is soon to become a reality. As explained on page 2 in the CARICOM Secretariat's Stats News & Views, Vol 1 2001, the CSME "will allow for the cross border establishment of businesses and the free movement of capital, goods and services, and specific categories of persons across the region." Benefits to be derived will include: the creation of opportunities for the expansion of competitive production and trade in goods and services, the expansion of investment and employment opportunities, and the provision of support to disadvantaged countries and sectors. However, almost all the countries have lagged behind in achieving social development. National Statistical Organisations now manage to conduct their statistical activities under conditions of financial and human resource constraints and, called upon to rise to these new challenges, will most certainly render some hard pressed to meet the new demands. In becoming ready for the new developments ahead, countries must reassess and reform their existing activities and practice and respond to new demands for statistics. In the past, institutional research seems to have been a luxury they could ill-afford. Various accommodations were therefore made with external institutions, such as the Central Banks and Planning and Research agencies in the region. At the present time, the NSO's need to find a way to have institutional research incorporated into their ongoing operational activities. The benefits to be derived from this development and the necessity of training professionals to perform this function will be outlined in this paper.

## CHARACTERISTICS OF CARICOM MEMBER STATES

The imposing feature of the countries of the CARICOM is their smallness both in terms of population and physical size. Categorized as Small Island Developing States they remain vulnerable to a series of global, economic and environmental forces, as well as having their share of social and security problems. The populations of member states comprising the region shown in Table 1, barely amount to six million and are noted to be increasing at a slower rate than in the past. Nevertheless, the countries together have maintained a range of statistical activities in the

areas indicated. These statistical activities pose challenges and are pursued amidst many constraints.

Table 1 Population of CARICOM Member States, estimated for year 2000 by Country and Sex.

COUNTRY	POPULATION		
	WOMEN	MEN	
Antigua & Barbuda	38,725	36,016	
The Bahamas	155,833	147,778	
Barbados	139,581	129,211	
Belize	116,442	116,669	
Dominica	34,750	35,975	
Grenada	51,106	50,200	
Guyana	391,744	380,470	
Jamaica	1,305,052	1,300,735	
Montserrat	2,481	2,793	
St.Kitts/Nevis	21,360	21,000	
St.Lucia	79,502	76,494	
St. Vincent & Grenadines	56,020	55,797	
Suriname	203,486	206,380	
Trinidad & Tobago	642,949	640,914	

Source: CARICOM Secretariat Statistics Database.

#### Statistics Sectors:

The areas for which statistics are produced on a regular basis include:

- 1. Agricultural
- 2. Economic: International and Regional Trade
- Financial: National Income, Balance of Payments, External Debts, Interest and Exchange Rates.
- 4. National Accounts
- 5. Population and Vital Events
- 6. Population and Housing Census
- 7. Social and Gender
- 8. Surveys: Income and Expenditure, Continuous Sample Survey of Population, Labour Force
- 9. Tourism and Environment

#### Problems and Challenges

Not all countries engage in the range of statistics listed, due to varying size, financial, material and human resource capacity. As a consequence, many functional problems are not easily overcome nor challenges readily embraced. These can be identified as follows:

Those of a general nature are: (a) the maintaining of regular data series and the linking of output across sectors; (b) the timely revision of international classifications; (c) devising and implementing locally and regionally customized statistical systems, (d) eliminating lag in adopting new systems so as to be internationally comparable, (e) responding to new demands in a timely manner. Specifically in the area of Trade statistics, there is some difficulty in maintaining classification systems and researching new products and service areas. In the area of the Retail Price Index, the timely re-basing of the index and the updating of the basket of consumable goods are noted. With respect to the National Accounts, there is slowness to implement new systems,, e.g., the UN (1993) System.of National Accounts, and there is the need to establish satellite accounts to incorporate the social sector into the system. Financial statistics pose the challenge of monitoring conditions in the financial sector and researching data on international experiences to

enhance the production of statistics in the sector. Tourism and the Environment are new initiatives and Social and Gender statistics require new paradigms, theoretical and methodological frameworks to guide data collection and presentation.

## Resource Constraints

Because of resource constraints, which include: (a) scarcity of financial and human resources (b) competition among sectors for available resources (c) high turnover of staff and (d) lack of skilled personnel to undertake research into economic and social conditions and the monitoring and assessment of ongoing statistical activities, it has been difficult to maintain efficiency and meet all statistical demands. Many countries have relied heavily upon externally sourced assistance, through technical assistance arrangements. Ventures into new areas of statistics, such as social (incorporating the gender perspective), environmental, tourism and health accounting, present additional challenges. New demands emanating from globalization, external debt servicing and the soon to be established Common Single Market and Economy in the region, are to be expected. These new developments will increase demands for new types of statistical professionals to engage in monitoring, assessment and policy-oriented research.

#### PROSPECTS FOR RESEARCH ACTIVITY WITHIN NSO'S

The Association for International Research (AIR) (1998) publication People, Processes and Managing Data points out that, "the effectiveness of institutional research in supporting an institution's decision making depends heavily on the availability of usable data. Usable implies that the data must be sufficiently accurate, timely and collected systematically." Statistical organizations in the region face challenges in living up to these expectations, unless institutional research is made an integral part of their functioning. Essentially, they function to collect, process and disseminate data to a range of users. However, this must be done within clearly defined parameters that will enable them to evaluate output towards improving and maintaining quality: and refine processes to produce data on a timely basis, which are usable and of relevance. They need to develop, modify and refine methods and conceptual frameworks to enable data analysis and the interpretation of information. Additionally, they must manage and maintain databases leading to the dissemination of data to users, and for informing policies and decision-making. Statistics is based on a well-developed tradition that supports the development of theoretical and conceptual frameworks and methodologies that may need to be modified over time or in certain situations. By their very nature statistical organizations can ably support the practice of institutional research.

## PROBLEMS TO BE OVERCOME WITHIN NSO'S TO FACILITATE IR ACTIVITY

Given the problems of conducting and maintaining statistical activities, the practice of institutional research could enhance statistical operations in the following areas: provide clarity and assist in the harmonization of concepts, definitions and classification systems; provide data and information for decision support systems; help to refine and assist in the selection of appropriate survey instruments; evaluate the effectiveness of old, and contribute to the development of new methodologies best suited to prevailing conditions; apply theory and conceptual frameworks to provide a better understanding of the statistical data gathered, for forming policies and program direction. A major characteristic feature of the countries of the CARICOM region however, is that they are small developing island-states with the total population barely extending beyond six millions. So small are the populations, there has had to be constitution into a sub-region comprising 9 of the countries, into the Organisation of Eastern Caribbean States, (OECS). By this arrangement there is a sharing of cost and deployment of resources towards economic and social development. The Eastern Caribbean Central Bank provides assistance to the sub-region in areas where otherwise resource would not be forthcoming.

# LESSONS LEARNT FROM RECENT SOCIAL AND ENVIRONMENTAL STATISTICS PROJECTS

Population and Family, Health and Education

Recent initiatives in the areas of Social/Gender and Environmental statistics have clearly demonstrated the need for building capacity and developing capabilities through training. A collaborative effort between the United Nations Statistical Department and the CARICOM Statistics Division to promote social and gender statistics among countries in the region demonstrated the need for building capacity and developing skills in sourcing data, compiling and analyzing statistics and indicators on major social issues affecting people's lives. The project employed the strategy of focusing on issues and concerns noted to be of national and regional importance and deriving statistics expressed as indicators, to describe and measure conditions pertaining to education, health and population and family issues. Although some member states have produced social statistics and indicators in the past, these were not integrated into a system. The project revealed several shortcomings of the practice pursued in the past. Some of there shortcomings were that sources of social statistics data were undocumented and so too were methodologies employed in generating the statistics and that concepts and definitions varied across countries and were often unclear, giving rise to the need for standardization and the harmonization of data sets.

# Incorporating Gender Issues

The World Summit for Social Development held in Copenhagen, Denmark in 1995, provided the impetus for incorporating gender in the production of statistics. At this forum, the status and condition of women were addressed and statistical organizations were urged to produce statistics and indicators that would project the situation of women in the society. Following this there has been much lobbying to move beyond the procedure of merely producing gender-disaggregated statistics, and to adopt "a gender approach" towards the production of statistics. In this matter, National Statistical Offices would have to be guided by a whole new tradition of theory and methods not fully developed in this area, especially as insistence upon moving in this direction remains very strong. In order for the generation of gender statistics to become established practice, there is much to be done in clarifying concepts and definitions and devising analytical frameworks for incorporation into statistical systems.

#### Service Statistics

An expanded new area of statistics that will prove to be of a dynamic nature and will create a need for persons with institutional research capability will be that of Services. The latter will take on a broader meaning than currently obtains, as it has been recognized that there is need to strengthen capacity within national and regional organizations to undertake generation of service statistics. This area will also prove to be the strongest link in the chain of revitalized statistical activity. Protocol II of the oncoming CSME has established: the right of establishment, the provision of services and movement of capital to be major components of the CSME. Enactment of the protocol would realize the removal of restrictions that currently debar member states from pursuing activities related to the three areas identified. The need for data and information on all aspects of the activities defined in the protocol would therefore arise, research being a significant component. Many areas have been identified in the CARICOM document, "Strengthening capacity of National Authorities and Regional Organizations in respect of Service Statistics." Distributed at the twenty-sixth meeting of the Standing Committee of Caribbean Statisticians meeting in Nassau, the Bahamas in October 2001.. The document speaks of the need for: situational assessments of services statistics in the 15 CARICOM member countries; the development of frameworks for enhancing the capabilities of NSO'S; research of the field towards establishing guidelines for the processes involved in the generation of services statistics; the development of new questionnaires, refining of existing ones and the conduct of reviews of documents; the conduct of field research towards assessing capacity and capability of organizations concerned with service statistics and other areas.

#### TRAINING OF INSTITUTIONAL RESEARCH PROFESSIONALS

The above citations serve as demonstrations of the research possibilities that arise out of new challenges that define areas of statistical development with opportunities for institutional research. Other new areas are those of Environment and Tourism Statistics and very much has to be done in respect of the existing traditional sectors to bring them in line with the demands of the changing world environment. The shortcomings of these established sectors at the national and regional levels signal the need for a research orientation in their management. Countries with little resource to spare outside of their regular activities have been contracting out specific research items. Some countries with even less capacity and expertise in particular statistical areas have been receiving assistance from institutions, external to their own, especially those having research departments. These include Central Banks in the region which have assisted in those areas of statistics which require research and monitoring. Among these, Balance of Payments, Exchange and Interest rates, National Income and the servicing of external debts, Planning and Research departments of government ministries, academic institutions and private research consultants assist in areas where the application of research methods and conceptual frameworks have to be employed. It can be argued that, given the small size of many countries of the region and that of their statistical operations, there will continue to be the need for this external assistance. Many would not be in a position to establish and maintain research departments.

The CARICOM Secretariat, which has a statistical department, has programmed certain activities from which countries that are unable to realize capacity in these areas would benefit. These facilities are to include: resident databases, documentation of methodologies, standardized classification systems, concepts and definitions and identification of data sources. This should not pre-empt the need for the training of statisticians in institutional research. Exactly how the training programs servicing these needs are to be developed would have to be worked out at both national and regional levels. Since the issue of globalization has become such a pervasive one, training opportunities at international institutions should also be considered. Whilst the focus in this paper has been mainly on national statistical organizations and the need for the training of institutional research professionals to provide for their needs, it is recognized that these are not the only context within which such needs will arise. Institutions that pursue research activities and produce social and economic statistics and indicators must be acknowledged. Among these are PAHO, CAREC, in the area of health; the IMF which is currently working with countries in the region to develop capability in establishing Data Dissemination Systems; IDB and The World Bank, working in poverty assessment and living conditions surveys the United Nations group of agencies including ILO, UNDP, UNECLAC, UNICEF and UNSD, work with countries in different aspects of research and capability building. Regionally, there are the Caribbean Development Bank and the Central Banks, which provide financial support and research assistance, respectively.

# CONCLUSION

During 24-26 October 2001, the 26<sup>th</sup> meeting of the Standing Committee of Caribbean Statisticians took place in Nassau, Bahamas (2001c), and was attended by Directors of Statistics of CARICOM, and representatives from a number of International agencies. The meeting deliberated on many issues involving the assessment and review of ongoing statistical programs, special projects and new developments on the International scene The main areas of focus is expected to be the harmonization of statistics in the region, which will be achieved through the development of a core set of, statistics, held by many countries. The core will be constituted of data on GDP per capita, labour market information, inflation, exchange rates, employment, trade, price indexes and stock exchange transactions. There is to be continuation of the programs of social and gender and environmental statistics and indicators, which have been begun with support from the United Nations Statistical Department. Additionally, special data series will be produced and used: to monitor performance of statistical systems and assess growth and information policy at national and regional levels. The need for research and the training of professionals, follow from these planned activities, especially those related to the measurement and analysis of the economic and social conditions of CARICOM member states. This paper has highlighted areas where there are possibilities for the practice of institutional research. The

factor of trained human resource will need to be addressed. In respect of the training required, considerations will need to given to (a) the content of such training, (b) the levels of staff within NSO's to be trained, (c) specific areas of focus, and (d) the balance that can be achieved through pursuit of formal academic programs and on-the-job applications, for which NSO'S are ideally suited.

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