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COUNTRY PAPER - BOTSWANA

1. Introduction

The Botswana Central Statistics Office (CSO) is a government department within the Ministry of Finance And Development Planning. Its primary function is to provide government ministries and departments, non-governmental organizations, regional and international organizations and members of the public in general with statistical information. It operates within the legal framework of the Statistical Act of The Laws of Botswana, which in broad but explicit terms, outlines the duties of the department. The Act was constituted in 1967.

The department is functionally divided into three major divisions, namely, Census and Surveys, Economic and Social Statistics. The divisions are made up of statistical units, some of which are seconded to and housed in user ministries.

2. Organization of Economic Statistics

The Economic Statistics division is responsible for the collection, compilation, analysis and dissemination of economic statistics, namely national accounts, industrial, trade, prices, transport, labour and environment statistics. To make this responsibility manageable, the division is further divided into three sub-divisions. The first division is made up of National Accounts, Labour and industrial statistics Units. The second division comprises Prices and Trade Statistics Units; while the third is composed of Transport and Environment Statistics Units.

Presently, there are many users of economic statistics in Botswana. Some of which are government ministries and departments, civil society, researchers, business community, students, politicians, regional and international organizations and the general public The CSO has established a formal relationship with its data users through User/Producer Committees. The committees are meant to maintain a continuous dialogue between CSO and data users in order to define a programme of operations, guide and advice the CSO on issues relating to data requirements. In addition to these committees, a National Statistical Advisory Council with membership from both the public and private sector has been formed to advise the CSO on statistical matters.

One other avenue for an effective relationship between the CSO and users of statistics is the semi-centralized nature of the CSO, where units are physically seconded to user ministries. These units are in daily contact with the major user and serve in various planning committees of those ministries. While this type of arrangement has its disadvantages, primarily from a professional stand point, it has been welcomed by user ministries as a very effective link between the CSO and users.

3. Data Sources And Data Collection Methods For Compilation of Economic Statistics

3.1 Statistical Data Sources

In compiling economic statistics, the CSO uses data collected mainly through economic surveys and administrative records.

Before the current economic census which is currently in the data collection stage, the CSO has never before conducted an economic census for the purpose of compiling economic statistics. The population and housing census which is conducted every ten years, the last one having been conducted in 2001, has been used as a source of benchmark data for mainly labour (employment) statistics and now environment statistics.

The CSO is for the first time conducting an economic census. The census covers the period 2006/7. Its objective is to collect economic data from all formal economic entities classified in ISIC sections A, B and C for the purpose of:

- Determining the structure of the economy through the existing establishments and enterprises
- Collecting benchmark data for economic statistics
- updating the Enterprises and Establishments Register as well as to add more variables to the database

In addition to general information about establishments and enterprises, the census is collecting data on operating characteristics, employment characteristics, revenue, expenditure, financial and investment details.

In terms of economic surveys, the CSO undertakes monthly, quarterly and annual surveys to collect data used in the compilation of the different economic statistics it produces. The collection program for most market activities consists of:

- Monthly Price Surveys collect price data for the different chosen consumer items from the sampled outlets for the purpose of compiling the Consumer Price Index.
- Quarterly surveys
 - Survey of Recent Trends collects revenue/income/sales, inventories, quantity and value of production of main commodities. It covers large establishments in major economic activities except those in agriculture, water and electricity. It is the main source for the compilation of quarterly Gross Domestic Product
 - Survey of Industrial Production collects quantities and values of manufactured commodities data for the purpose of compiling Industrial Production Index.
- Bi-Annual Surveys
 - Survey of Employment And Employees collects data on employees of establishments. It is confined to the formal sector and is the main source for labour statistics
- Annual Surveys
 - Annual Economic Survey collects comprehensive revenue, expenditure, inventories, fixed assets and financial assets and liabilities data from sampled formal establishments and enterprises within ISIC A, B and C for the compilation of national accounts statistics
 - Census of Manufacturing and Construction collects comprehensive revenue, expenditure, inventories, fixed assets and financial assets and liabilities data from

sampled formal establishments and enterprises in manufacturing, construction, mining, water and electricity for the compilation of national accounts statistics

The CSO also compliments data collected through regular economic surveys with data from ad-hoc surveys. The ad-hoc surveys are:

- Household Income And Expenditure Survey conducted every 10 years after the population and housing census. The aim of conducting a household income expenditure survey is to provide an up-to-date data on income distribution and consumptions patterns of households The last one was conducted in 2002/3 and the plan is to have a mini-survey in 5 years time.
- Labour Force Survey conducted every 10 years, the last one was for 2005/06. The objective of the survey is to obtain comprehensive data on the status of the labour market prevailing in Botswana.

Informal sector units are not normally covered in the regular economic surveys. The CSO undertook the first informal sector survey in 1999 to answer a number of key policy issues on the existence of informal sector in Botswana. The objective was to collect data that would provide information required to shed light on the contribution of the informal sector to the economy, types of major activities, proportion of workforce employed, proportion of household income generated by the sector, size of capital investment in the sector and the extent of the informal sector's contribution to the competitive market in the economy. The second survey of this nature is currently on-going covering the period 2007.

3.2 Data Compilation Methods

As much as there are different types of economic statistics, there are different methods of compiling them. For all the economic statistics, the different surveys are designed to have fully enumerated and sampled strata. Establishments employing less than 50 employees are extracted from the Enterprises and Establishment Register by strata and stratified according to the ISIC division. A systematic random sample is then drawn from each ISIC division depending on the number of establishments in that particular ISIC division.

In terms of estimation procedure, for the fully enumerated strata every attempt is made to achieve complete response. For the few fully enumerated establishments, which do not respond, imputation is made on the basis of the previous returns or other information. No grossing up or ratio raising is done to allow for non-response.

For the sampled stratum, a simple expansion factor¹ is applied to the total establishment data in each ISIC separately. This procedure is not uniformly applied. After preliminary estimates are made, a careful examination is carried on the individual units and the expansion factors. In some cases, the following adjustment is made: if an establishment with very high employment has responded in the less than 50 employee's stratum, it is transferred to the fully enumerated strata and no expansion factor is applied.

3.3 Use of Administrative Data Sources

The CSO uses administrative data sources for compiling External Trade, Transport and Environment statistics. Customs and Excise operations documents are used as the source for External Trade statistics.

Transport and Communication Statistics are derived from several administrative records. Statistics on civil aviation and vehicle registrations are from records kept by the Department of Civil Aviation and Department of Road Transport and Road Safety respectively. Motor vehicle accident statistics are obtained from the Botswana Police records. Traffic counts and road network statistics are obtained from the Roads Department and Local Authorities records. Data on railways and postal services are derived from Botswana railways and Botswana postal Services respectively.

3.4 Use of Statistical Business Register

The CSO maintains the Enterprises and Establishments Register (EER) used to select the enterprises and establishments that are surveyed for economic data. The EER was originally populated using information provided by a number of bodies, including the Registrar of Companies, the Registrar of Societies and Local Authorities. Updating of the EER is done continuously using records from government ministries and departments.

The CSO also dispatches a business review form to newly registered enterprises to further update the EER. This would appear to be a

¹ The expansion factor is the number of establishments in the EER for that ISIC strata divided by the number of effective respondents for the stratum. The effective response includes respondents who advise CSO that they have no data or are dormant as well as those with valid data details.

comprehensive procedure for recording all formal businesses when they are set up. Unfortunately, the register contains a number of dormant enterprises, those that have ceased to exist, or that have registered but not commenced operations. Returned mail (to detect closed businesses) and newspaper advertisements (to detect new enterprises) are monitored. The other CSO collection systems also report any new or ceased businesses that they identify.

The EER covers approximately 60,000 establishments and contains information on the company's name, location, telephone number, date of registration, type of activity, and employment size. Clearly, unregistered companies are not included in the EER, which is a particular problem for the construction sector. The CSO is currently undertaking a full census of all businesses operating in Botswana using enumerators to list and enumerate all active businesses in the country. This exercise will be used to derive the details required for the EER.

4. Data Dissemination

Economic Statistics produced by the Botswana CSO is disseminated through various channels. To meet user's needs the CSO has subscribed to the General Data Dissemination Standards.

Most of the statistical outputs are disseminated through regular (monthly, quarterly and annual) publications which are sold at subsidized prices to users. Dissemination is also done through workshops and media (newspapers, radio, television, and website).

5. Problems And Difficulties Encountered

The CSO has several constraints and challenges in the collection and compilation of economic statistics, some of which are underlined below:

- Low response for economic surveys
- Lack of coordinative machinery for administrative data
- lack of central depository stations for administrative data
- lack of skilled manpower in various fields of economic statistics