Census of Economic Establishments in Ethiopia

1.   Introduction

In general, it is obvious that, availability of relevant, reliable and up to date statistical data is considered indispensable for the evaluation of the economic and social development of the country. The activities and the mandate of the Central Statistical Agency (CSA) of Ethiopia are mainly aimed at the production of statistical data required for development planning, monitoring and evaluation of all sectors of the economy. To that effect, the Agency is conducting several surveys to collect and compile economic statistics in various sectors, as it is one of the main objectives of the CSA to steadily develop and improve the system of economic statistics in order to extend and intensify data collection and improve the quality of the statistical data in the country. Based on this general objective, the Central Statistical Agency (CSA) has been conducting surveys and censuses of various economic activities, of which Census of Economic Establishments, which was carried out in February-March 2004 is the first of its kind at CSA.

Economic Census enables to have a record of all active business enterprises. Essentially, it contains structural information about each business, including (but not limited to) name, economic activity, location and persons engaged by sex and other size indicators. This structural information is central to the collection of business statistics, because it enables one to identify and describe more precisely each business participation in the country. Thus, Economic Census provides a starting point for many economic and related surveys in an economy. It provides the means of selecting a sample that accurately represents a population of business establishments to be surveyed and studied.

2.   Institutional Arrangements of the Census of Economic Establishments

A Director General and three Deputy Director Generals head the Central Statistical Agency of Ethiopia. One of the Deputy Directors Generals is responsible for Economic Statistics. The Economic Statistics branch of the Agency has three departments i.e. Natural Resources and Agricultural Statistics; Industry, trade and Service Statistics; and Household Budget and Price Statistics. The departments are further

subdivided into two or three expert teams. Furthermore, the Agency has 25 Branch Statistical Offices located all over the country, which mainly administer data collection and supervision activities.

3.   Objectives of the Census of Economic Establishments

- To create a Business Register System,
- To obtain baseline data for on-going surveys and censuses of economic activities,
- To create economic activities database,
- To obtain a frame for future statistical surveys,
- To obtain data on the number and distribution of economic establishments by industrial category, region, persons engaged, … etc and
- To obtain baseline data which will be an input to the System of National Accounts on economic activities.

4.   *Scope and Coverage of the Census of Economic Establishments*

The scope of the Census of Economic Establishments is confined to all Establishments that were established with the aim of profit making and covers both public and private establishments that are located in urban areas of the country. The Census includes those which sell or produce in open markets, in fixed location and mobile businesses in all sectors, such as: Agriculture, Fishing, Mining and Quarrying, Construction, Electricity, Gas and Water supply, Wholesale and Retail trade, Hotels, Restaurants and Bars, Transport, Storage and Communication, Financial intermediaries, Real-estate, Renting and Business activities, Education, Health and Social works, and other Community, Social and Personal Service activities, with no limitation of number of persons engaged and amount of income. However, it excludes civil service institutions, defense and other non-profit making government and non-governmental organizations.

This Census of Economic Establishments covered all urban areas of the country. Even though, urban areas are those with a population of at least 2,000 people, for this Census the following criteria were used to define urban centers:-

a. Major urban center of a Region, Zone or District,
b. A town with urban localities, (not included in a),

c. A town with a municipality, (not included in a and b) and

d. Areas with a population of more than 1,000 and mainly engaged in activities other than agriculture.

5. *Training of Field Staff and Data Collection for the Census of Economic Establishments*

The execution of a survey and quality of data acquired from the survey depend on the type of training given to the enumerators and supervisors and the consequent understanding of the tasks to be performed and the standard procedures to be followed by the enumerators and supervisors in the survey undertaking. The quality and completeness of data are ensured when the training meets its objective of producing responsible and fervent enumerators and supervisors.

The training of the Census of Economic Establishments was conducted in two stages: the first stage training which took place at the Head Quarter of the CSA targeted staff from the head office statisticians and senior field supervisors from Branch Statistical Offices. The staff that took part on the first stage training was then assigned to conduct similar training for enumerators and supervisors in all the 25 Branch Statistical Offices distributed across the country. Enumerator's manual was prepared for the survey to introduce the participants with the detailed explanations of the basic concepts and how to handle each and every part of the questionnaire.

6. *Reports on Census of Economic Establishments*

A report has been prepared presenting the main results of the Census, showing in particular the composition of the economy into formal and informal sector, the distribution of the business unit population into economic categories as well as its regional distribution. Among others, to mention only few the contents of the list of tables of the report were:

- Number and percentage distribution of business establishments by ownership, region, major urban centers and industrial categories,
- Number of persons engaged by region and industrial categories,
- Conditions of books of accounts and license by region and industrial categories.

- Formal and Informal Business establishments by region and industrial categories,
- Number of business establishments by initial capital, revenue by region and industrial categories . . . etc.

7. Database on Economic Establishments

Based on the results of the Census, the CSA made an attempt to establish a database on Economic Establishments/Enterprises, which contains all business units. The business register was designed to contain basic size and type indicators such as address, economic activity, number of persons engaged, legal status, paid-up capital, revenue and other related structural data of all business units. All data records have been converted into an ACCESS database, which contains approximately 670,000 data records. The ACCESS database is used for analytical purposes by concerned subject matter sections of the Agency.

8. Problems Encountered in the Census of Economic Establishments

Although the fieldwork of the census was carried out without much problem, there were a number of shortcomings.

- The census of the economic establishments was found to be a huge undertaking,
- The qualities of the data on size indicators, which are very important for further economic survey sampling, were unreliable, specially paid up capital and revenue,
- Lack of in-depth knowledge for establishing a database for such huge data as required for sampling activities.

Therefore, currently the CSA's major emphasis on economic statistics is to establish a reliable frame or business register system by conducting well -designed Census of Economic establishments/enterprises in four years time, and to use as the same time administrative data for establishing and maintaining Business Register system.

Because of the problem or almost unavailability of timely, updated business register, except for Large and Medium Scale Manufacturing Industries, CSA uses indirect methods such as area sampling, mixed-households surveys approach and administrative data sources as a frame for conducting economic surveys on various sectors.

9. Compilation of Economic statistics by Sector

9.1. Agricultural Statistics

Agriculture is the leading sector in the Ethiopian Economy. It accounts for about 45 percent of the GDP, employs about 80 percent of the labour force, generates about 80 percent of the export earnings. Hence, the process of agricultural planning, strategy, designing, policy formulation and analysis, budget preparation, project implementation, appraisal, monitoring and evaluation require a large volume of agricultural statistical data/information. In this regard, CSA has made several efforts in producing agricultural statistics through "Integrated Household Survey Program" carried out on annual basis since 1980.

To highlight a flavor of the work being done by the CSA, it is worth mentioning here that, the current annual agricultural sample survey includes:-

- Crop forecasting,
- Area and Production of the main and short rain seasons,
- Farm management practices /inputs, irrigation …etc./,
- Land utilization /crop land, fallow land, grazing land, wood land, other land uses, size of holdings …etc./,
- Livestock /livestock number, products and by products, poultry, fishes, beehives …etc./

These data are available annually for private peasant holdings (for both seasons). CSA's agricultural sample surveys are currently the major primary data sources in the country. The annual agricultural sample survey represents over nine million small holders cultivating more than 10 million hectares and account more than 90 percent of the agricultural output. However, the reliability of the data on Large and Medium Scale Commercial Farms/Enterprises survey result is not as such satisfactory for various reasons. Among others, this is due to the fact that CSA uses unreliable frame and also under estimation of income and related data is reported purposefully by the enterprises.

9.2   Mining and Quarrying Statistics

A wide variety of minerals including metals, non-metals, the dominant currently being Gold, as well as, industrial and energy minerals including various types of quarrying activities are known to exist in the country. However, the exploitation and development of these minerals is at its infant stage. The envisaged progress and development of the Industry however requires statistical data in the sector.

The data items required in this sector are:-

- Mineral and Quarrying production, sales, value added, domestic consumption, export and import by type,
- Statistical data on location, reserve, grade and use by type, and
- Inputs and Investment expenditure, mineral exploration …etc.

CSA collects data on mineral exploration, investment, imports and exports on annual basis. Concerning Quarrying activities, CSA has conducted comprehensive survey twice. However, the result of these surveys was not as good as it should have been. The list of establishments/enterprises/ the frame/ obtained from administrative records is incomplete for taking real sample. Furthermore, under estimation of income and non-response rate are other major problems.

9.3   Manufacturing Industries Statistics

The contribution of the manufacturing sector for the national economy is relatively low, with value added share of less than 15 percent of the GDP. However, it is one of the dynamic modern sectors showing promising changes.

A lot of effort and resources is put in place to carry out surveys and censuses on the manufacturing establishments/enterprises, which include:-

- Annual Survey on Large and Medium Scale Manufacturing Industries, Since 1976,
- Quarterly Survey on Large and Medium Scale Manufacturing Industries, since 2000,
- Producer Price Survey on Manufacturing Industries (PPI-M), since 2004 on quarterly basis,
- Small Scale and Cottage/Handicraft Industries Survey, every five years.

CSA obtains the list of enterprises or directory for Large and Medium Scale Manufacturing Industries from various Ministries and Agencies and updating is done annually. However, for Small Scale and Cottage/ Handicraft industries the survey is usually carried out using area sampling, based on the results of the Population and Housing Censuses.

9.4   Electricity, Gas and Water Supply Statistics

The Energy Sector in Ethiopia is made up of three sub-sectors, of which the power sub-sector is the most dominant, from the point of view of its contribution to economic development; petroleum and traditional/alternative sources of energy constituting the rest. Ethiopia imports refined petroleum products.

Broadly, statistical data on the following areas are believed to be crucial for the energy sector development.
- Energy supplies by source of energy,
- Energy consumption and demand,
- Energy prices, sales and value added,
- Financial information …etc.

From CSA survey reports on electricity industry, data are available on installed generating capacity and electricity products, sales and revenue, intermediate costs, value of fixed assets …etc. CSA also collects data on petroleum import; prices and related data from administrative records. The traditional sources of energy data on consumption and related activities are some how available only from household surveys such as Household Income, Consumption and Expenditure Survey.

Regarding water supply, purification, distillation and distribution of water are available from administrative sources. But at the moment they are not compiled by CSA. Like that of other sectors, CSA's main problem in this respect is luck of reliable compiled frame. Concerning household surveys, CSA conducts Welfare Monitoring Survey every three years from which we obtain percentage of the rural/urban population having safe and adequate water supply, access to proper sanitation facilities …etc.

9.5   Construction Statistics

Statistics on the Construction Sector play an important role in analyzing short term trends, annual and more frequent development not only for the sector itself but also for other economic activities. This is so because; construction activity generally contributes much to the country's total activity, at least with the corresponding demand for materials and labour inputs. The swings in the level of construction activity tend to both amplify and to lead the movements in the economy as a whole. It is for this reason; any available construction statistics and indicators tend to be closely watched by policy makers and researchers. Furthermore, statistics on the construction activity also contributes to the System of National Accounts (SNA).

In Ethiopia, construction is showing a sign of a highly accelerated expansion in recent years, which resulted, unlike the previous years severe shortage of construction materials, most notably cement.   In relation to this, in order to fulfill these data requirements on the sector, data that ought to be generated are expected to cover contract construction by construction industry proper, non-construction units carrying out contract construction and own account construction.

The data need on construction activities include value of construction put in place, repair and maintenance, cost and quantity of inputs …etc. In this respect, CSA has carried out two surveys including one pilot on contract construction.

However, various problems were encountered during the survey. The major problem was the unreliability of the frame. In addition to the difficulty in locating the enterprises by the addresses obtained from the directory, non-response rate were also the most important hurdles faced, to mention only few.

9.6   Distributive Trade and Services Statistics

Statistics on the distributive trade and services include wholesale and retail trade, personal services, hotels and restaurants. In Ethiopia, this sector contributes between 15 - 20 percent of GDP. Statistics on the distributive trade and services play an important role in analyzing short term trends, annual and more frequent developments of the sector.

The CSA has conducted nation wide surveys on distributive trade and services twice: in 1997 and 2003. Although the results were relatively successful and disseminated to users in time, there were shortcomings in the frame used for the survey. Due to absence of a reliable frame, CSA conducted this survey using area sampling based on the results of the population census.

9.7 Transport and Communications Statistics

Transport and communications as it is well known play a vital role in the expansion and/or development of the socio-economic sectors of a country. In Ethiopia the contribution of this sector to GDP is less than 10 percent. The transport and communication statistics compiled by CSA are from administrative records. Because of this, though CSA has tried to improve the details of the data, contents are mostly determined by the availability of information at the sources.

The compilation of transport and communications data among others include; in the transport sector, freight traffic volume, revenues, passenger and employment in each modes of transport i.e. land, water, air and rail. In the communications part it includes employment, type of service, revenue and expenditure …etc. of the various communication media:- telephone, telegraph, internet, radio, television, newspapers and periodicals.

9.8 Informal Sector Statistics

The CSA has successfully conducted two nation wide urban informal sector surveys to provide comprehensive data to users on the size and characteristics and its contribution to the national economy. As evidenced from the latest 2003 informal sector survey, this sector contributes nearly 50 percent of urban employment in the country.

The informal sector survey provides data on:-

- the number of informal sector establishments classified by kind of economic activities, type of work place,
- employment earning's, hours of work, output, value added, operating surplus, capital equipment,

- conditions and constraints under which informal sector operators operate, financial resources, and

- Characteristics of the households and household members of informal sector operators …etc.

The informal sector refers to home based or individual establishment/activity operated by the owner with few or no employees. Therefore, CSA conducted both surveys as a household survey; the sample drawn was based on the population censuses results.

9.9   Other Economic Sectors Statistics

As discussed earlier, the CSA has conducted a comprehensive Economic Census on February/March 2004. It is only in this census that CSA collected some basic information on profit making institutions in relation to that of education, health and other social service activities. However, the overall performance and various indicators are compiled usually through administrative records data, household surveys such as welfare monitoring and other social statistics surveys.

9.10   Data Dissemination

As stated in this short report, the Agency plans and executes various economic surveys using its National Integrated Survey Program as well as ad-hoc surveys, annually. Moreover, the Agency periodically plans and undertakes censuses. The data from these surveys and censuses are processed, evaluated, analyzed and publications presenting the results of the surveys or censuses are prepared, printed and disseminated to users.

In general the data for each sector and the results of the Census of Economic Establishments are disseminated to users via Dissemination Seminars, Publications, CD, and Website of the CSA.

Census of Economic Establishments in Ethiopia

By Yasin Mossa

Central Statistics Agency of Ethiopia

June 2009

Addis Ababa

Ethiopia