# **CENTRAL STATISTICAL AGENCY**

**Compilation of Economic Statistics in Ethiopia** 

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# Compilation of Economic Statistics 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.

In relation to this, a list or directory of establishments/enterprises or population of business units acting in the economy of the country by basic size-indicators represents an important tool for conducting surveys/censuses in the economic/business sectors. The list of economic establishments/enterprises by basic size-indicators does not only show by its own essential trends and structural characteristics of the economic/business units and related activities, but it is also the basis for building up a coherent system of economic statistics. It helps in preparing, managing and coordinating the various economic surveys/censuses. However, CSA is not as such successful to have a robust business register, though there was some effort to this direction. In this regard, I would like to extend my appreciation for the interest the UNSD has shown towards economic statistics and business registers.

## 2. Organization of Economic Statistics

### 2.1 Institutional Arrangements

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.

#### 2.2 Overview and Main Users of Economic Statistics

The availability of and the sustainability in the flow of timely economic statistics data remains crucial for the purpose of designing programs and for formulating sound economic policies and strategies both at federal and regional levels. Moreover, gauging the impact of policy changes via quantitative economic indicators over time is only possible with the availability of reliable economic data that reflects the activities of the sector under consideration. Understanding the breadth and depths of the activities of the emerging private sector also requires uninterrupted and timely flow of basic economic data on key variables, such as, investment structure and trend, output, sales performance, market outlets, value added ...etc. In this regard there exists a huge data requirement or demand on various economic sectors for development planning, policy making, national accounts, research and other purposes.

## 3. Data needs, Sources, Gaps and Compilation Methods of Economic Statistics

#### 3.1 Economic Census

The Census on Economic Establishments/Enterprises has been conducted aiming at the establishment of a comprehensive statistical business register at the CSA. The Census of Economic establishments was carried out in February/March 2004. It was the first census of its kind. This census comprised all profit making business units being active in the economy irrespective of the type and legality of the business. Non-profit units or organizations were not included. The census was carried out in urban parts of the country by face to face interview using a questionnaire.

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.

Although the field work of the census was carried out without much problem, there were a number of short comings.

- 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 not reliable.
- 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 two years time.

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.

The types of surveys, periodicity, data compilation methods, survey frames and data items collected for each sector are summarized below.

# 3.2 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 regards, 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, he 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.

## 3.3 Mining and Quarrying

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.

## 3.4 Manufacturing Industries

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.

## 3.5 Electricity, Gas and Water Supply

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 ector 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.

#### 3.6 Construction

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. Therefore, 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 survey 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.

#### 3.7 Distributive Trade and Services

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.

### 3.8 Transport and Communications

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.

#### 3.9 Informal Sector

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.

#### 3.10 Other Economic Sectors

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.

#### 4. 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 is disseminated to users via Dissemination Seminars, Publications, CD and Website of the CSA.