

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Country Note for South Africa

The basic economic statistics environment of Statistics South Africa has the following elements:

1. An annual sample survey covering the formal market sector of the South African economy [except commercial agriculture at this stage], collecting a set of financial data sufficient for the calculation of industry value added and gross profit, as well as some balance sheet items. The Annual Financial Survey [AFS] is conducted at a broad level of industry detail [1 and 2 digit SIC]. The survey, which is used directly in the compilation of the annual national accounts, is complementary to and provides a context for a programme of large sample surveys of individual industry sectors, covered next.
2. The Large Sample Surveys [LSS] programme comprises a rolling set of industry surveys covering most industry sectors of the formal market economy every 3-4 years. The industry detail is considerably greater than in the AFS, but the financial data set is the same, so that, for the industry sector in scope of the LSS programme in any one year, the LSS results are used in the AFS estimates instead of directly collecting for that sector in the AFS for that year. The LSS programme also collects value data [and quantity where appropriate] for product [goods and services] inputs and outputs primary the in scope-industries within the industry sector being covered in a particular year. While the relationship between the AFS and ASS programmes is complementary, and considerable effort is made to avoid unnecessary overlaps, further investigation work continues to find the optimal balance between the two programmes.
3. The Annual Agricultural Survey programme, while not formally part of the LSS programme, is broadly consistent with it. The sample surveys collect a range of financial data in respect of enterprises engaged in commercial agriculture, as well as data on land holdings, crop production etc. Every fifth year a full census of agricultural enterprises is conducted instead of the agricultural survey for that year.
4. The quarterly financial survey [QFS] is a subset of the AFS, and is designed to produce a range of financial current indicators.
5. The quarterly employment survey [QES] is a quarterly sample survey of employer entities measuring the demand for employment in the formal market sector. Data collected include end of quarter employment and quarterly earnings. The main focus is on the industrial dissection of employment trends. The best measure of the level of formal sector employment [and unemployment] will come from the household-based labour force survey [LFS]. This survey is currently under redevelopment to bring it from a six-monthly to a quarterly frequency. It is not discussed further in the country note.

6. There are a number of other quarterly indicators, particularly relating to building and electricity generation statistics.
7. All but one of the monthly economic indicator series are based on surveys of enterprises engaged in manufacturing, wholesale and retail trade, and motor trades. All the surveys collect turnover, and the monthly manufacturing survey also collects opening and closing inventories, to support estimates of manufacturing production in index form; it also collects quantity information on the production of some manufacturing commodities. The monthly retail trade survey supports turnover estimates by category of retailer, but not at this stage a dissection of turnover by broad retail commodity. All estimates are published at current and constant prices. All the series apart from retail turnover are seasonally adjusted, and trend estimates are produced for all the monthly series. There are now sufficient observations to support a seasonal reanalysis of the retail turnover series with a view to producing seasonally adjusted series.
8. The monthly mining production series are based on an administered by-product source.

Each of the main elements of Stats SA's basic economic statistics programme is discussed briefly in the annexes to this note, under the headings in the UNSD's Regional Workshop letter of 15 June 2007. All of the Stats SA surveys in the programme depend for their frames and samples on Stats SA's business register. It is also briefly discussed in an annex.

All elements of the basic economic statistics programme are input to the compilation of annual and/or quarterly national accounts. As the national accounts per se do not form part of the scope of the basic economic statistics programme, this country note does not address them. However it is worth noting that in South Africa the responsibility for compilation of estimates of GDP is divided between Stats SA and the Reserve Bank. Stats SA is responsible for producing the production and income-based measures of annual and quarterly GDP, while the Reserve Bank produces the expenditure-based measures. There is close liaison between the two organisations on reconciliation of their estimates. Many of Stats SA's economic data series are used by the Reserve Bank in the compilation of the expenditure-based GDP series.

Economic Statistics Cluster
Statistics South Africa
18 July 2007

Annex 1

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Financial Statistics in South Africa

1.1 Institutional arrangements

- The National Accounts division of Statistics SA uses the estimates in compiling annual and quarterly Gross Domestic Product (GDP).
- The South African Reserve Bank (SARB) uses the estimates in assessments of the state of the South African economy.

1.2 Main users

The main users of economic statistics include the following:

- **Government** – Economic policy departments, especially the Treasury, and SARB
- **National Accounts**
- **Research and/or Educational Institutions** - Universities, Human Sciences Research Council and the National Research Foundation.
- **International Organisations** - World Bank, International Statistical Offices
- **Labour unions**
- **Non Governmental Organisations**
- **Industrial Federations** - SAFCEC, SEIFCA, BIFSA
- **General Public**- Economists, media and businesses.

1.3 User needs

User needs are determined by arranging advisory committee meetings with internal and external users. In 2006, an advisory committee meeting was held and inputs obtained regarding items on the annual and quarterly questionnaires, while for 2007 inputs by users were obtained using Stats SA's website.

2.1 Description of statistical data sources

Stats SA undertakes an Annual Financial Statistics Survey (AFS) and a Quarterly Financial Statistics Survey (QFS), which measure overall activity in the South African economy. The surveys are based on samples of private and public enterprises operating in the formal non-agricultural business sector of the economy, excluding financial intermediation, insurance and government institutions. The surveys are designed to give information on selected income and expenditure items and the consolidated balance sheet by industry. The AFS collects data at greater detail than the QFS; the latter supports a set of current economic indicators about aspects of financial performance.

The AFS and QFS depend dependent on accurate reporting by responding entities. In most instances it is the financial manager or accountant, or an individual with a strong background in accounting, who completes the questionnaire.

The AFS collects financial data, at a broad level of industry detail, for the following industries: forestry and fishing, mining and quarrying, manufacturing, electricity, gas and water, trade, construction, transport, storage and communication, real estate and other business services (excluding financial intermediation and insurance) and community, social and personal services (excluding government institutions). The QFS covers the same industries, excluding forestry and fishing.

The AFS provides an annual complement to the Large Sample Survey (LSS) program. Whereas the AFS covers the entire formal market sector annually at broad industry detail, the LSS program covers individual industry sectors at a fine level of industry detail. The financial data set for the AFS and LSS programs is essentially the same, but the LSS also collect product details – goods and services produced and used.

2.2 Data compilation methods

Surveys frame

The frame for economic surveys is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are used as a source for updating the BR, and information for them is used in profiling and delineation. The BR takes responsibility for creating the BSF and the survey frames drawn from it.

Type of unit

The type of unit used in the surveys is the enterprise, which is a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

Periodicity

For the AFS, information is collected for the financial years of enterprises that ended on any date between 1 July of one year and 30 June of the following year. For the QFS, information is collected in respect of the March, June, September and December quarters.

Main data items covered by the AFS

The survey collects information on –

- **Description of main activity** - to support checking/amendment of the entity's SIC classification.
- **Income items** -
 - Sales of goods;
 - Income from services rendered;

- Income from mineral rights leases (royalties);
- Income from the rental and leasing of land, buildings and other structures;
- Income from operational leasing and hiring of plant, machinery and equipment;
- Income from operational leasing and hiring of motor vehicles and other transport equipment;
- Interest received;
- Dividends received;
- Royalties, franchise fees, copyright, trade names and trade and patent rights received;
- Subsidies and incentives received from government;
- Net profit on foreign loans as a result of variations in foreign exchange rates or transactions;
- Profit from the redemption, liquidation or revaluation of liabilities, at a value lower than the book value, if credited;
- Other income;
- Total income.

➤ **Inventory: Opening values -**

- Raw materials or materials for processing, packaging materials, fuel and consumable and maintenance stores, e.g. spares;
- Work in progress (partially completed);
- Finished goods produced by this enterprise;
- Finished goods not produced by this enterprise, but purchased for resale;
- Total opening values.

➤ **Inventory: Closing values -**

- Raw materials or materials for processing, packaging materials, fuel and consumable and maintenance stores, e.g. spares;
- Work in progress (partially completed);
- Finished goods produced by this enterprise;
- Finished goods not produced by this enterprise, but purchased for resale;
- Total closing values.

➤ **Expenditure items -**

- Purchases;
- Containers and packaging materials;
- Total gross salaries and wages paid during the financial year;
- Accommodation;
- Advertising;
- Bank charges;
- Bursaries
- Containers and packaging;
- Depreciation provided for during this financial year;
- Entertainment expenditure;

- Excise and customs duty;
 - Insurance premiums paid;
 - Interest paid;
 - Losses from the redemption, liquidation or revaluation of liabilities at a value higher than book value, if debited, e.g. foreign exchange losses;
 - Losses on assets or investments sold or revalued (not related to normal trade activities);
 - Motor vehicle running expenditure, including parts and fuel;
 - Operational leasing and hiring of plant, machinery, equipment and vehicles;
 - Paper expenditure;
 - Postal, courier and telecommunication services;
 - Printing expenditure;
 - Property tax;
 - Railage and transport-out;
 - Regional services council levies;
 - Rental of land, buildings and other structures;
 - Repair and maintenance expenditure;
 - Royalties, franchise fees, copyrights, trade names and trade and patent rights paid;
 - Security services (including IT security services);
 - Severance, termination and redundancy payments;
 - Stationery expenditure;
 - Travelling expenditure;
 - Water and electricity services paid;
 - Stock options; and
 - Other expenditure.
- **Net profit or loss before tax;**
- **Company tax paid or provided for during this financial year;**
- **Dividends paid -**
- Cash dividends paid or provided for;
 - Other dividends (capitalisation issues, scrip dividends or capitalisation shares);
 - Total dividends paid or provided for during this financial year.
- **Balance sheet -**
- non-current assets;
 - current assets;
 - total assets;
 - owners' equity;
 - non-current liabilities;
 - current liabilities; and
 - total equity and liabilities.

- **Book value of assets and capital expenditure on fixed assets and intangible assets.**
- **Environmental issues -**
 - Triple Bottom Line Reporting;
 - ISO 14001 certificate.

Data items covered by the QFS

The survey collects information on -

- **Income items -**
 - Sales of goods;
 - Income from services rendered;
 - Interest received;
 - Dividends received;
 - Royalties, franchise fees, copyright, trade names and trade and patent rights received;
 - Income from the rental and leasing of land, buildings and other structures;
 - Income from operational leasing and hiring of plant, machinery, vehicles and other equipment;
 - Profit on assets and investments sold or revalued;
 - Other income;
 - Total income.
- **Inventory: Opening values -**
 - Work in progress (partially completed);
 - Finished goods (both produced by this enterprise and not produced by this enterprise, but purchased for resale);
 - Other inventories (e.g. raw materials);
 - Total opening values.
- **Inventory: Closing values -**
 - Work in progress (partially completed);
 - Finished goods (both produced by this enterprise and not produced by this enterprise, but purchased for resale);
 - Other inventories (e.g. raw materials);
 - Total opening values.
- **Expenditure items -**
 - Purchases;
 - Salaries and wages paid;
 - Severance, termination and redundancy payments;
 - Interest paid;

- Royalties, franchise fees, copyrights, trade names and trade and patent rights paid;
 - Rental and leasing of land, buildings and other structures, including payments for water and electricity services;
 - Operational leasing and hiring of plant, machinery, equipment and vehicles;
 - Depreciation provided for;
 - Losses on assets or investments or liabilities sold or revalued (not related to normal trade activities);
 - Other expenditure;
 - Total expenditure.
- **Net profit or loss before tax.**
 - **Tax and company tax brought into account.**
 - **Dividends payable.**
 - **Book value of fixed assets -**
 - Book value of fixed assets at the beginning of the quarter;
 - Book value of fixed assets at the end of the quarter.
 - **Capital expenditure on selected new fixed assets -**
 - Buildings, improvement and construction works;
 - Vehicle and transport equipment;
 - Plant, machinery, furniture, fittings and other equipment;
 - Total capital expenditure on selected new assets.
 - **Capital expenditure on purchases of land, existing buildings and works, as well as used plant, machinery and vehicles which were not imported.**

Estimates

Estimates for the AFS 2005 were based on a sample covering the following industries: forestry and fishing, mining and quarrying, manufacturing, electricity, gas and water supply, construction, trade, transport, storage and communication, real estate and other business services (excluding financial intermediation and insurance, but including activities auxiliary to financial intermediation) and social and personal services (excluding government institutions).

Imputation for non-response involves one of three methods:

- Historical information for the same entity
- Information from a similar donor entity
- Ratio imputation

These imputation methods are only used for missing large enterprises. For missing medium and small enterprises no imputation is performed; for these enterprises the original design weights are adjusted for non-response.

Estimates are compiled similarly for the QFS.

Link to National Accounts

- The results of the annual and quarterly surveys are used in the compilation of estimates of annual and quarterly GDP and components;
- the AFS is a critical source for annual national accounts compilation because it provides an annual snapshot of financial activity, at considerable item detail, for the whole of the market sector of the South African economy, dissected by broad industry; and
- the QFS provides quarterly indicators for moving the annual data forward, making the QFS an important sources for compilation of quarterly GDP and components.

2.3 Use of administrative data sources

Not applicable to the AFS and QFS.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

The frame for the AFSs and QFSs is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are also used as a source for updating the BR, and information for them is used in profiling and delineation.

The Systems of Registers division maintains the BR and takes responsibility for creating the sampling and survey frames, used by the sampling specialists in the Methodology and Standards division. Samples for the economic surveys are drawn annually, currently each year at the end of April. The BR front end is available for use by survey areas to view the current situation regarding enterprises and their components.

Also see the separate statement for Stats SA's Business Register.

3. Data dissemination

The AFS and QFS publications adhere to section 17 of the Statistics Act regarding confidentiality. They are available through Statistics SA's website for free public access, and hard copies are sent via email to subscribers. Additional dissemination is done when officials from Stats SA visit respondents to assist in completion of the questionnaire.

4 Problems and difficulties encountered

4.1 Problems and difficulties in conducting the economic surveys

- Obtaining required response rates;
- Locating enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises;
- Differences in accounting standards and practices by enterprises can also lead to some inconsistencies in the data used to compile the estimates. While much of the accounting process is subject to standards, there remains a great deal of flexibility available to businesses in the policies and practices they adopt.

4.2 Problems and difficulties in use of administrative data sources

Not applicable

4.3 Problems and difficulties in use of statistical business register

Problems that arise include:

Duplication

- Duplications of enterprises regarding legal name and income tax numbers.

Size groups

- Instances occur where the same enterprise is allocated to different size groups in consecutive samples, due to inconsistencies in the measure of size (turnover).

Classifications

- Instances occur where the same enterprise is allocated different a SIC in consecutive samples.
- In some instances enterprises are not classified to SIC at the required level of detail.

Different legal names

- In some instances the legal names of enterprises are not up to date on the Business Register.

See also the statement for Stats SA's Business Register.

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Survey areas provide feedback to the Business Register based on additional information obtained about reporting enterprises.

4.5 Problems and difficulties in data dissemination

Generally no problems are encountered.

Annex 2

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Large Sample Survey Program in South Africa

1. Organisation of the Large Sample Survey (LSS) program within Statistics Stats SA

1.1 Background

The last full economic census was conducted for the manufacturing industry in 1996.

A decision was taken in 2000 to discontinue censuses and instead to systematically, and in depth, cover each of the industry sectors in the South African formal market sector by means of large sample surveys on a rotating basis. The LSS program is conducted against the background of the Annual Financial Survey (AFS), which collects an extensive range of financial data annually.

The AFS provides an annual complement to the LSS program. Whereas the AFS covers the entire formal market sector annually at broad industry detail, the LSS program covers individual industry sectors at a fine level of industry detail. The financial data set for the AFS and LSS programs is essentially the same, but the LSS also collect product details – goods and services produced and used.

The introduction of an LSS program in 2004 has led to:

- efficient use of resources (staff and financial)
- improved timeliness, reliability and quality of publications
- generally satisfied users (especially National Accounts).

1.2 Purpose and objectives

Purpose:

- To conduct comprehensive survey program periodically covering the structure, financial performance, inputs and outputs of all industry sectors on a rolling basis, at a detailed industry level.

Objectives:

- To collect financial year data once every three to four years on each industry sector (excluding agriculture, forestry and fisheries, financial intermediation, insurance, government) of the South African economy.

- To publish the first (usually financial) results within one year after the end of the reference year and the final report within twenty four months after the end of the reference year.
- To provide detailed breakdowns on the product composition of ‘sales of goods’, ‘income from services’ and ‘purchases’ than the AFS and short-term economic indicator surveys.

1.3 Main users and uses of LSS Program

- National accountants use the results to benchmark national accounts aggregates and to compile Supply-Use tables for confronting and reconciling the different approaches to measurement of GDP.
- Price specialists use the data to refresh the composition and weights of the basket of goods and services for producer price indices.
- Industry policy specialists in government agencies use the data to measure the performance and contribution of individual industries to the South African economy, and to evaluate the effectiveness of the relevant policies.
- Individual businesses use the data to analyse their performance relative to the industry as a whole.

1.4 Determination of user needs and their satisfaction

- Users are consulted individually and in user groups to determine their needs.
- Respondents are also visited to ascertain whether they are able to provide the information required by the users.
- An Advisory Meeting is held with all the stakeholders to finalise each LSS questionnaire.

2. Description of statistical data sources

2.1 Periodicity and reference period

The LSS program aims to cover the main industry sectors (manufacturing, trade, real estate and business services) every three years and the other sectors every four years - see Appendix 1.

The reference period is any financial year which ends on any date between July and June, e.g. July 2006 to June 2007.

2.2 Scope and coverage

The program covers private and public enterprises that are mainly engaged in the following industries as defined in the International Standard Industrial Classification of all Economic activities (ISIC):

- Mining and quarrying,
- Manufacturing,
- Electricity, gas and water supply,

- Construction,
- Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants,
- Transport, storage and communication,
- Real estate and business services, and
- Community, social and personal services (except national, provincial and local government activities).

2.3 Statistical unit

The statistical unit for the collection of the information is the **enterprise**. An enterprise is a legal unit (or a combination of legal units) that includes and directly controls all functions necessary to carry out its production activities.

2.4 Data items

The data items are in Appendix 2.

3. Methods

3.1 Collection

- The questionnaires are dispatched by mail.
- Follow-ups are made by phone, fax and e-mail.
- Visits are made to assist enterprises with the completion of questionnaires.

3.2 Sample or Census

- A stratified simple random sample (not the whole population) is enumerated.
- 'Large' enterprises are completely enumerated.
- Enterprise turnover from the Value-added tax (VAT) source (preferred) or income tax (IT) sources (for enterprises below the VAT threshold or exempt from the VAT system) is used as the measure of size for stratification.

A 'large' enterprise is defined in terms of VAT turnover, according to turnover size guidelines by the Department of Trade and Industry.

3.3 Quality assurance

The reported data are compared with:

- annual data reported in the AFS,
- short-term (monthly and quarterly) data for the same enterprise,
- data reported by the enterprise in a previous LSS (where applicable), and
- any relevant external sources.

4. Availability and use of statistical business register

The frame for the LSSs is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are also used as a source for updating the BR, and information for them is used in profiling and delineation. The BR takes responsibility for creating the BSF and the survey frames drawn from it.

The Systems of Registers division maintains the Business Register (BR) and takes responsibility for creating the sampling and survey frames, used by the sampling specialists in the Methodology and Standards division. Samples for the economic surveys are drawn annually, currently each year at the end of April. The BR front end is available for use by survey areas to view the current situation regarding enterprises and their components. Also see the separate statement for Stats SA's Business Register.

5. Data dissemination

5.1 Publication

Estimates are presently published at national level in a statistical release. For some of the surveys, details of sales (value and quantity, where applicable) are published in a separate report.

5.2 Online availability

The publications are available online on Stats SA's website.

6. Problems and difficulties encountered

6.1. Conducting the LSS surveys

Response rates

A number of enterprises either do not respond or take a long time in responding. This is more evident when conducting surveys in industries which are not covered by short-term surveys.

'Untraceable' enterprises

It is not possible to locate some of the enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises.

Demand for survey data by South African Province

There is a growing demand for including a provincial dimension in LSS estimates. This is made difficult by the choice of the statistical enterprise as the reporting unit. Stats SA is

exploring ways to address this need, possibly through the creation of sub-enterprise units in the BR where an enterprise has activities in more than one Province.

6.2 Use of administrative data sources

Not applicable.

6.3 Use of statistical business register

Duplication

- Duplications of enterprises regarding legal name and income tax numbers.

Size groups

- Instances occur where the same enterprise is allocated to different size groups in consecutive samples, due to inconsistencies in the measure of size (turnover).

Classifications

- Instances occur where the same enterprise is allocated different a SIC in consecutive samples.
- In some instances enterprises are not classified to SIC at the required level of detail.

Different legal names

- In some instances the legal names of enterprises are not up to date on the Business Register.

See also the statement for Stats SA's Business Register.

6.4 Maintenance and improvement of the statistical business register

Survey areas provide feedback to the Business Register based on additional information obtained about reporting enterprises.

Appendix 1: Past and Proposed Schedule for Large Sample Surveys

Industry	Financial year collection started								
	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
Mining			1				3		
Manufacturing				1			1		
Electricity, gas and water					5				
Construction			4			2			2
Motor Trade	2				4				1
Wholesale and retail trade				2		1			1
Accommodation, Food & beverages			2			1			1
Transport	1				2			2	
Post and communication	3				3			3	
Real estate and business services		1			1			1	
Other community, social & personal services			3				2		

Notes:

1. The schedule aims to cover the main industry sectors (manufacturing, trade, real estate and business services) every three years and the other sectors every four years.
2. There is an agreement with National Accounts that these priorities must be reviewed regularly.

Appendix 2: List of data items collected in each LSS

1. Industrial Classification

- Main activity, and
- Secondary activities.

2. Imports and exports

3. Use of ICT

4. Details of employment

- Employment by gender.

5. Income items :

- Sales of goods;
- Income from services rendered;
- Income from mineral rights leases (royalties);
- Income from the rental and leasing of land, buildings and other structures;
- Income from operational leasing and hiring of plant, machinery and equipment;
- Income from operational leasing and hiring of motor vehicles and other transport equipment;
- Interest received;
- Dividends received;
- Royalties, franchise fees, copyright, trade names and trade and patent rights received;
- Subsidies and incentives received from government;
- Net profit on foreign loans as a result of variations in foreign exchange rates or transactions;
- Profit from the redemption, liquidation or revaluation of liabilities, at a value lower than the book value, if credited;
- Other income; and
- Total income.

6. Expenditure items:

- Purchases;
- Containers and packaging materials;
- Total gross salaries and wages paid during the financial year;
- Accommodation;
- Advertising;
- Bank charges;

- Bursaries
- Containers and packaging;
- Depreciation provided for during this financial year;
- Entertainment expenditure;
- Excise and customs duty;
- Insurance premiums paid;
- Interest paid;
- Losses from the redemption, liquidation or revaluation of liabilities at a value higher than book value, if debited, e.g. foreign exchange losses;
- Losses on assets or investments sold or revalued (not related to normal trade activities);
- Motor vehicle running expenditure, including parts and fuel;
- Operational leasing and hiring of plant, machinery, equipment and vehicles;
- Paper expenditure;
- Postal, courier and telecommunication services;
- Printing expenditure;
- Property tax;
- Railage and transport-out;
- Regional services council levies;
- Rental of land, buildings and other structures;
- Repair and maintenance expenditure;
- Royalties, franchise fees, copyrights, trade names and trade and patent rights paid;
- Security services (including IT security services);
- Severance, termination and redundancy payments;
- Stationery expenditure;
- Travelling expenditure;
- Water and electricity services paid;
- Stock options;
- Other expenditure; and
- Total expenditure.

6. Profit or loss

7. Inventories

- Raw materials or materials for processing, packaging materials, fuel and consumable and maintenance stores, e.g. spares;
- Work in progress (partly completed);
- Finished goods produced by this enterprise; and
- Finished goods not produced by this enterprise, but purchased for resale.

8. Dividends paid –

- Cash dividends paid or provided for;
- Other dividends (capitalisation issues, scrip dividends or capitalisation shares);
- Total dividends paid or provided for during this financial year.

9. Balance sheet –

- non-current assets;
- current assets;
- total assets;
- owners' equity;
- non-current liabilities;
- current liabilities; and
- total equity and liabilities.

10. Book value of fixed assets (opening values, acquisitions, disposals, closing values)

11. Details of income from services

12. Details of sales of goods (also quantity where applicable), and

13. Details of purchases (also quantity where applicable).

Annex 3

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Agricultural Statistics in South Africa

1.1 Institutional arrangements and main users

- National Department of Agriculture (National Accounts division – Agricultural National Accounts).
- The National Accounts division of Statistics SA uses the inputs for compiling estimates to Gross Domestic Product (GDP).
- National Treasury and other government departments to plan, develop and monitor policies.
- The South African Reserve Bank (SARB) uses the estimates as input to economic policy development and monitoring.
- Human Sciences Research Council (HSRC).
- National Research Foundation (NRF).
- Development Bank of South Africa (DBSA).
- Non-governmental organisations.
- Research (by universities, schools, business and industry economists) into the South African agricultural situation, as well as some economic modelling within the Agricultural environment.
- Agricultural organisations (i.e. TAU SA, AGRI SA, NAFU etc.) measuring agricultural activity on provincial as well as national level.
- International Organisations (UNSD, World Bank, etc)
- General public to measure their individual agricultural activity on provincial as well as national level.
- Media to report on current trends regarding agricultural variables.

1.2 User needs

User needs are determined by arranging advisory committee meetings with internal and external users. During the year several such meetings were held and inputs obtained regarding issues relating to questionnaires design and layout, new variables to include etc.

Additional inputs were also obtained by arranging meetings with agricultural product organisations (the Red Meat Producers Organisation of South Africa, Poultry Association of South Africa, Grain SA etc.) and researchers in this field to obtain detailed inputs to improve the data coverage of the questionnaire.

2.1 Description of statistical data sources

Stats SA undertakes two main statistical projects in the agriculture field:

- Agricultural surveys (annual, except for the year of the Agricultural Census) – excluding enterprises within the forestry, ocean- and coastal fishing and agricultural services sectors;
- Agricultural censuses (every five years) – including all enterprises within all sectors of agriculture (farming, forestry, ocean- and coastal fishing and agricultural services).

These surveys and censuses measure the activity of the agricultural sector within the South African economy.

The surveys are based on samples of farming enterprises operating in the agricultural business sector of the economy and which are registered in the Value Added Tax (VAT) and/or Income Tax (IT) systems.

The agricultural surveys and censuses primarily depend on respondents or their representatives (accountants/bookkeepers/managers of the farmer/farming units) to truthfully and accurately report on the enterprise's activity.

The trend seen during data collection in the most recent (2005) agricultural survey, was that in most instances it was the accountants/bookkeepers/managers who completed the questionnaires for the sampled agricultural enterprises.

The agricultural surveys collect financial data (income, expenditure, debt, market values, losses experienced), product data, employment, size of land and land use, for the agricultural sector (excluding forestry, ocean- and coastal fishing and agricultural services) within the South African economy.

As mentioned above, the agricultural surveys exclude enterprises from:

- forestry related industries
- Ocean- and coastal fishing related industries
- Agricultural services related industries.

The agricultural census will collect information from all of these enterprises as well as the farming sector.

2.2 Data compilation methods

Surveys frame

The frame for the agricultural surveys and censuses is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of

statistical units. Businesses registered in the Income Tax (IT) system are also used as a source for updating the BR, and information for them is used in profiling and delineation.

The Systems of Registers division maintains the BR and takes responsibility for creating the sampling and survey frames, used by the sampling specialists in the Methodology and Standards division. Samples for the economic surveys are drawn annually, currently each year at the end of April. The BR front end is available for use by survey areas to view the current situation regarding enterprises and their components.

Also see the separate statement for Stats SA's Business Regist

Type of unit

The type of unit used in the surveys is the enterprise, which is a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

Periodicity

For the agricultural surveys, information is collected for the financial year of enterprises that ended on any date between 1 March of one year and 28 February of the following year.

Main data items covered by the survey

The survey collects information on:

- **Description of main activity** - to support checking/amendment of the entity's SIC classification, for farming activities only (SIC 1 – up to 5 digits if possible i.e. 11110, 11120, 11130, 11210, 11220, 11300 etc.)
- **Income items** -
 - Sales of agricultural produced goods (i.e. field crop produce, horticultural produce, animals- and animal products and other products);
 - Other income:
 - Income received for work done for fellow/other farmers (such as ploughing, harvesting, baling, picking, spraying, shearing etc.) and the leasing of farming equipment, excluding the leasing of land and sales of fixed assets, vehicles, machinery, equipment and tools;
 - Incoming rent from the leasing of land, rebates, shares, dividends and interest received and any other additional income sources.
- **Expenditure items** -
 - Salaries and wages;
 - Cost price of payment in kind;
 - Seed, seedlings, seed potatoes and other plant material purchased;
 - Stock and poultry feed purchased;
 - Fertilizers purchased, such as agricultural lime, guano, kraal manure and compost;
 - Fuel, lubricants and grease purchased;

- Packing material purchased;
- Remedies purchased for combating diseases and pests in livestock and poultry, e.g. dips;
- Remedies purchased for forage, field crops and horticultural crops, e.g. insecticides;
- Total amount paid for the transport of your agricultural products (excluding your own transport costs);
- Total amount paid for plant / animal health services, including artificial insemination and remedies supplied by veterinary surgeons;
- Total amount paid to contractors, co-operatives, co-farmers, etc, for services rendered such as ploughing, harvesting, picking, etc.;
- Total amount paid to a security enterprise (if applicable) to safeguard the farm and maintenance costs of security systems;
- Total amount paid for maintenance of and repairs to buildings, dams, fencing, machinery etc.;
- Electricity and water costs;
- License fees paid for vehicles, trucks, trailers, tractors, etc.;
- Insurance premiums paid for crop insurance and farm property, such as buildings and vehicles;
- Rates paid to regional services and other local authorities;
- Interest paid on mortgages and money borrowed;
- Advertising and marketing expenses;
- Rental, usufruct and grazing rights paid for land (including payments in respect of land farmed on shares);
- Protective clothing purchased;
- Depreciation provided during the financial year;
- Other expenditure (e.g. banking costs, telephone accounts, accounting fees, stationery);
- Expenditure related to purchasing livestock and poultry;
- Cost of livestock purchased;
- Cost of poultry purchased;
- Cost of game purchased;
- Additional agricultural products (e.g. milk, eggs) purchased;

Estimates

Estimates from the agricultural survey are based on a sample covering only the farming activities, excluding enterprises within the forestry-, ocean- and coastal fishing industry as well as within the agricultural services industry.

Estimates have been derived using a combination of

- actual data obtained from respondents;
- for non-respondents:
 - historical information (if still relevant);
 - data obtained using one of several imputation methods.

Imputation is only performed for large non-respondent enterprises (those with a turnover of more than R 3 million).

For medium and small enterprises no imputation is performed. For them the original design weights are adjusted for non-response.

Link to National Accounts

The results of the annual agricultural surveys are used in the compilation of estimates of the annual and quarterly GDP and components.

2.3 Use of administrative data sources

Administrative data acquired from institutions like the Department of Agriculture, commodity associations and agriculture organisations are used for data confrontation purposes and determination of market prices.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

The frame for the agricultural surveys and censuses is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are also used as a source for updating the BR, and information for them is used in profiling and delineation.

The Systems of Registers division maintains the BR and takes responsibility for creating the sampling and survey frames, used by the sampling specialists in the Methodology and Standards division. Samples for the economic surveys are drawn annually, currently each year at the end of April. The BR front end is available for use by survey areas to view the current situation regarding enterprises and their components.

There is a permanent frame maintenance team responsible solely for maintenance of the agricultural frame on the BR, with survey feedback during and after the completion of the surveys and censuses.

Also see the separate statement for Stats SA's Business Register.

3. Data dissemination

The agricultural statistics publications adhere to section 17 of the Statistics Act regarding confidentiality.

The publications are available through Stats SA's website for free public access, and hard copies are also distributed during the national agricultural unions congresses. Additional dissemination is done when officials from Stats SA visit respondents to assist in completion of the questionnaire.

4. Problems and difficulties encountered

Problems and difficulties in conducting the agricultural surveys and censuses included:

- Achieving required response rates.
- Locating enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises.
- Differences in accounting standards and practices by enterprises/farming units can also lead to some inconsistencies in the data used to compile the estimates. While much of the accounting process is subject to standards, there remains a great deal of flexibility available to businesses in the record keeping practices they adopt.
- The reluctance by farmers to releasing their financial information.
- The lack of knowledge of the farmers about the purpose of the census and what benefits will transpire out of their participation.
- The political climate within the country, with sensitivities over the issue of land.
- The census and surveys were conducted at a time when there was widespread concern regarding the agricultural situation in a neighbouring country, with some South African farmers, out of sympathy with neighbouring farmers, not wanting to participate in the census.
- New laws passed affecting farmers and their employees.
- The gap between the previous survey (1996) and census (2002), and the most recent survey (2005) and census (to be run in 2007).

In addition,

- Of the original number of dispatched questionnaires, many were sent to the offices of bookkeepers or accountants. These had to be contacted and visited. This was because the VAT and/or IT returns for most farmers are completed by bookkeepers.

4.2 Problems and difficulties in use of administrative data sources

Some of the administrative data were not representative of the sector. Reliability was of great concern.

4.3 Problems and difficulties in use of statistical business register

- Obtaining required response rates;
- Locating enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises;
- Differences in accounting standards and practices by enterprises can also lead to some inconsistencies in the data used to compile the estimates. While much of the accounting process is subject to standards, there remains a great deal of flexibility available to businesses in the policies and practices they adopt.

4.2 Problems and difficulties in use of administrative data sources

Not applicable

4.3 Problems and difficulties in use of statistical business register

Problems that arise include:

Duplication

- Duplications of enterprises regarding legal name and income tax numbers.

Size groups

- Instances occur where the same enterprise is allocated to different size groups in consecutive samples, due to inconsistencies in the measure of size (turnover).

Classifications

- Instances occur where the same enterprise is allocated different a SIC in consecutive samples.
- In some instances enterprises are not classified to SIC at the required level of detail.

Different legal names

- In some instances the legal names of enterprises are not up to date on the Business Register.

See also the statement for Stats SA's Business Register.

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Survey areas provide feedback to the Business Register based on additional information obtained about reporting enterprises on a continuous basis, but survey feedback is not always updated on the BR for these enterprises in time for it to be brought to bear in frame creation for the following surveys and censuses.

4.6 Problems and difficulties in data dissemination

Generally no problems are encountered.

Annex 4

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Quarterly Employment Statistics in South Africa

1.1 Institutional arrangements

- The Monetary Policy Committee of the South African Reserve Bank (SARB) uses the estimates from the Quarterly Employment Survey (QES), along with other current economic indicators, as input to its interest rates reviews.
- South Africa is a subscriber to Standard Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF).

1.2 Main users

The main users of economic statistics include the following:

- **Government** - policy makers
- **Banker to Government** - the SARB
- **Research and/or Educational Institutions** - Universities, Human Sciences Research Council
- **International Organisations** - International Labour Office
- **Labour unions**
- **Non Governmental Organisations**
- **Industrial Federations** - SACTWU
- **General Public** - Academic and business economists, media and businesses.

2.1 Description of statistical data sources

The QES generates quarterly estimates of the number of employees and gross salaries and wages. The survey is based on a sample of private and public enterprises and government institutions operating in the formal non-agricultural business sector of the economy. The survey provides information on number of employees, gross salaries and wages and average monthly earnings by industry.

The QES is dependent on accurate reporting by responding entities. In most instances it is the payroll manager or accountant, or an individual with a strong background in payroll information, who completes the questionnaire.

The QES collects payroll data for the following industries: manufacturing; electricity, gas and water supply; trade; construction; transport, storage and communication; financial intermediation, insurance, real estate and other business services; and community, social and personal services (including government institutions).

2.2 Data compilation methods

Surveys frame

The frame for economic surveys is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units.

Businesses registered in the Income Tax (IT) system are used as a source for updating the BR, and information for them is used in profiling and delineation. The BR takes responsibility for creating the BSF and the survey frames drawn from it.

Type of unit

The type of unit used in the surveys is the enterprise, which is a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

Periodicity

For the QES, information is collected quarterly in respect of the March, June, September and December quarters.

Main data items covered by the survey

The survey collects information on -

- **Description of main activity** - to support checking/ amendment of the entity's SIC classification;
- **Payroll items** -
 - Salaries and wages;
 - Overtime payments;
 - Bonuses;
 - Number of employees;
 - Number of employees appointed;
 - Number of employees resigned, retrenched and dismissed.

Estimates

Estimates in respect of the QES for the four quarters of 2006 were based on a sample covering the following industries: mining and quarrying; manufacturing; electricity, gas and water supply; construction; trade and hotels and restaurants; transport, storage and communication; financial intermediation, insurance, real estate and other business services; and community, social and personal services (including government institutions).

Imputation for non-response involves one of two methods:

- Historical information for the same entity
- Mean imputation

Imputation is only done on missing large enterprises. For missing medium sized and small enterprises no imputation is done. For these non-responding enterprises the original design weights are adjusted for non-response.

2.3 Use of administrative data source

Mining and quarrying data are obtained from Department of Minerals and Energy.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

The Systems of Registers division maintains the Business Register (BR) and takes responsibility for creating the sampling and survey frames, used by the sampling specialists in the Methodology and Standards division. Samples for the economic surveys are drawn annually, currently each year at the end of April. The BR front end is available for use by survey areas to view the current situation regarding enterprises and their components.

Also see the separate statement for Stats SA's Business Register.

3. Data dissemination

Publications containing QES estimates adhere to section 17 of the Statistics Act regarding confidentiality. They are available through Statistics SA's website for free public access, and hard copies are sent via email to subscribers. Additional dissemination is done when officials from Stats SA visit respondents to assist in completion of the questionnaire.

4 Problems and difficulties encountered

4.1 Problems and difficulties in conducting the economic surveys

- Obtaining required response rates;
- Locating enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises;
- Payroll systems of some enterprises are not designed according to the breakdowns requested in the QES questionnaire.

4.2 Problems and difficulties in use of administrative data sources

The information reported may not meet the QES questionnaire format. For instance we need overtime payments and bonuses separated from gross salaries and wages.

4.3 Problems and difficulties in use of statistical business register

Problems that arise include:

Duplication

- Duplications of enterprises regarding legal name and income tax numbers.

Size groups

- Instances occur where the same enterprise is allocated to different size groups in consecutive samples, due to inconsistencies in the measure of size (turnover).

Classification

- Instances occur where the same enterprise is allocated to a different SIC in consecutive samples.
- In some instances enterprises are not classified to SIC at the required level of detail.

Different legal names

- In some instances the legal names of enterprises are not up to date on the Business Register.

See also the statement for Stats SA's Business Register.

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Survey areas provide feedback to the Business Register based on additional information obtained about reporting enterprises.

4.7 Problems and difficulties in data dissemination

Generally no problems are encountered.

Annex 4

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Quarterly Employment Statistics in South Africa

1.1 Institutional arrangements

- The Monetary Policy Committee of the South African Reserve Bank (SARB) uses the estimates from the Quarterly Employment Survey (QES), along with other current economic indicators, as input to its interest rates reviews.
- South Africa is a subscriber to Standard Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF).

1.2 Main users

The main users of economic statistics include the following:

- **Government** - policy makers
- **Banker to Government** - the SARB
- **Research and/or Educational Institutions** - Universities, Human Sciences Research Council
- **International Organisations** - International Labour Office
- **Labour unions**
- **Non Governmental Organisations**
- **Industrial Federations** - SACTWU
- **General Public** - Academic and business economists, media and businesses.

2.1 Description of statistical data sources

The QES generates quarterly estimates of the number of employees and gross salaries and wages. The survey is based on a sample of private and public enterprises and government institutions operating in the formal non-agricultural business sector of the economy. The survey provides information on number of employees, gross salaries and wages and average monthly earnings by industry.

The QES is dependent on accurate reporting by responding entities. In most instances it is the payroll manager or accountant, or an individual with a strong background in payroll information, who completes the questionnaire.

The QES collects payroll data for the following industries: manufacturing; electricity, gas and water supply; trade; construction; transport, storage and communication; financial intermediation, insurance, real estate and other business services; and community, social and personal services (including government institutions).

2.2 Data compilation methods

Surveys frame

The frame for economic surveys is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units.

Businesses registered in the Income Tax (IT) system are used as a source for updating the BR, and information for them is used in profiling and delineation. The BR takes responsibility for creating the BSF and the survey frames drawn from it.

Type of unit

The type of unit used in the surveys is the enterprise, which is a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

Periodicity

For the QES, information is collected quarterly in respect of the March, June, September and December quarters.

Main data items covered by the survey

The survey collects information on -

- **Description of main activity** - to support checking/ amendment of the entity's SIC classification;
- **Payroll items** -
 - Salaries and wages;
 - Overtime payments;
 - Bonuses;
 - Number of employees;
 - Number of employees appointed;
 - Number of employees resigned, retrenched and dismissed.

Estimates

Estimates in respect of the QES for the four quarters of 2006 were based on a sample covering the following industries: mining and quarrying; manufacturing; electricity, gas and water supply; construction; trade and hotels and restaurants; transport, storage and communication; financial intermediation, insurance, real estate and other business services; and community, social and personal services (including government institutions).

Imputation for non-response involves one of two methods:

- Historical information for the same entity
- Mean imputation

Imputation is only done on missing large enterprises. For missing medium sized and small enterprises no imputation is done. For these non-responding enterprises the original design weights are adjusted for non-response.

2.3 Use of administrative data sources

Mining and quarrying data are obtained from Department of Minerals and Energy.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

The Systems of Registers division maintains the Business Register (BR) and takes responsibility for creating the sampling and survey frames, used by the sampling specialists in the Methodology and Standards division. Samples for the economic surveys are drawn annually, currently each year at the end of April. The BR front end is available for use by survey areas to view the current situation regarding enterprises and their components.

Also see the separate statement for Stats SA's Business Register.

3. Data dissemination

Publications containing QES estimates adhere to section 17 of the Statistics Act regarding confidentiality. They are available through Statistics SA's website for free public access, and hard copies are sent via email to subscribers. Additional dissemination is done when officials from Stats SA visit respondents to assist in completion of the questionnaire.

4 Problems and difficulties encountered

4.1 Problems and difficulties in conducting the economic surveys

- Obtaining required response rates;
- Locating enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises;
- Payroll systems of some enterprises are not designed according to the breakdowns requested in the QES questionnaire.

4.2 Problems and difficulties in use of administrative data sources

The information reported may not meet the QES questionnaire format. For instance we need overtime payments and bonuses separated from gross salaries and wages.

4.3 Problems and difficulties in use of statistical business register

Problems that arise include:

Duplication

- Duplications of enterprises regarding legal name and income tax numbers.

Size groups

- Instances occur where the same enterprise is allocated to different size groups in consecutive samples, due to inconsistencies in the measure of size (turnover).

Classification

- Instances occur where the same enterprise is allocated to a different SIC in consecutive samples.
- In some instances enterprises are not classified to SIC at the required level of detail.

Different legal names

- In some instances the legal names of enterprises are not up to date on the Business Register.

See also the statement for Stats SA's Business Register.

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Survey areas provide feedback to the Business Register based on additional information obtained about reporting enterprises.

4.8 Problems and difficulties in data dissemination

Generally no problems are encountered.

Annex 6

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Electricity Statistics in South Africa

1.1 Institutional arrangements

- The National Accounts division of Statistics SA uses the electricity statistics in compiling annual and quarterly Gross Domestic Product (GDP).
- The South African Reserve Bank (SARB) uses the estimates in assessments of the state of the South African economy.

1.2 Main users

The main users of economic statistics include the following:

- **Government** - policy makers
- **Banker to Government** - the SARB
- **Research and/or Educational Institutions** - Universities, Human Sciences Research Council
- **International Organisations** - International Labour Office
- **Labour unions**
- **Non Governmental Organisations**
- **Industrial Federations** - SACTWU
- **General Public** - Academic and business economists, media and businesses.

1.3 User needs

User needs are determined by arranging advisory committee meetings with internal and external users. In 2007, inputs by users were obtained using Stats SA's website.

2.1 Description of statistical data sources

This survey covers electricity undertakings and establishments conducting activities concerned with the generation and/or transmission and distribution of electricity, including electrical power installations which, as subsidiary divisions of undertakings, produce electricity for regular use by these undertakings.

2.2 Data compilation methods

Survey frame

Eskom regularly provides Stats SA with a list of generating establishments (which has remained constant over the last ten years).

Type of unit

The basic statistical unit for the collection of information is the electricity undertaking or establishment. The electricity undertaking or establishment is the smallest economic unit that functions as a separate entity. Each statistical unit is classified by industry.

Periodicity

Data are collected on a monthly basis. Completed questionnaires are required to be returned to Stats SA within 10 days after the end of the reference month

Main data items covered by the survey

The survey collects information on:

- Electricity generated
- Electricity consumed in power stations and energy storage systems
- Net quantity of electricity generated and sent out from power station(s)
- Purchases outside the Republic of South Africa
- SCO, DWA and Assets (Applicable to Eskom only)
- Sales to undertakings outside the Republic of South Africa
- Provincial distribution of electricity (Eskom only)

Estimates

Weights calculated during the design and allocation of the sample are used to expand sample results to the level of the population. The weight of a sample record is given by the reciprocal value of the sample fraction of the industry sub-domain by size group stratum to which the record belongs.

The weights are calculated as follows:

The sampling weight (w) within the j^{th} size group

$$w_j = N/n$$

where N = Number of units of electricity generated in the j^{th} size group (population).

n = Number of units of electricity generated in the sample in the j^{th} size group.

Data for outstanding large establishments are imputed using the historical imputation method.

Link to National Accounts

The National Accounts division of Statistics SA uses the results of the Building Statistics Survey in compiling annual and quarterly Gross Domestic Product (GDP).

2.3 Use of administrative data sources

Not applicable.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

The business register cannot give accurate information on establishments generating electricity because the majority of enterprises in the small population are classified to other industry sectors (such as Manufacturing). Stats SA used the 1995 Census of electricity, gas and steam as the frame for the sample.

Stats SA confirms with Eskom on a regular basis if there were any additions in electricity undertakings producing electricity [licensed with the National Energy Regulator (NERSA)]. These include enterprises predominantly classified to manufacturing and mining, as well as local authorities.

3. Data dissemination

Stats SA adheres to section 17 of the Statistics Act regarding confidentiality. The publication is available through Statistics South Africa's website for free public access, and hard copies and sent via email to subscribers. Additional dissemination is done when officials from Stats SA visit respondents to assist in completion of the questionnaire.

4 Problems and difficulties encountered

4.1 Problems and difficulties in conducting the economic surveys

- Obtaining required response rates
- Locating enterprises, as administrative information on the Business Register is not adequate and reliable for all sampled enterprises.

4.2 Problems and difficulties in use of administrative data sources

Not applicable

4.3 Problems and difficulties in use of statistical business register

Not applicable

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Not applicable

4.9 Problems and difficulties in data dissemination

Generally no problems are encountered.

Annex 7

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Monthly Manufacturing Statistics in South Africa

1.1 Institutional arrangements

- The National Accounts division of Statistics SA uses the monthly manufacturing estimates for compiling annual and quarterly Gross Domestic Product (GDP).
- The South African Reserve Bank (SARB) uses the estimates for macro economic decisions.

1.2 Main users

The main users of economic statistics include the following:

- **South African Reserve Bank** - requires short term production, trade and building statistics
- **National Accounts** - Require production and sales statistics of all industries monthly in calculating quarterly GDP
- **Research and/or Educational Institutions** - Universities, Human Sciences Research Council and the National Research Foundation.
- **International Organisations** - World Bank, International Statistical Offices and the International Monetary Fund (IMF)
- **Labour unions**
- **Non Governmental Organisations**
- **General Public** - Academic and business economists, media and businesses.

1.3 User needs

User needs are determined by arranging advisory committee meetings with internal and external users. In 2007, inputs by users were obtained using Stats SA's website.

2.1 Description of statistical data sources

The Survey of Manufacturing Production and Sales (MPS) measures the overall quantity and value of manufactured products and total value of stocks from a sample of enterprises in the South African economy. The survey is based on samples of private enterprises operating in the formal non-agricultural business sector of the economy, excluding financial intermediation, insurance and government institutions.

The short term manufacturing survey is dependent on accurate reporting by responding entities. In most instances it is the production manager at the manufacturing plant who completes the questionnaire.

The MPS collects data for the following topics:

- Total value of sales
- Total value of opening and closing inventories
- Total quantity produced of selected manufactured products
- Total value of unfilled orders.

2.2 Data compilation methods

Survey frame

The frame for the MPS is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are used as a source for updating the BR, and information for them is used in profiling and delineation. The BR takes responsibility for creating the BSF and the survey frames drawn from it.

Type of unit

The type of unit used in the surveys is the enterprise, which is a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

Periodicity

Monthly, published within 6 weeks (42 days) after the end of the relevant month.

Main data items covered by the survey

- The manufacturing, processing, making or packing of products
- The slaughtering of animals, including poultry
- Installation, assembly, completion, repair and related work.

Estimates

Estimates from the surveys are based on data reported by respondents, together with data from imputation for missing respondents based on their previous responses.

Imputation is only performed for large enterprises, and enterprises for which data for at least one previous month were received. For medium and small enterprises that have never responded no imputation is performed. For these enterprises the original design weights are adjusted for non-response by number raising.

Link to National Accounts

The MPS provides monthly indicators for moving annual data forward quarterly, making the MPS an important source for compilation of quarterly GDP and components.

2.3 Use of administrative data sources

Not applicable to the MPS.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

The frame for the MPS is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are also used as a source for updating the BR, and information for them is used in profiling and delineation.

The Systems of Registers division maintains the BR and takes responsibility for creating the sampling and survey frames, used by the sampling specialists in the Methodology and Standards division. Samples for the economic surveys are drawn annually, currently each year at the end of April. The BR front end is available for use by survey areas to view the current situation regarding enterprises and their components.

Also see the separate statement for Stats SA's Business Register.

3. Data dissemination

The MPS publication adheres to section 17 of the Statistics Act regarding confidentiality. It is available through Statistics SA's website for free public access, and hard copies are sent via email to subscribers. Additional dissemination is done when officials from Stats SA visit respondents to assist in completion of the questionnaire.

4. Problems and difficulties encountered

4.1 Problems and difficulties in conducting the economic surveys

- Obtaining required response rates;
- Locating enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises.

4.2 Problems and difficulties in use of administrative data sources

- Not applicable.

4.3 Problems and difficulties in use of statistical business register

Problems that arise include:

Duplication

- Duplications of enterprises regarding legal name and income tax numbers.

Size groups

- Instances occur where the same enterprise is allocated to different size groups in consecutive samples, due to inconsistencies in the measure of size (turnover).

Classifications

- Instances occur where the same enterprise is allocated different a SIC in consecutive samples.
- In some instances enterprises are not classified to SIC at the required level of detail.

Different legal names

- In some instances the legal names of enterprises are not up to date on the Business Register.

See also the statement for Stats SA's Business Register.

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Survey areas provide feedback to the Business Register based on additional information obtained about reporting enterprises.

4.5 Problems and difficulties in data dissemination

Generally no problems are encountered.

Annex 8

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Monthly Retail, Wholesale and Motor Trade Statistics in South Africa

1.1 Institutional arrangements

- The National Accounts division of Statistics SA uses the monthly trade survey estimates for compiling annual and quarterly Gross Domestic Product (GDP).
- The South African Reserve Bank (SARB) uses the estimates for macro economic decisions.

1.2 Main users

The main users of economic statistics include the following:

- **South African Reserve Bank** - requires short term production, trade and building statistics
- **National Accounts** - Require Require production and sales statistics of all industries monthly in calculating quarterly GDP
- **Research and/or Educational Institutions** - Universities, Human Sciences Research Council and the National Research Foundation.
- **International Organisations** - World Bank, International Statistical Offices and the International Monetary Fund (IMF)
- **Labour unions**
- **Non Governmental Organisations**
- **General Public** - Academic and business economists, media and businesses.

1.3 User needs

User needs are determined by arranging advisory committee meetings with internal and external users. In 2007, inputs by users were obtained using Stats SA's website.

2.1 Description of statistical data sources

The monthly Wholesale Trade, Retail Trade Motor Trade sales surveys measure the activity of each of these sectors in the South African economy. The surveys are based on samples of private enterprises operating in the formal business sector of the economy. The surveys are designed to give information on sales by industry (retail and wholesale trade) and activity (motor trade).

The trade surveys are dependent on accurate reporting by responding entities. In most instances it is the accountant who completes the questionnaire.

2.2 Data compilation methods

Survey frame

The frame for the trade surveys is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are used as a source for updating the BR, and information for them is used in profiling and delineation. The BR takes responsibility for creating the BSF and the survey frames drawn from it.

Type of unit

The type of unit used in the surveys is the enterprise, which is a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

Periodicity

Information is collected for one calendar month.

Main data items covered by these surveys

The **wholesale trade survey** collects information on -

- Total wholesale trade sales
- Total income from trade on behalf of and on account of others sales

The **retail trade survey** collects information on -

- Total retail trade sales

The **motor trade survey** collects information on -

- Total motor trade sales
- Motor trade sales by type of activity
 - New motor vehicle sales
 - Used motor vehicle sales
- Income from service department or workshop
- Direct sales of automotive fuels, oils and additives
- Direct sales of spares and accessories
- Convenience store income
- Other direct sales and other trading income

Estimates

Estimates from the surveys are based on data reported by respondents, together with data from ratio imputation for missing respondents.

Ratio imputation is only performed on large enterprises and enterprises for which data for at least one month was received. For medium and small enterprises that have never

respondents no imputation is performed. For these enterprises the original design weights are adjusted for non-response by number raising.

Link to National Accounts

The trade surveys provides monthly indicators for moving quarterly and annual data forward, making these surveys an important source for compilation of quarterly GDP and components.

2.3 Use of administrative data sources

Not applicable to the trade surveys.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

The frame for the trade surveys is the Business Sampling Frame (BSF) drawn from Stats SA's Business Register (BR), for which businesses registered in the Value Added Tax (VAT) system are the main source for creation and updating of statistical units. Businesses registered in the Income Tax (IT) system are used as a source for updating the BR, and information for them is used in profiling and delineation. The BR takes responsibility for creating the BSF and the survey frames drawn from it.

3. Data dissemination

The trade survey publications adhere to section 17 of the Statistics Act regarding confidentiality. It is available through Statistics SA's website for free public access, and hard copies are sent via email to subscribers. Additional dissemination is done when officials from Stats SA visit respondents to assist in completion of the questionnaire.

4. Problems and difficulties encountered

4.1 Problems and difficulties in conducting the economic surveys

- Obtaining required response rates;
- Locating enterprises as administrative information on the Business Register is not adequate and reliable for all sampled enterprises.

4.2 Problems and difficulties in use of administrative data sources

Not applicable.

4.3 Problems and difficulties in use of statistical business register

Problems that arise include:

Duplication

- Duplications of enterprises regarding legal name and income tax numbers.

Size groups

- Instances occur where the same enterprise is allocated to different size groups in consecutive samples, due to inconsistencies in the measure of size (turnover).

Classifications

- Instances occur where the same enterprise is allocated different a SIC in consecutive samples.
- In some instances enterprises are not classified to SIC at the required level of detail.

Different legal names

- In some instances the legal names of enterprises are not up to date on the Business Register.

See also the statement for Stats SA's Business Register.

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Survey areas provide feedback to the Business Register based on additional information obtained about reporting enterprises.

4.5 Problems and difficulties in data dissemination

Generally no problems are encountered.

Annex 9

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Monthly Mining Production and Sales Statistics in South Africa

1.1 Institutional arrangements

- The National Accounts division of Statistics SA uses the monthly estimates from the Mining Production and Sales survey for compiling annual and quarterly Gross Domestic Product (GDP).
- The South African Reserve Bank (SARB) uses the estimates for macro economic decisions.

1.2 Main users

The main users of economic statistics include the following:

- **South African Reserve Bank** - requires short term production and sale statistics for mining as well as other sectors
- **National Accounts** - Require production and sales statistics of all industries monthly in calculating quarterly GDP
- **Research and/or Educational Institutions** - Universities, Human Sciences Research Council and the National Research Foundation.
- **International Organisations** - World Bank, International Statistical Offices and the International Monetary Fund (IMF)
- **Labour unions**
- **Non Governmental Organisations**
- **General Public** - Academic and business economists, media and businesses.

1.3 User needs

User needs are determined by arranging advisory committee meetings with internal and external users. In 2007, inputs by users were obtained using Stats SA's website.

2.1 Description of statistical data sources

The monthly Mining Production and Sales survey measures mining production and mineral sales in the South African economy. The survey is based on administrative data received from the Department of minerals and energy (DME).

2.2 Data compilation methods

Survey frame

The survey covers mining establishments conducting activities in extracting, dressing and beneficiating of minerals occurring naturally, such as coals and ores.

Type of unit

The basic statistical unit for the collection of information is the mining establishment. An establishment is the smallest economic unit that functions as a separate entity. Each statistical unit is classified to an industry.

Periodicity

Monthly, published within 6 weeks (42 days) after the end of the relevant month.

Main data items covered by the survey

- Total production of commodities in South Africa
- Local/export and total sales value of minerals in South Africa.

Estimates

For non-responding units the DME uses an exponential smoothing method to estimate their figures.

Link to National Accounts

The Mining Production and Sales survey provides monthly indicators for moving annual data forward quarterly, making the survey an important source for compilation of quarterly GDP and components.

2.3 Use of administrative data sources

The monthly Mining Production and Sales survey is based on administrative data. This is obtained from DME every month in an Excel file.

2.4 Availability and use of statistical business registers for compilation of basic economic statistics

Not applicable.

3. Data dissemination

The Mining Production and Sales publication adheres to section 17 of the Statistics Act regarding confidentiality. The publication is available through Statistics South Africa's website for free public access, and hard copies are sent via email to subscribers.

4 Problems and difficulties encountered

4.1 Problems and difficulties in conducting the mining survey

- Obtaining data from DME in time
- The reliability of the data provided by DME
- Stats SA may not always explain the 'mineral commodity market' as well as DME's mineral economists.

4.2 Problems and difficulties in use of administrative data sources

As above.

4.3 Problems and difficulties in use of statistical business register

Not applicable

4.4 Problems and difficulties in maintenance and improvement of the statistical business register

Not applicable

4.5 Problems and difficulties in data dissemination

Occasionally data are not published by the pre-announced release time because of the need to resolve problems in the data provided by DME.

Annex 10

UN Regional Workshop on Compilation of Basic Economic Statistics, 23-26 July 2007

Stats SA's Business Register

The following notes on the Business Register and related administrative data sets address headings 2.4 and 4 in the UNSD's Regional Workshop letter of 15 June 2007.

2.4 Availability and use of statistical business register for the compilation of basic economic statistics

Economic statistics are dependent on a business register to develop a sampling frame. Stats SA has been continually engaged for some years in developing a comprehensive business register from a number of administrative data sources. Each of these administrative data sets, originally intended for administrative purposes, present significant challenges for statistical purposes.

Integrated Business Register

Data files from seven administrative databases are received and stored on the Integrated Business Register (IBR) on behalf of the contributing agencies, principally the South African Revenue Service (SARS), also the Departments of Labour and Trade and Industry. The IBR is an inter-departmental database, not a Stats SA database, but it is maintained in close collaboration between the respective departments. The IBR is the starting point from which statistical units can be created from administrative units, for updating Stats SA's own Business Register. The IBR data refer to legal entities, or parts of legal entities, in various roles, such as VAT account holder, income tax payer and exporter. Thus there may be records referring to a given legal entity in several different files. There may even be several records within the same file, for example where a legal entity has more than one VAT account.

Statistical units

Input data from the IBR refer to administrative units, none of which are entirely suitable as statistical units. Statistical units have to be defined in such a way that:

- they meet statistical needs, that is, are the units comprising the survey frames about which production, employment, financial, etc. data can be collected;
- they can be substantially created and maintained using data derived from administrative units.

The combined set of statistical and administrative units is referred to as the *units model*. Stats SA has defined a legal unit and three types of statistical units for economic statistics

as given below. They are the *conceptual* definitions. Administrative units from the IBR are transformed into statistical units on Stats SA's Business Register.

Legal Unit

A Legal Unit (LU) is a natural (individual or partnership) or juristical person (company, close corporation, trust) that has obligations and rights as defined by law.

The main characteristics of a LU are that they own goods or assets, they incur liabilities, enter into contracts and may be involved in litigation, they take decisions and actions for which they are held responsible and accountable at law, they make complete sets of accounts (including profit-and loss accounts and balance sheets).

Enterprise (EN)

An EN is a legal unit, or the smallest combination of legal units, that includes and directly controls all the functions necessary to carry out its production activities.

According to this definition, an enterprise is a production unit principally: it buys and sells from and to the open market, respectively. Thus an enterprise unit is supposed to be the key statistical unit in business statistics according to the current local interpretation of theory.

Kind of Activity Unit (KAU)

A KAU is an enterprise unit or part of an enterprise unit engaged in one or predominantly one kind of economic activity without being restricted to a single geographical location.

Geographical Unit (GEO)

A GEO is an enterprise unit or part of an enterprise unit involved in one, or predominantly one, kind of activity at 3-digit SIC level, at/from one *location*, which is normally an unbroken physical area/site.

It is understood that the three statistical units form a hierarchy in the sense that:

- a GEO is linked to one and only one KAU and a KAU is linked to one and only one EN.
- an EN is composed of one or more KAUs, each of which is composed of one or more GEOs

The simplest form of statistical structure is one in which the EN is linked to a single KAU which is linked to a single GEO and the EN, KAU and GEO thus coincide in their coverage.

Updating of Business Register

Stats SA receives monthly transaction data from the IBR about businesses registered in the VAT system. The VAT data are used to update the VAT tables within the Business Data Base (BDB) in the Business Register. From the updated BDB, the statistical tables within the Business Sampling Frame (BSF) are updated. This is the primary source of BSF changes.

Twice per year, the BDB is also updated with businesses registered in the income tax (IT) system. The process is similar to that for VAT data in the sense that the IT administrative data tables are updated, and, for each new IT record with no BDB link to any existing record in the database a new enterprise (EN) record and associated GEO and KAU records are created.

4. Major difficulties encountered

A major challenge arises from the lack of a unique identifier for each business when engaging with different government spheres. Typically, a company will have completely different and independent numeric identifiers in the systems for IT, Skills Development Levy (SDL), Unemployment Insurance Fund (UIF), PAYE and VAT. The IBR has been tasked to consolidate information from all these administrative data sources to develop a coherent single business register that can be used for statistical purposes. However, without a unique identifier, resolution of units information depends on soft-matching, which is expensive and error prone. As well, the IT source requires extensive screening to isolate units of interest for statistical purposes, and investigations are proceeding into the continuing the utility of this source, given that the numerous small IT businesses which are not registered in the VAT system contribute relatively little to statistical totals.

Research is also proceeding to determine the best administrative source for employer businesses in the formal sector, as well as the best measure of size for them to use in frame and sample stratification. The aim is to determine and adopt a measure (employment, wages or PAYE deductions) which is much more closely related to the measurement of employment and earnings in Stats SA's Quarterly Employment Survey, a sample survey of employer businesses.