

# **AFRICAN STATISTICS DAY**

**18<sup>TH</sup> NOVEMBER 2011**

**KEEPING ACCOUNTS TO IMPROVE  
AFRICA'S PRESENT FOR A  
BRIGHTER FUTURE**

*Prepared by National Bureau of Statistics*

# *Compilation of National Accounts Statistics*

## **Outline:**

- What is national accounts statistics?
- What do national accounts measure?
- How is national accounts compiled?
- What is Gross Domestic Products?
- Who compile National Accounts in Tanzania?
- What are the uses/importance of national accounts statistics in Tanzania?
- Plans in place to improve national accounts statistics in the country

# ***What is National Accounts Statistics?***

National accounts statistics are consistent and comprehensive surveys of national economy. Contain national aggregates and give detailed descriptions of transactions between different sectors of the economy, including the rest of the world. Statistics from all areas of the economy in the country are utilized in national accounts.

# *What is SNA?*

- The System of National Accounts (SNA) is a statistical framework that provides a comprehensive, consistent and flexible set of macroeconomic accounts for policy making, analysis and research purposes.
- SNA is produced and released under the auspices of the United Nations, the European Commission, the Organization for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group.

# What is Gross Domestic Products?

- **Gross Domestic Product (GDP)** refers to the market value of all final goods and services produced in a country in a given period
- ✓ Most important component of national accounts
- ✓ Common denominator to all other statistical aggregates.
- **Standard definition:**
  - GDP is the sum of the gross values added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies on products)
  - In Tanzania ,GDP estimates are compiled at
    - Semi-annual ,
    - Quarterly (at constant prices only)
    - Regional GDP estimates as per the request.

# How is GDP measured?

**Basically there are three** common approaches recommended for estimating GDP namely;

- ❖ Production approach
- ❖ Expenditure approach and
- ❖ income approach.

In practice, all the three methods/approaches must result in the same GDP estimates as a cross-checking mechanism

# ***Production approach***

***(also known as Net product or Value Added method)***

- **Production** is the outcome of the process whereby labour, accumulated capital assets and technical knowledge are applied to the task of transforming resources (raw materials) and/or semi-processed goods into goods or services. The inputs may be tangible or intangible (such as ideas, information, and knowledge) into goods or services.

Gross Domestic Product (GDP) is compiled by aggregating the Gross Value Added (GVA) of each branch of activity in the economy. These estimates can be expressed at current and constant prices.

# *Production approach*

- GVA for each activity is arrived at by subtracting the value of **intermediate consumption** from the Total **Gross Output**.
- Symbolically,
- **G V A = Output – IC where;**
- Output = Value of total sales of goods and services + Value of changes in inventories.
- The sum of **Gross Value Added** in various economic activities is known as **GDP at basic prices**

# ***Expenditure approach:***

- GDP is measured by aggregating final consumption expenditures (by households, NGOs and government), capital formation, and exports less imports of goods and services.
- *In economics, most goods are produced for sale and therefore, measuring the total expenditure of money used to buy things is a way of measuring production. This is known as the expenditure method of calculating of estimating GDP*

## *Expenditure approach:*

- Components of GDP by expenditure;  
GDP (Y) is a sum of Consumption (C), Investment (I), Government Spending (G) and Net Exports (X – M).
- $Y = C + I + G + (X - M)$

# *Income approach*

- Using this approach ;GDP is estimated by adding **incomes** that firms pay the households for the factors of production they hire - **wages** for labour, **interest** for capital, **rent** for land and **profits** for entrepreneurship.
- GDP = compensation of employees + gross operating surplus + gross mixed income + taxes less subsidies on production and imports
- **GDP = COE + GOS + GMI + TP & M – SP & M**

- GDP estimates can be presented in **nominal** or **real** terms. Real GDP is calculated using constant prices whereas nominal GDP uses current prices. The difference between the nominal GDP and real GDP is due to the inflation rate in the market.

## *Data sources for national accounts statistics*

- These data sources are categorized as Primary and Secondary.
- ***Primary data sources:*** include surveys, census and special studies. In Tanzania we have Population and Housing Censuses, Household Budget Surveys, Integrated Labour Force Surveys and others.
- ***Secondary data source:*** include administrative/official data from MDAs and other semi-official data from published books, research papers journals, etc.

# *Who compile National Accounts in Tanzania?*

- Usually national accounts are compiled by national statistical offices and/or central banks in each country
- NA statistics are released on both annual, quarterly or semi-annual frequency. I
- In Tanzania, the NBS has the mandate to compile and release all official statistics in the country (Stat.Act no1,2002)  
NBS is also the center of reference for statistical methods and standards in the country. However, NBS works in close collaboration with line MDAs for data audit and harmonization purposes.

## ***What are the uses/importance of national accounts statistics in Tanzania?***

- ***Used in economic policy formulation, where key considerations include;***
- How is output divided between **consumption** and **investment**?
- How dependent is the national economy on **foreign trade**?
- How does output break down between different **industries**?
- To what extent and in what ways do different decision-making sectors create savings for capital growth?
- How has the structure of output changed over the years?

***Used for purposes of analyzing the structure of the national economy. Interests here include:***

- value added and employment by industry and region
- breakdown of income by sector
- imports and exports by product groups
- consumption expenditure by product groups
- gross fixed capital formation and fixed capital assets
- composition of financial assets, reserves and flows by type of instrument and by sector

***tool for monitoring the development of the national economy over time.***

- analysing the rate of GDP growth
- analysing the rate of inflation
- analysing seasonal variations in household expenditure by means of quarterly accounting
- analysing the changing significance of different types of funding instruments
- comparing industry structures in the national economy in the longer term

- ***used to analyze individual components or aspects of the national economy. examples include;***
- banking and finance
- the role of general government
- regional economies (as compared to the national economy)

## ***challenges in compiling and maintaining national accounts statistics in Tanzania?***

- Lack of controlled quality of data from diverse sources
- Formal economic activity is limited to a relatively small proportion of the population in a big country like Tanzania.
- Much more resources far beyond what could be reasonably allocated in terms of funding, skilled and knowledgeable staff, technical support (such as currently provided by IMF/AFRITAC) and the co-operation of line Ministries are all essential inputs for compiling GDP estimates of a quality necessary for good governance.

# *Towards improving national accounts statistics in the country*

- *The Needs Assessment of Statisticians in Regional Offices through the Tanzania Statistical Master Plan (TSMP) annual work Program*
- For effective National Statistical System, it is important to have a sufficient number of **qualified statisticians** to carry out the statistical activities in the regions.
- In this regard, the TSMP has planned to undertake **needs assessment** so as to identify the actual number of statisticians to be recruited in the regional offices.

## *Improving national accounts statistics in the country – cont'*

- After the assessment, the ideal relationship between the NBS Regional Statistical Offices and the Regional Secretariats will be explored to provide a sound linkage between the two offices

## ***Improving national accounts statistics in the country – cont'***

- ***Adopting current international classifications/standards***
- Different MDAs use different classifications and definitions, which makes comparisons and combination of data across the National Statistical System and over time **difficult**
- All statistical activities need to be conducted in line with agreed international standard classifications /systems such as the International Standard Industrial Classification (ISIC), Harmonized System Codes (HS), and Classification of Products by Activity (CPA) and using internationally agreed compilation framework such System of National Accounts (SNA), Government Finance Statistics (GFS) etc. All these will be accommodated in the TSMP annual work programs.