

CONCEPTS AND DEFINITIONS

FOR OFFICIAL STATISTICS IN TANZANIA

THIRD EDITION



National Bureau of Statistics

Ministry of Finance and Planning

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National Bureau of Statistics Vision "To become a one-stop centre for official statistics in Tanzania"

"To produce quality official statistics and services that meet needs of

national and international stakeholders for evidence-based planning and

Mission

decision making"

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PREFACE

According to the Statistics Act, 2015 one of the functions of the National Bureau of Statistics

(NBS) is to develop statistical methods and standards so as to ensure their use by all producers and

users of official statistics. The use of defined statistical methods and standards facilitate the

integration and comparison of statistics produced both nationally and internationally.

This publication puts together all Statistical Concepts and Definitions that are used in the collection

and compilation of official statistics in the country. The objective of this publication is to produce

concepts and definitions that will be used by all producers of official statistics in the entire National

Statistical System (NSS).

To allow internal and external comparisons, most of the concepts and definitions given are those

recommended internationally. However, where national interests are better served by departing

from international recommendations, priority is given to national interests.

The provisional of concepts and definitions for official statistics was prepared by the NBS in

collaboration with various stakeholders from Ministries, Departments and Agencies (MDAs) within

the National Statistical System in Tanzania Mainland. Appreciation goes to the participants who

spent their time to provide useful information that has enable NBS to obtain the required

information.

We hope that both the current and potential producers/users of official statistics will find concepts

and definitions contained herein useful in their research and analytical needs. We also welcome

feedbacks, comments and suggestions that will lead to the improvement of future editions of this

publication.

Dr. Albina A. Chuwa

Director General.

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INTRODUCTION

The National Bureau of Statistics (NBS) is not the only producer of statistics in the National Statistical System in the country. However, according to the Statistics Act, 2015 NBS is mandated among other functions to coordinate statistical services in the country so as to produce quality statistics that are comparable over time and across subject matter areas.

Experience has shown that producers of statistics in Tanzania have been producing statistics that are conflicting. This situation has, over the years, brought difficulties for planners and decision makers to decide on which dataset to use.

In order to address this situation, the NBS has produced this document, which provides statistical concepts and definitions to be used by all producers and users of statistics so as to enhance harmonization in the production of official statistics in Tanzania. This publication is summarized into six (6) subject matter areas;

- i. Demographic statistics
- ii. Education statistics
- iii. Health statistics
- iv. Other Social statistics
- v. Economic statistics
- vi. Crosscutting subject matter areas that include; Business Register (BR), Geo-Information System (GIS), Sampling, and Environment.

The First Edition *on Concepts and Definitions* was published in 2004-2010 as one of the regular publications for use by the Government and other statistical stakeholders. The Second Edition on *Concepts and Definitions for Official Statistics 2011-2014* was produced by involving various stakeholders from MDAs within the National Statistical System (NSS). This was aimed at fulfilling the needs of the implementation process for five years (2009/10-2013/14) of the Tanzania Statistical Master Plan (TSMP) that focuses on five substantive components namely; Institutional Development and Legal Reforms, Human Resource Development, Data Development and Dissemination, Physical Infrastructure and Equipment Development and Development of Statistical Infrastructure. Henceforth, the NSS needs to be supported by adequate statistical infrastructure based on well defined Concepts, Definitions, International Classifications and Standards.

It is expected that Development of Statistical Infrastructure will improve the Quality of Data and harmonize statistical production processes as well as reduce production costs within the NSS. This initiative will also help to raise public awareness and confidence among various customers in the use of Routine, Survey and Census Data.

The plan is to update this publication after every five (5) years. The time in between will be used to review, develop concepts and definitions for new subject matter areas and promote discussions, comments and constructive suggestions from stakeholders. The updated publication will incorporate the new concepts and definitions and constructive suggestions from stakeholders that will be used to produce quality statistics needed to facilitate evidence based plans for decision making. The next edition will be produced in 2020.

PART ONE: REAL SECTOR

CHAPTER ONE

NATIONAL ACCOUNTS STATISTICS

National accounts statistics are designed to provide a consistent and comprehensive survey of the national economy. The national accounts contain national aggregates, and give detailed descriptions of transactions between different sectors of the economy, including the rest of the world.

1.0 The System of National Accounts (SNA)

The System of National Accounts (SNA) is the internationally agreed standard set of recommendations on how to compile measures of economic activity. The SNA describes a coherent, consistent and integrated set of macroeconomic accounts in the context of a set of internationally agreed concepts, definitions, classifications and accounting rules.

It provides an overview of economic processes, recording how production is distributed among consumers, businesses, government and foreign nations. It shows how income originating in production, modified by taxes and transfers, flows to these groups and how they allocate these flows to consumption, saving and investment. Consequently, the national accounts are one of the building blocks of macroeconomic statistics forming a basis for economic analysis and policy formulation.

1.1 Regional National Accounts

Refers to coherent, consistent and integrated sets of macroeconomic accounts and tables designed for a variety of analytical and policy purposes but compiled at regional level. In Tanzania Mainland, there are 26 regions and each region constitutes an economic territory used for the compilation of Regional National Accounts.

1.2 Quarterly National Accounts (QNA)

Refers to coherent, consistent and integrated sets of macroeconomic accounts and tables designed for a variety of analytical and policy purposes but compiled quarterly basis in a year.

1.3 Semi-annual National Accounts

Refers to coherent, consistent and integrated sets of macroeconomic accounts and tables designed for a variety of analytical and policy purposes but compiled after every six months.

1.4 Institutional unit

Refers to an economic entity that is capable, in its own right, of owning assets, incurring liabilities, engaging in economic activities and engaging in transactions with other entities.

1.5 Economic Production

Refers to an activity carried out under the control and responsibility of an institutional unit that uses inputs of labour, capital, goods and services to produce outputs of goods or services. A purely natural process without any human involvement or direction is not production in an economic sense.

1.6 Current Prices

Refers to the prevailing prices at the time of observation.

1.7 Current Price Estimates

Estimation of Gross Domestic Product (GDP) at current prices involves expressing the value of each component transaction as the product of a current price and quantity.

1.8 Constant Price

Obtained directly by factoring changes over time in the values of flows or stocks of goods and services into two components reflecting changes in the prices of the goods and services concerned and changes in their volume.

1.9 Constant Price Estimates

Gross Domestic Product (GDP) at constant prices involves expressing the value of each component transaction as the product of a fixed base year price and current quantity.

1.10 Price Deflator / GDP deflator

Is a measure of the level of prices of all new, domestically produced final goods and services in an economy. It measures the ratio of current-year price of a good to its price in some base year. The formula used to calculate the deflator is:

GDP deflator =
$$\frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

1.11 Implicit Price Deflator

This is obtained by dividing GDP at current prices value by a corresponding GDP at constant prices.

1.12 Market output

Refers to output sold at prices that are economically significant or otherwise disposed of on the market, or intended for sale or disposal on the market.

1.13 Gross

The term "gross" is a common means of referring to values before deducting consumption of fixed capital (generally used as in "gross capital stock" or "gross domestic product").

1.14 Gross Domestic Product (GDP)

Refers to the sum of the gross values added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies on products not included in the value of their outputs). The sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' price, less the value of imports of goods and services, or the sum of primary incomes distributed by resident producer units.

The basic formula for calculating the GDP is:

Y = C + I + E + G

Where

Y = GDP

C = Consumer Spending

I = **Investment made by Industry**

E = Excess of Export over Imports (X - M)

G = Government Spending

a) Gross Domestic Product at Market Prices

Refers to the producers' value of the gross output of Resident Producers less the purchasers' values of their intermediate Consumption plus import duties.

b) Gross Domestic Product at Factor Cost

Refers to the value of all goods and services produced by the Resident without including the excess of indirect taxes over subsidies.

1.15 Basic price

The basic price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, on that unit as consequence of its production or sale; it excludes any transport charges invoiced separately by the producer.

1.16 Gross Domestic Product at Basic Prices

Refers to the value of the gross output at basic prices of resident Producers less the purchasers' values of their intermediate Consumption plus net taxes on products

1.17 Gross National Income (GNI)

GNI (gross national income) is GDP less net taxes on production and imports, less compensation of employees and property income payable to the rest of the world plus the corresponding items receivable from the rest of the world (in other words, GDP less primary incomes payable to none resident units plus primary income receivable from non-resident units); an alternatively approach to measuring GNI at market prices is as the aggregate value of the balances of gross primary incomes for all sectors; (note that GNI is identical to gross national product (GNP) as previously used in national accounts generally

1.18 Real Gross Domestic Income

Refers to a measure of the real purchasing power of income generated by domestic production (including the impact on those income of changes in the terms of trade); it is equal to gross domestic product at constant prices plus the trading gain (or less the trading loss) resulting from the changes in the terms of trade.

1.19 Real Gross National Income

Refers to a measure of the real purchasing power of national income calculated by adjusting real gross domestic income for the real impact of primary income flows (property income and labour income) to and from the rest of the World.

1.20 Factor Incomes from the Rest of the World

These include Primary Income and Factor Income from the Rest of the World.

a) Primary Incomes

These are payable out of the value added created by production. They include compensation of employees, property incomes (interests, dividends,) and taxes on production and imports net of subsidies.

b) Factor Incomes

These are payments as a result of the use of factors of production (labour, capital and land).

c) Rest of the World

Refers to all non-resident institutional units that enter into transactions with resident units or have other economic links with resident units.

1.21 Value Added

It is the measure of the additional value created by a process of Production in the economy for the reference period.

a) Gross Value Added

The value of output minus the value of intermediate consumption; it is a measure of the contribution to GDP made by individual producer, industry or sector.

b) Net Value Added

It is the value of output less the values of both intermediate consumption and consumption of fixed capital.

1.22 Goods and Services

a) Goods

These are physical objects for which a demand exists. The ownership rights can be established and whose ownership can be transferred from one institutional unit to another by engaging in transactions on markets. It includes goods for own consumption.

b) Services

These are heterogeneous outputs produced on demand. Typically consist of changes in conditions of the consuming units realized by the activities of producers at the demand of the consumers. Services are not separate entities over which ownership rights can be established. They cannot be traded separately from their production.

1.23 Subsistence Production

Refers to the value of goods and services produced at small scale and used by the producers themselves without exchange for money.

1.24 Stocks

Stocks are a position in, or holdings of, assets and liabilities at a point in time and the System records stocks in accounts, usually referred to as balance sheets, and tables at the beginning and end of the accounting period; stocks result from the accumulation of prior transactions other flows in the period (note that stocks of goods are referred to as "inventories" in the System).

1.25 Subsidies

Subsidies are current unrequited payments that government units, including non-resident government units, make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services, which they produce, sell or import.

1.26 Other subsidies on production

Other subsidies on production consist of subsidies, except subsidies on products, which resident enterprises may receive as a consequence of engaging in production (eg, subsidies on payroll or workforce or subsidies to reduce pollution).

1.27 Other subsidies on products

Other subsidies on products consist of subsidies on goods or services produced as the outputs of resident enterprises that become payable as a result of the production, sale, transfer, leasing or delivery of those goods or services, or as a result of their use for own consumption or own capital formation; there are three broad categories: (1) subsidies on products used domestically, (2) losses of government trading organisations, and (3) subsidies to public corporations and quasi-corporations.

1.28 Export subsidies

Export subsidies consist of all subsidies on goods and services that become payable to resident producers when the goods leave the economic territory or when the services are delivered to non-resident units; they include direct subsidies on exports, losses of government trading enterprises in respect of trade with non-residents, and subsidies resulting from multiple exchange rates.

1.29 Output

Output consists of those goods or services that are produced within an establishment that become available for use outside that establishment, plus any goods and services produced for own final use.

1.30 National Disposable Income:

Refers to Gross National Income at market prices less current transfers, in cash or in kind between resident and non-resident institutional units. Gross or net national disposable income may be derived from gross or net national Income by:

Adding all current transfers in cash or in kind receivable by resident Institutional units from non- resident units; and subtracting all Current transfers in cash or in kind payable by resident institutional to Non-resident units.

a) Transfers

Refers to transactions between one institutional unit and another unit without exchange of goods, services or assets in return.

b) Residence

Is a center of economic interest in the economic territory of that country. Residence is not based on nationality or legal criteria. The residency status of producers determines the limits of domestic production and affects the measurement of gross domestic product and many flows in the system.

1.31 Capital transfers

Capital transfers are transactions in which the ownership of an asset (other than cash and inventories) is transferred from one institutional unit to another, in which cash is transferred to enable the recipient to acquire another asset or in which the funds realised by the disposal of another asset are transferred.

1.32 Current transfers

Current transfers consist of all transfers that are not transfers of capital; they directly affect the level of disposable income and should influence the consumption of goods or services.

1.33 Gross National Disposable Income

Is equivalent to GNI plus all secondary income in cash or in kind receivable by resident institutional units from the rest of the world, less all secondary income in cash or in kind payable by resident institutional units to the rest of the world.

1.34 Property Income

Refers to the income receivable by the owner of a financial asset or a tangible non-produced asset in return for providing funds to or putting a tangible non-produced asset at the disposal of another, institutional unit.

1.35 Final Consumption Expenditure

Refers to transactions on final consumption of goods and services by the household and the government in the economy during a reference period.

1.36 Final consumption expenditure of government

Government final consumption expenditure consists of expenditure, including imputed expenditure, incurred by general government in both individual consumption goods and services and collective consumption services.

1.37 Final consumption expenditure of households

Household final consumption expenditure consists of the expenditure, including imputed expenditure, incurred by residence households on individual consumption of goods and services, including those sold at prices that are not economically significant.

1.38 Final consumption expenditure of NPISHs

Final consumption expenditure of NPISHs consists of expenditure, including imputed expenditure incurred by resident NPISHs on individual consumption of goods and services.

1.39 Compensation of Employees

Refers to total remuneration in cash or in kind, payable by an enterprise to employees in return for work done by the latter during the accounting period.

1.40 Wages and Salaries in cash

Refers to the total remuneration in cash payable by an enterprise to an employee in return for work done during the accounting period.

1.41 Wages and Salaries in kind

Refers to the total remuneration in cash payable by an enterprise to an employee in return for work done during the accounting period but payments are made in kind. For example food, accommodation and travel.

1.42 Intermediate Consumption

Refers to the value of the goods and services used as inputs in the process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital; the goods or services may be either transformed or used up by the production process.

1.43 Actual Final Consumption of Households

Is the value of consumption goods and services acquired by households, whether by purchase in general, or by transfer from government units or NPISHs, and used by them for the satisfaction of their needs and wants; it is derived from final consumption expenditure by adding the value of social transfers in kind receivable.

1.44 Gross Fixed Capital Formation

Is measured by the total value of producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non- produced assets (such as subsoil assets or major improvements in the quantity, quality or productivity of land) realized by productive activity of institutional units.

1.45 Acquisitions

Goods and services are acquired by institutional units when they become the new owners of the goods or when the delivery of services to them is completed.

1.46 Changes in Inventories

Changes in inventories (including work- in -progress) consists of changes in: a) stocks of outputs that are still held by the units that produced them prior to their being processed, sold, delivered to other units or used in other ways; and b) stocks of products acquired from other units that are intended to be used for intermediate consumption or for resale without further processing; they are measured by the value of the entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories.

1.47 Gross Capital Formation

Is measured by total value of the gross fixed capital formation, changes in inventories and acquisitions less disposals of valuables for a unit or sector.

1.48 Acquisitions of Non-financial Assets

It is equal to Acquisitions of total non financial assets less Consumption of fixed capital. Net acquisitions are partly actual purchases and sales of goods, but also reflect internal transactions of the producers. In practice, changes in inventories of goods in general are determined as total supply less total other uses of each good and subsequently summed over all goods.

1.49 Exports of Goods and Services

Consists of sales, barter, or gifts or grants, of goods and services from residents to non residents; the treatment of exports and accounts as described in the Balance of Payments Manual.

1.49.1 Exports of goods

Exports of goods consist of exports of the following items from residents to non-residents, generally with a change of ownership being involved: general merchandise, goods for processing, goods procured in domestic ports by nonresident carriers, and non-monetary gold.

1.49.2 Exports of services

Exports of services consist of the following services provided by residents to non-residents: transportation; travel; communications; construction; insurance; financial; computer and information; royalties and licence fees; other business services; personal, cultural, and recreational services; and government services n.e.c.

1.50 Imports of Goods and Services

Consists of purchases, barter, or receipts of gifts, or grants, of goods and services by residents from non residents; the treatment of exports and imports in the SNA is generally identical with that in the balance of payments accounts as described in the Balance of Payments Manual.

1.51 Imports of goods

Imports of goods consist of imports of the following items from non-residents to residents, generally with a change of ownership being involved: general merchandise, goods for processing, goods procured in foreign ports by domestic carriers, and non-monetary gold.

1.52 Imports of services

Imports of services consist of the following services purchased by residents from non-residents: transportation; travel; communications; construction; insurance; financial; computer and information; royalties and licence fees; other business services; personal, cultural, and recreational services; and government services n.e.c.

1.53 Cost, Insurance and Freight Price (c.i.f)

The c.i.f. price (i.e. cost, insurance and freight price) is the price of a good delivered at the frontier of the importing country, including any insurance and freight charges incurred to that point, or the price of a service delivered to a resident, before the payment of any import duties or other taxes on imports or trade and transport margins within the country.

1.54 Free on board price (F.o.b)

The f.o.b. price (free on board price) is the c.i.f. price less the costs of transportation and insurance charges, between the customs frontier of the exporting (importing) country and that of the importing (exporting) country.

1.55 Operating Surplus

Operating surplus or mixed income is a measure of the surplus accruing from processes of production before deducting any explicit or implicit interest charges, rent or other property incomes payable on the financial assets, or tangible non produced assets borrowed or rented by enterprise.

1.56 Fixed Assets and Consumption of Fixed Capital

Refers to the reduction in the value of fixed assets used in production during the accounting period resulting from physical deterioration, normal obsolescence or normal accidental damage.

a) Fixed Assets

Are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly or continuously in other processes of production for more than one year.

b) Consumption of Fixed Capital

Refers to the decline in the current value of stock of fixed assets as a result of physical deterioration, normal obsolescence or normal accidental damage.

1.57 Non-financial assets

Non-financial assets are entities, over which ownership rights are enforced by institutional units, individually or collectively, and from which economic benefits may be derived by their owners by holding them, or using them over a period of time, that consist of tangible assets, both produced and non-produced, and most intangible assets for which no corresponding liabilities are recorded.

1.58 Non-produced assets

Non-produced assets are non-financial assets that come into existence other than through processes of production. Non-profit institutions serving households (NPISHs) consist of NPIs which are not financed and controlled by government and which provide goods or services to households free or at prices that are not economically significant

1.59 Valuables

Valuables are produced assets that are not used primarily for production or consumption, that are expected to appreciate or at least not to decline in real value, that do not deteriorate over time under normal conditions and that are acquired and held primarily as stores of value.

1.60 Basic Price

It is the price receivable by a producer exclusive of taxes on the product and inclusive of subsidies on the product.

1.61 Producers' Price

It is the price receivable by a producer inclusive of taxes on the product (but not Value Added Tax) and exclusive of subsidies on the product.

1.62 Purchasers' Price

Refers to the price paid by the purchaser, excluding any deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place.

1.63 Financial Intermediation

It is a productive activity in which an institutional unit incurs liabilities on its own account for the purpose of acquiring financial assets by engaging in financial transactions on the market.

1.64 Financial intermediation services indirectly measured

Financial intermediation service indirectly measured (FISIM) is an indirect measure of the value of financial intermediation services provided but for which financial institutions do not charge explicitly.

1.65 Social Accounting Matrix (SAM)

It is a square matrix consisting of rows and columns accounts that represent different sectors, agents, and institutions of an economy at the desired level of desegregation. The SAM is a useful framework for consistent multi-sectoral economic data preparation, represents the expenditure-receipt flows among all actors and sectors of the entire economy, capturing both input-output and national income and product data.

It contains detailed information about the incomes and expenditures/outlays of institutions (household groups, enterprises/companies, governments and relevant accounts of the rest of the world); and about the production structure i.e. the input-output (I-O) structure of production in the economy.

Figure 1.1 General Structure of A Macroeconomic Social Accounting Matrix PAYMENTS

		. ///						
		Activities	Commodities	Factors	Households & Firms	Government	Savings Investment	Rest of the World
	Activities		D Domestic Supply					E Export
	Commodities				C Private Consumptio	G Government Consumptio	I Investment Demand	
R E	Factors	Y Value- added						
C EI P	Households & Firms			Y Household Income				
T S	Government	T _X Indirect Tax			T _H Income Tax			
	Savings Investment				S _H Private Saving	S _G Government Saving		S _F Foreign Saving
	Rest of the World		M Imports					

Key:

Y = Value-added (GDP at basic prices/ factor costs)

TX = Indirect production tax

D = Domestic supply

M = Imports (c.i.f.)

C = Final private consumption

TH = Income taxes

SH = Domestic private savingsG = Government consumption

SG = Government savings

I = Investment demand

E = Exports (f.o.b.)

SF = Foreign savings

The designing and structure of any SAM depends on the socio-economic structure of an economy, policy needs, and data availability.

1.66 Input-Output Table

It is a tabular summary of the flows of goods and services between industries and final demand of an economy with the output of each sector being the inputs of the other sectors. It is an important analytical tool for analyzing the structure of production in an economy. It also shows the relationship between inputs of raw materials and output of final product.

1.67 Supply and Use Tables

These are tables in the form of matrices that record how supplies of different kinds of goods and services originate from domestic industries and imports and how those supplies are allocated between various intermediate or final uses, including exports.

1.68 Value Added Tax (VAT)

It is a consumption tax charged on all taxable goods and services. It is a multi-stage tax levied on the difference between a commodity's price before taxes and its production cost at each stage of production and distribution up to the retail stage. It is also levied on taxable imports.

1.69 Taxes on products

Taxes on products, excluding VAT, import and export taxes, consist of taxes on goods and services that become payable as a result of the production, sale, transfer, leasing or delivery of those goods or services, or as a result of their use for own consumption or own capital formation.

1.70 Taxes on production and imports

Taxes on production consist of taxes payable on goods and services when they are produced, delivered, sold, transferred or otherwise disposed of by their producers plus other taxes on production, consisting mainly of taxes on the ownership or use of land, buildings or other assets used in production or on the labour employed, or compensation of employees paid.

1.71 Taxes and duties on imports

Taxes and duties on imports, excluding VAT, consist of taxes on goods and services that become payable at the moment when the goods cross the national or customs frontiers of the economic territory or when the services are delivered by non-resident producers to resident institutional units.

1.72 Deductible VAT

Deductible VAT is the amount of VAT payable on purchases of goods or services intended for intermediate consumption, gross fixed capital formation or for resale which a producer is permitted to deduct from his own VAT liability to the government in respect of VAT invoiced to his customers.

1.73 Non-deductible VAT

Non-deductible VAT is the VAT payable by a purchaser which is not deductible from his own VAT liability, if any.

1.74 Export taxes

Export taxes are taxes on goods or services that become payable when the goods leave the economic territory or when the services are delivered to non-residents; they include export duties, profits of export monopolies and taxes resulting from multiple exchange rates.

1.75 Import Duty

Is levied at fixed rate on the Cost, Insurance and Freight (CIF) value of goods imported into the country.

1.76 Public Sector

The public sector is comprised of government and parastatal sub-sectors. It includes establishments under the central, regional or local governments and other government institutions.

1.77 Private Sector

The private sector comprises formal and informal establishments, which are not part of Government. These establishments can be individual, joint or cooperatives.

1.78 Production Sector

These are sectors, which produce goods such as agriculture, manufacturing, mining and quarrying, electricity, and water.

1.79 Service Sector

These are sectors, which renders services such as trade, transport, communication, public administration, finance and other business.

1.80 Additional Concepts

The three methods (approaches) used for calculating Gross Domestic Product (GDP) according to the System of National Accounts (SNA) are Product approach, Expenditure approach and Income approaches.

Product approach is aggregated based on the production accounts. GDP is Sum of Gross Value Added of all industries (or all activities)
 PLUS Taxes on products
 LESS Subsidies on products.

- Income approach, which is aggregated based on the generation of income accounts. GDP is sum of Compensation of employees Operating surplus Consumption of fixed capital Taxes on products net subsidy.
- **Expenditure approach,** which is aggregated based on the goods and services accounts. GDP as sum of expenditure categories:

Government final consumption expenditure

Household final consumption expenditure

Change in inventories

Gross fixed capital formation

Export of goods and services

LESS

Import of goods and services.

National Accounts of Tanzania is mainly complied using product and expenditure approaches.

CHAPTER TWO

TAX STATISTICS

Tax is a compulsory levy or charge imposed by the state on her citizens or non-citizens that is usually payable in monetary terms. Taxes are compulsory financial contributions to state revenue made by a person or body of persons towards workers' income and business profits or added to the cost of some goods, services and transactions expenditure of a public authority.

Tax Statistics refers to the data that are related to taxes collected by the authorized institutions in the country.

2.0 Types of Taxes

Basically, there are two types of taxes namely, Direct and Indirect Taxes. Each type is classified according to the legal and effective incidence to the final payer.

2.1 Direct Taxes

These are taxes levied directly on people's income from employment, business or ownership of property or investment. They include income tax, corporate tax, property tax, Pay as You Earn (PAYE), Basic Skills and Development Levy, Individual tax, withholding tax Rental and Gaming tax.

2.1.1 Imposition of Income Tax

It is charged and payable for each year of income by every person who:-

- Has total income, which is the sum of employment, business and investment income;
- Has a domestic permanent establishment that has repatriated income for the year of income; or
- Receives final withholding payments for the year of income.

2.1.2 Corporate Tax

It is levied on all the corporate taxable profits, accruing to all companies carrying on business in Tanzania. It is generally applied to a company' operating earnings, after expenses such as Cost of Goods sold (COGS), Selling General and Administrative expenses (SG&A) and depreciation have been deducted from a company revenues.

2.1.3 Individual Income Taxes

These refer to:

 Tax charged to non-corporate payers who include sole traders (proprietors) taxed at progressive individual income tax rates; and ■ Pay As You Earn (PAYE) which is a tax whereby a certain amount of money from employee's gross emoluments is levied.

2.1.4 Taxation of small traders with and without complete records

It is levied income tax on all small traders who operate mostly in the informal sector with and without their business records based on their annual business turnover.

2.1.5 Gains or Profits from Employment

This is an income that an employee earns from an employment in the form of salary, which is payable on daily, weekly or monthly. It includes payments of wages, salary, payment in lieu of leave, fees, commissions, bonus and gratuities, payments of any personal allowance, payments providing any discharge or reimbursement of expenditure incurred by an individual or by an associate of an individual payment for an individual's agreement to any conditions of the employment. Contributions made on behalf of the employee to retirement funds and retirement payments made directly to employees. Redundancy and other payments for loss or termination of employment relating to the year of payment and any benefits in kind.

2.1.6 Qualification of Benefits in Kind

Benefits which an employer may decide to give to the employee. These include:-

- Motor Vehicle Benefit: Where an employee is provided with motor vehicle by an employer for personal use in return for employment rendered and the employer incurs all necessary expenses to maintain the vehicle then this is a taxable benefit to the employee quantified annually.
- Subsidized Loans: It is a loan to an employee provided by employer at no interest or at an interest rate that is below the statutory interest rate.
- Provision of Housing: It is the value of housing provided to an employee by the employer which is taxable benefit and is included in the employee's monthly pay. The value of housing is calculated as the market value of renting that housing or 15 percent of the rest of the employee's income from employment, whichever is less.

2.1.7 Gains or Profit from Business

It is a person's income from a business during a year. The following amounts derived from business are regarded as gains or profits and they are taxable:-

- Service fees:
- Incomings from trading stock (sales of business stocks);
- Gains from sale of business assets or liabilities:
- Sale of depreciable assets;
- Amounts derived as consideration for accepting a restriction on the capacity to conduct the business; and

• Gifts and other payments received by the person in respect of a business.

2.1.8 Gains from investment

Income from investment include:-

- Any dividend, distribution of a trust, gains from life insurance, gains from an interest in an unapproved retirement fund, interest, natural resources payment, rent, or royalty;
- Net gains from realization of investment assets (Capital gains); and
- Amounts derived as a consideration for accepting a restriction on the capacity to conduct the investment.

2.1.9 Losses from Business or Investments

The income tax law provides the treatment of unrelieved losses as follows:-

- When computing income from business or investments during any year of income and a loss is incurred which becomes unrelieved loss, the law allows it to be carried forward and offset against future business income as the case may be, until the whole unrelieved loss is exhausted;
- A person is allowed to deduct a foreign loss from investment only in calculating the person's income from foreign source investment;
- A person is allowed to deduct losses other than foreign losses from investments only in calculating the person's income from investments;
- In case of foreign business, loss is allowed only in calculating the foreign business income; and
- In case of a loss incurred in agricultural business it is allowed only in calculating the person's income from agricultural business.

2.1.10 Payment of Tax by Installments

• **Single Installments:** Is a payment of income tax by single installment required from any person who derives a gain in conducting investments from realization of interest in land or buildings situated in Tanzania.

A rate of 10 and 20 percent of the gain for a resident and nonresident person respectively, is required to pay income tax by single installment. Payment by single installment also applies in case of non-resident person who receives a payment in conducting a business of land, sea, or air transport or chartered (without having a domestic permanent establishment in Tanzania) which evolves the carriage of passengers who embarked or cargo, mail or other moveable tangible assets that are embarked in Tanzania and which are not for transit, the payer is required to withhold 5 percent of the gross payments before the proper before the proper vessel, vehicle or aircraft is allowed to leave from Tanzania.

• Quarterly Installments: It is a payment required from business or investments during the year of income at the end of each three-month period commencing at the beginning of the year of income and a final installment on the last day of the year of the income.

2.2 Indirect Taxes (Consumption Taxes)

These are taxes based on consumption. Categorically they are divided into consumption taxes, other domestic taxes and International trade taxes. Examples of such taxes are like Import Duty, Excise Duty and Value Added Tax (VAT). By definition the legal incidence of the tax falls on the trader who act as a collection agent of the Government while the effective incidence falls on the final consumer of goods or service who eventually pays the tax.

2.2.1 Value-Added Tax (VAT)

It is a consumption tax charged on all taxable goods and services at a standard rate of 18 percent. It is a multi-stage tax levied on the difference between a commodity's price before taxes and its production cost at each stage of production and distribution up to the retail stage. It is also levied on taxable imports made by person whether or not registered for VAT.

2.2.2 Excise Duty (Local)

It is levied on certain locally manufactured goods and services such as soft drinks, beer, wines, spirit, mobile phone services, plastic shopping bags, satellite television services, cigarettes and petroleum products.

2.3 Value Added Tax on Imports

It is levied on all goods and services imported into the country unless such goods and services are specifically exempted under the VAT law. All importers must pay VAT regardless of whether or not they are registered for VAT. However, importers who are registered for VAT can claim as an input tax in their business, the VAT paid on the imported goods. However, for VAT on imported services the input tax is treated as reverse charge hence added to the value of the service.

2.4 Other Taxes

2.4.1 Skills and Development Levy (SDL)

This tax is based on the total gross emoluments paid by an employer to employees (currently, at a rate of 6 percent). The gross emoluments include salary, wage, leave, pay, payment in lieu of leave, subsistence allowance, etc.

2.4.2 Stamp Duty

Refers to the duty paid on certain legal instruments/transactions, affidavit, conveyance and lease Agreements. The duty rate is 1 percent based on the consideration applicable on non business persons when issuing a receipt whenever they sale their privately owned assets/properties. Stamp duty on conveyance of agricultural land is TShs 500/=.

2.4.3 Airport Service Charge

Refers to charges levied on passengers who board an aircraft at any airport in Tanzania.

2.4.4 Port Service Charge

Refers to charges levied on passengers who travel by a passenger shipping vessels at any port in Tanzania.

2.4.5 Motor Vehicle Registration and Transfer Tax

Refers to charges levied when a person is registering/transfer fee a motor vehicle and motor cycle.

2.4.6 Motor Vehicle Annual License Fee

It is charged on annual basis according to motor vehicle engine capacity. **Note that:** Tractors which are used sorely for agriculture are exempted from the annual license fee.

2.5 Custom Modernization Programme

Refers to enhance efficiency and effectiveness in revenue collection at the same time facilitates the international trade. Some of the programs include; Post Clearance Audit, Destination Inspection Scheme, Computerized Risk Management System, Agreement on Customs Valuation and Compliant Traders Scheme.

2.5.1 Post Clearance Audit

This is a trade facilitation tool where goods can be cleared prior to physical examination in Tanzania. The system verifies the accuracy of declaration through the examination of goods, records, business system and all relevant customs commercial data held by persons and companies directly or indirectly involved in international trade.

2.5.2 Destination Inspection Scheme (DSI)

Is the verification of the importers' declaration at the point of destination in Tanzania through certain procedures for the purposes of:-

- Determining the quality and quantity of goods imported;
- Establishing the value of goods as compared to the declaration made by the importer;
- Establishing the country of origin and supplier;
- Determining the applicable customs tariff code under which the goods are to be classified and tax is computed;
- Providing TRA with Computerized Risk Management Database, which assist in determining levels of intervention and valuation process; and
- Enhancing security and international trade facilitation.

2.5.3 Computerized Risk Management System (CRMS)

It identifies risks associated with each import transaction and determines the applicable level of intervention:-

- *Low Risk:* Goods covered by these transactions may be released without physical inspection.
- *Medium Risk:* Consignments will be subjected to X-Ray scanning. In case no discrepancy is detected such goods will be released without physical inspection.
- *High Risk:* Transaction will be subjected to physical inspection by customs officers to determine compliance.

2.5.4 Agreement on Customs Valuation (ACV)

It is the system of goods valuation known as Agreement on Customs Valuation (ACV). The system provides for use of price actually paid or payable for the goods and forbids the use of arbitrary and fictitious values. This is part of Tanzania's obligation to implement World Trade Organization (WTO) agreement to which Tanzania is a signatory.

2.5.5 Compliant Traders Scheme

This scheme allows the audit exercise to be carried after the goods have been cleared. The scheme was introduced with a view of facilitating trade through speed clearance of imported goods.

2.6 Tax Incentives

2.6.1 Import Duty

It is a relief on the payment of import duty tax for goods and services imported in Tanzania. It is based on the value of goods, the weight, dimensions, or other criteria of the item such as its size. The exempted from import duty include all importers of raw materials, electronic cash registers, replacement parts, inputs for manufacturing agricultural equipment, inputs for horticulture and agriculture, hotel equipment, computer software, packing materials for manufacturing medicaments and solar equipment and accessories.

2.6.2 Import Duty Drawback

It is a scheme, which allows exporters to claim refund of import duties paid on raw materials and other inputs used in the production of goods that are exported from Tanzania. This scheme is used as a measure to remove fiscal obstacles to export development. It includes inputs used in production process that do not form part of the qualified product e.g. catalysts and some other chemical agents.

2.6.3 Withholding Tax on Dividends and Interest

It refers to taxes paid by investors with incentive certificates.

2.6.4 Export Processing Zone (EPZ)

It is an area where goods processed or manufactured are exempted from import duty and other taxes.

2.7 Local Government Taxes

Tanzania has two-tier system of Government that is the Central Government and the Local Government, which is at the District, Town, Municipal or City level. Most of the Local Government Authorities collect taxes, fees and levies in: Property Tax, Service Levy, Hotel Levy or Guest House Levy, Slaughtering Fees, Billboards and Sign Fees, Market Fees, Trading License Fees, and Liquor License Fees.

2.7.1 Property Tax

It is charged to owners of properties. Is an important source of revenue for urban councils in Tanzania. Some properties like museums, places of worships, aerodromes and land used for sporting purposes, properties of charitable and educational institutions are exempted from property tax. The rate of the tax is fixed by the local authority (The Councilors) through enacting by-laws depending on the value and location of the property.

2.7.2 Service Levy

This levy is charged on the value of goods manufactured by local industries. It is mainly for urban local authorities and it replaces the industrial cess. All corporate entities, which pay the service levy, are exempted from paying agricultural produce cess. Currently, the levy is charged at a rate of 0.3 percent of the turnover net of VAT for corporate entities

2.7.3 Other taxes and Fees

Most of local authorities charge and collect fees from different sources such as local markets and stores, slaughtering activities, burial services, billboards and sign fees and liquor fees.

2.7.4 Subsidies

It is the funds from Central Government allocated to support the budget for Local Governments recurrent and development expenditures.

PART TWO: SOCIAL SERVICES SECTOR

CHAPTER THREE

DEMOGRAPHIC STATISTICS

Demography is concerned with the description, analysis and understanding of population phenomena. It can therefore be extended to include and to cover the social, economic, historical and political characteristics of the population and related demographic process.

Demographic statistics seek mathematical and statistical descriptions of human population.

3.1 Fertility

Fertility refers to the number of live births women would have during their reproductive age (15-49 years). It differs from fecundity, which refers to the physiological capability of women to reproduce.

It is measured by using some of the following indicators

3.1.1 Crude Birth Rate (CBR)

It is the number of live births in a calendar year per 1,000 mid year population.

$$CBR = \frac{Number\ of\ births\ in\ a\ calender\ year}{Current\ year\ population} \times 1,000$$

3.1.2 General Fertility Rate (GFR)

It is the number of live births per 1,000 women in the 15-49 years age group in a given year.

$$GFR = \frac{Number\ of\ births\ in\ a\ calender\ year}{Mid\ year\ population\ of\ women\ 15-49\ years} \times 1,000$$

3.1.3 Age-Specific Fertility Rate (ASFR)

It is the number of live births to women in the specific age group per 1,000 women in that specific age group in a given year. For example:

$$ASFR_{(20-24)} = \frac{Number\ of\ live\ births\ to\ women\ aged\ 20-24}{Number\ women\ aged\ 20-24} \times 1,000$$

3.1.4 Total Fertility Rate (TFR)

It is the average number of children that a woman would have by the time she ended childbearing if she were to pass through all her childbearing years conforming to the age-specific fertility rates of a given year. In other words it is the number of children a woman would have from age (15-49) if she were to bear children at the prevailing age-specific rates. TFR can be represented symbolically as follows;

$$TFR = n \sum_{X=15}^{49} n f_X = n \sum_{X=15}^{49} \left(\frac{n B_X}{n W_X} \right)$$

Where,

n = Number of children,

x = Child bearing age of women from 15 to 49 years,

 f_x = Fertility rate at age x,

 $_{n}B_{x}$ = Births at age x,

 $_{n}W_{x}$ = women at age x

3.1.5 Gross Reproduction Rate (GRR)

It is the average number of daughters that would be born to a woman (or a group of women) during her lifetime if she passed through her childbearing years conforming to the age-specific fertility rates of a given year. This rate is like the TFR except that it counts only daughters and literally measures "reproduction" that is a woman reproducing herself by having a daughter. GRR is therefore given as;

$$GRR = \frac{TFR}{\left(1 + sex\ ratio\ at\ birth\right)}$$

The GRR is usually expressed as a rate per woman rather than a rate per 1,000 women, it may be expressed symbolically by the formula

$$GRR = \sum f_x$$

Where,

 $f_x =$ Fertility rate at age x specific for sex (i.e. female births to females

or male births to males

 Σ = Over all ages in the reproductive life span

3.1.6 Net Reproduction Rate (NRR)

It is the average number of daughters that would be born to a woman (or a group of women) if she passed through her lifetime from birth conforming to the age-specific fertility and mortality rates of a given year. This rate is like GRR but is always lower because it takes into account the fact that some women will die before completing their childbearing years.

$$NRR = \sum f_x l_{x+1/2} / l_o$$

Where.

 $f_x =$ Fertility rate at age x specific for sex

 $l_{x+1/2}/l_o$ = Probability of surviving from birth to age x + ½

 Σ = Over all ages in the reproductive life span

3.1.7 Replacement - Level Fertility

It is the level at which women in the same cohort have exactly enough daughters (on average) to "replace" themselves in the population. A Net Reproduction Rate (NRR) of 1.00 is equal to replacement level.

3.2 Mortality

Mortality refers to deaths that occur within a population. The probability of dying during a given time period is linked to many factors, such as age, sex, race, occupation and social class. The incidence of death can reveal much about a population's standard of living and health care. It is measured using some of the following indicators:

3.2.1 Crude Death Rate (CDR) or Death Rate

It is the number of deaths in a calendar year per 1,000 Mid year population in a given year.

$$CDR = \frac{Number of \ deaths in a \ calender \ year}{Mid-year \ population (Projected \ population)} \times 1,000$$

3.2.2 Age-Specific Death Rate (ASDR)

It is the number of deaths among the population in a specific age group per 1,000 of that specific age group in a given year. For example:

$$ASDR_{(20-24)} = \frac{Number\ of\ deaths\ among\ the population\ 20-24\ years}{Mid-year\ population\ of\ (20-24)\ years} \times 1,000$$

3.2.3 Cause-Specific Death Rate (CSDR)

It is the number of deaths due to a specific cause during a given year per 100,000 population. For example:

$$CSDR_{(Cancer)} = \frac{Number\ of\ deaths\ from\ cancer\ in\ 1\ year}{Mid-year\ population} \times 100,000$$

The cause-specific death rates are usually expressed in deaths per 100,000 because for most causes of deaths, rates of occurrence are very low.

3.2.4 Neonatal Mortality Rate (NMR)

It is the number of deaths to infants under 28 days of age in a given year per 1,000 live births in that year.

$$NMR = \frac{Deaths\ to\ inf\ ants\ under\ 28\ days\ in\ a\ given\ year}{Total\ number\ of\ live\ births\ in\ that\ year} \times 1,000$$

3.2.5 Infant Mortality Rate (IMR)

It is the number of deaths of infants under the age of 1 year per 1,000 live births in a given year.

$$IMR = \frac{Number\ of\ deaths\ to\ inf\ ants\ under\ 1\ year}{Total\ number\ of\ live\ births\ in\ that\ year} \times 1,000$$

3.2.6 Post Neonatal Mortality Rate (PNMR)

It is the number of infant deaths aged between exactly 4 weeks (28 days) and under 1 year of age per 1,000 live births in a given year.

$$PNMR = \frac{Infant \ deaths \ aged \ between \ exactly \ 4 \ weeks \ and \ under 1 \ year}{live \ births(Total \ births in that \ year)} \times 1,000$$

3.2.7 Child Mortality Rate (CMR)

It is the number of deaths of children aged 1 year and above but below 5 years of age per 1,000 live births in a given year.

$$CMR = \frac{Number\ of\ deaths\ aged\ 1\ year\ but\ below\ 5\ years}{Total\ number\ of\ live\ births\ in\ that\ year} \times 1,000$$

3.2.8 Under 5 Mortality Rate (U5MR)

It is the number of deaths of children below 5 years of age per 1,000 live births in a given year.

$$U5MR = \frac{Number\ of\ deaths\ between\ age\ 0\ and\ 5\ in\ 1\ year}{Total\ number\ of\ live\ births\ in\ that\ year} \times 1,000$$

3.2.9 Maternal Mortality Rate (MMR)

This is the number of women who die from any cause related to or aggravated by pregnancy or its management during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births

$$MMR = \frac{Number\ of\ maternal\ deaths\ in\ a\ given\ year}{Total\ number\ of\ live\ births\ in\ that\ year} \times 100,000$$

3.2.10 Life Expectancy

It is an estimate of the average number of additional years a person could expect to live if the age-specific death rates for a given year prevailed for the rest of his or her life.

3.2.11 Life Expectancy at Birth

It is an estimate of the average number of years a new born baby would live subject to the mortality risks prevailing for the cross—section of the population at the time of its birth.

3.3 Migration

It is the geographic movement of people across a specified boundary for the purpose of establishing a new permanent or semi permanent residence. The terms "immigration" and "emigration" are used to refer to movements between countries that is international migration. Corresponding terms to immigration and emigration for movement between areas within a country, that is internal migration are; in-migration and out-migration respectively.

3.3.1 Immigration Rate

It is the number of immigrants arriving at a destination per 1,000 persons at that destination in a given year.

$$Immigration \ \textit{Rate} = \frac{\textit{Number of Persons entering an area immigrants}}{\textit{Total population in that area}} ~ 1,000$$

3.3.2 Emigration Rate

It is the number of emigrants going away from an area of origin per 1,000 of the population at that area in a given year.

Emigration Rate =
$$\frac{Number\ of\ persons\ departing\ from\ an\ area}{Total\ population\ in\ that\ area} \times 1,000$$

3.3.3 Net Migration

It is the net effect of immigration and emigration on an area's population. It may be an increase, a decrease or zero.

3.3.4 Net Migration Rate (NMR)

It is the "net migration" of an area per 1,000 of the population of that area in a given year.

$$NMR = \frac{Number\ of\ immigrants - Number\ of\ Emigrants}{Total\ Population\ in\ that\ area} \times 1,000$$

3.4 Population Change

Population change has three components: births, deaths and migration. As people are born, die or move their total number in an area change.

3.4.1 Natural Increase (NI)

It is the surplus (or deficit) of births over deaths in a population in a given time period.

$$NI = B - D$$

Where.

NI is the natural increase during a period

B is the number of births and

D is the number of deaths during that period.

3.4.2 Rate of Natural Increase (RNI)

It is the increase or decrease of the population in a given year due to surplus (or deficit) of births over deaths, expressed as a percentage of the base population. *The RNI does not take into account the effects of immigration and emigration.* For example;

$$RNI_{Year} = \frac{Births \ in \ Year - Deaths \ in \ Year}{Total \ Population \ it \ at \ year} \times 100$$

The rate of natural increase can also be calculated from birth and death rates.

$$RNI = \frac{Births\ Rate - Deaths\ Rate}{10}$$

3.4.3 The Balancing Equation

It is the basic method of calculating numerical population change over time. The following is the equation;

$$P_t = P_0 + (B-D) + (I-E)$$

Where.

 P_t = Population at a later date/ Pop at time t

 P_o = Population at an earlier date/ base year pop

B = Births between the two dates

D = Deaths between the two dates

I = Immigrants between the two dates

E = Emigrants between the two dates

3.4.4 Population Growth Rate (GR)

It is the rate at which a population is increasing (or decreasing) in a given year due to natural increase and net migration, expressed as a percentage of the base population. *The growth rate takes into account all components of population growth: births, deaths, and migration.* For example;

$$GR_{1988} = \frac{\left(Births\ 1988 - Deaths\ 1988\right) + Net\ migration\ 1988}{Total\ Population\ in\ 1988} \times 100$$

3.4.5 Inter-Censal Growth Rate

It is the rate at which a population increases (or decreases) between two population censuses. This is obtained from the following formula;

$$P_{t} = P_{o}e^{rt}$$

Where;

 P_t = Population at time t

 P_o = Base year population

e = Exponential

r = Growth rate

t = Time

Growth rate r is derived as follows

$$\left(\frac{P_t}{P_0}\right) = e^n$$

$$\ln\left(\frac{P_t}{P_0}\right) = \ln\left(e^n\right) = rt$$

$$r = \frac{\ln\left(\frac{P_t}{P_o}\right)}{t}$$

3.4.6 Population Doubling Time

This is a time a population would take to double its size at its current growth rate. A quick way to approximate doubling time is to divide 70 by the growth rate expressed as a percent.

$$PDT = \frac{70}{Growth \, Rate \left(\frac{0}{0} \right)}$$

3.4.7 Population and Housing Census (PHC)

This is the total process of collecting, compiling, evaluating, analyzing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well delineated part of a country (United Nations definition).

3.4.8 Census Night

Is a reference night of the Census. e.g Tanzania 2012 Population and Housing Census, the Census night was the night of 25^{th} /26th August, 2012.

3.4.9 De facto Methodology

Means persons enumerated where they slept on the Census night.

3.4.10 Enumeration Area (EA)

Is a designated area with an average of 60 to 100 households.

3.4.11 Optical Mark Reader (OMR)

Is the process of capturing data by optical scanner by measuring the reflectivity of light at pre-determined positions on a surface.

3.4.12 Post Enumeration Survey (PES)

Is the sample survey conducted immediately after the census for the primary purpose of evaluating the census. It helps in identifying areas of deficiencies that need improvement in subsequent censuses.

3.4.13 Population Growth

Refers to the change in population over time, and can be quantified as the change in the number of individuals in a population using "per unit time" for measurement.

3.4.14 Age

Is the number of years one had lived as at last birthday.

3.4.15 Age-Dependency Ratio

Is the ratio of people in the "dependent" ages (those under age 15 and age 65 and older) to those in the "working age population" (15-64 years).

3.4.16 Elderly Population

Refers to persons aged 65 years and above (according to international definition). However, according to Tanzania National Ageing Policy, an elderly is an individual who is 60 years and above.

Median Age

Is the age at which exactly half the population is older and half is younger.

3.4.17 Population Pyramid

Is a graphical presentation of population's age and sex composition. Horizontal bars present the numbers or proportions of males and females in each age group.

3.4.18 Sex Ratio

Is the ratio of males to females in a given population usually expressed as the number of males for every 100 females.

3.4.19 Working Age Population

Is the population age 15 to 64 years (international definition).

3.4.20 Young People

Are the population age 0 to 14 years.

3.4.21 Youth Population

Is the population aged 15-24 years (international definition). However, according to Tanzania's Youth Policy, Youth Population is the population aged 15 to 35 years.

3.4.22 Birth Certificate

Is a vital record that documents the birth of a child. The term "birth certificate" can refer to either the original document certifying the circumstances of the birth or to a certified copy of or representation of the ensuing registration of that birth.

3.4.23 Birth Registration

Is the process by which a child's birth is recorded in the civil register by the Government authority.

3.4.24 Diaspora

Are citizens living outside the country.

3.5 Other Demographic Concepts

3.5.1 Age - Dependence Ratio

It is the ratio of persons in the "dependent" ages (generally under 15 and over 64) to those in the "economically active" ages (15-64) in a population.

$$ADR = \frac{Pop(below\ age\ 15 + age\ 64+)}{Pop\ (15 - 64\ years)}$$

3.5.2 Nuptiality

It refers to marriage as a population phenomenon, including the rate at which it occurs, the characteristics of persons in marriage, and the dissolution of such unions through divorce, separation, widowhood, and annulment.

3.5.3 Fecundity

It is a physiological ability of a woman to conceive.

3.5.4 Sterility

It is the inability of a woman to conceive. It can either be primary or secondary.

CHAPTER FOUR

EDUCATION STATISTICS



4.0 Literacy

It is the ability to read and write to a competent level. It excludes the ability to only write or sign one's own name or write memorized phrases. The ability to read and write may be in any language.

4.1 Literacy Rate

This is the proportion of the population of specified age group who can read and write expressed as a percentage of the total persons of that age group.

4.1.1 Illiteracy Rate

This is the proportion of the population of specified age group who cannot read and write expressed as a percentage of the total persons of that age group

4.2 Education

A process of teaching, training and learning especially in schools or colleges to improve knowledge and skills.

4.2.1 Formal Education

It is the education provided in the system of schools, colleges, universities and other educational institutions that normally constitute a continuous ladder of full - time education for children, and young people, generally beginning at an age of five, six or seven and continuing up to 20, 25 or more years of age

4.2.2 Non-Formal Education

Any organized educational activity outside the established formal system - whether operating separately or as an important feature of some broader activity - that is intended to serve identifiable learning clienteles and learning objectives

4.2.3 Informal Education

Refers to any organized and sustained educational activities that do not follow any approved curriculum

4.2.4 Educational System

It is the overall network of institutions and programmes through which education of all types and levels is provided to the population.

4.2.5 Educational Programme

It is a set of organized and purposeful learning experiences with a minimum duration of one school or academic year usually offered in an educational institution.

4.2.6 Universal Primary Education (UPE)

Means full enrolment of all children in the primary school – age group (7-13) that is 100 percent Net enrolment Ratio.

4.2.7 Course

A planned series of learning experiences in a particular subject matter area or a set of skills, usually offered by an educational or training institution or programme for one or more students/learners.

4.2.8 Grade

It is a stage of instructions usually covered in one academic year.

4.2.9 Pupil

A young person who is enrolled in an educational programme. Usually *pupil* refers to a child enrolled in primary school.

4.2.10 Student

It is a young person or an adult enrolled at more advanced levels.

4.2.11 Graduate

It is a pupil or student who successfully completes a level of education such as primary, secondary or university education.

4.2.12 School-age Population

It is the number of persons in the officially defined school age- group, whether enrolled in school or not *in a specified area*

4.2.13 Gross Enrolment Ratio (GER)

Number of pupils enrolled in a given level of education, regardless of age, expressed as percentage of the population in relevant official age group.

Example for primary education

$$GER = \frac{Total\ Pupils\ (enrolled\ in\ grade\ I - VII)}{Total\ children7 - 13old\ years} \times 100$$

4.2.14 Primary School Gross Enrolment Ratio

The total number of children enrolled in primary school that is in classes I-VII, regardless of age, expressed as a percentage of the total number of children in the relevant age - group for primary school education, which is 7-13 years age - group.

4.2.15 Secondary School Gross Enrolment Ratio

The total number of students enrolled in secondary schools expressed as a percentage of the total number of persons in the relevant age group for secondary school education, which is the 14-17 years age - group.

4.2.16 Vocational Training School Gross Enrolment Ratio

The total number of students enrolled in vocational training schools expressed as a percentage of the total number of persons in the relevant age - group for vocational education, which is the 14-17 years age group.

4.2.17 Net Enrolment Ratio (NER)

It is the total number of pupils/students in the official school-age group expressed as a percentage of the total population in that age group. Example for Primary Education

$$NER = \frac{Grade\ I - VII\ pupils\ aged\ 7 - 13\ years}{Total\ 7 - 13\ years\ old\ children} \times 100$$

4.2.18 Drop-out Rate (DR)

It is the percentage of pupils enrolled in a given grade or cycle or level of education in a given school year that are no longer enrolled in the following school year.

$$DR = \frac{Dropouts in a Grade in year N}{Enrolment in that Grade in year N} \times 100$$

4.2.19 Transition Rate (TR)

The number of pupils (or students) admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of pupils (or students) enrolled in the final grade of the lower level of education in the previous year.

4.2.20 Promotion Rate

It is the percentage of pupils promoted to the next grade in the following school year.

$$PR = \frac{\text{Pr omoted to a Grade in year } N + 1}{Enrolment in that Grade in year N} \times 100$$

4.2.21 Repetition Rate

It is the proportion of pupils enrolled in a given grade and in a given school year who study in the same grade the following school year.

$$RR = \frac{\text{Re peaters in a Grade in year } N + 1}{Enrolment in that Grade in year N} \times 100$$

4.2.22 Mean Years of Schooling

The total number of years of schooling received by persons aged 25 years and above divided by the total number of persons aged 25 years or older.

$$MYS = \frac{\sum_{x=25}^{N} y_x}{\sum_{x=25}^{N} p_x}$$

Where,

MYS = Mean Years of Schooling

 y_r = Years from age 25 years and above

N = Age above 25 years

 p_x = Persons with years from age 25 years and above

 \sum = Sum

4.2.23 Mean Age Enrolment for Primary School

It is the average age of enrolment in Primary schools.

4.2.24 Teacher

A person who on his/her professional capacity guides and directs pupil learning experiences in gaining knowledge, attitudes, and skills that are stipulated by a defined curriculum programme.

4.2.25 Full-time Teacher

A person engaged in teaching for specified number of hours per week according to official regulations in the country.

4.2.26 Part-time Teacher

A teacher employed for less than the normal or statutory number of hours of work for a full-time teacher over a complete school year.

4.2.27 Gender Parity Index (GPI)

Ratio of females to males, that is, the number of females divided by males.

4.2.28 Net Intake Rate (NIR)

New entrants in the first grade of pre-primary or primary education who are of official school-entrance age expressed as a percentage of the official school entrance age population.

4.2.29 Survival Rate (SR)

Percentage of pupils/students enrolled in a first grade of a given level of education who reach final grade of that level.

4.2.30 Completion Rate (CR)

Number of pupils/students enrolled in a final grade of a given level of education expressed as percentage of school-age population of that grade.

4.2.31 Pass Rate (PR)

Number of pupils/students who passed an exam expressed as percentage of total candidates who sat for the examination.

4.2.32 Pupil/Student Book Ratio (PBR)

Average number of pupils/students per book.

4.2.33 Teacher Attrition Rate

Proportion of teachers who leave the teaching career in a given year.

4.2.34 Percentage of New Entrants into Primary schools with Pre-Primary Education

New entrants into primary schools who have attended pre-pimary education expressed as percentage of all new entrants.

4.2.35 Percentage of Tutors in Teachers' Colleges with Relevant Qualifications

Tutors in teachers' Colleges who have relevant university degrees or diplomas expessed as percentage of all tutors.

4.2.36 Percentage of Female Students

Number of female students expressed as percentage of total number of students.

4.2.37 Percentage Distribution of Teaching Staff by qualification and sex

Distribution of teachers by qualification expressed as percentage of all teachers.

4.2.38 Percent of Trainees by Type of VET Program

Number of VET trainees by type of VET programme expressed as percent of total trainees.

4.2.39 Percentage of Female Students Enrolled in Technical and Higher Learning institutions by Award and Field of Study

Number of female students enrolled in Technical and Higher Learning institutions expressed as percentage of total enrolment by Award and Fild of Study.

4.2.40 Percentage of Students Studying Abroad by Field of Study

Number of students studying abroad by field of study expressed as percentage of all students studying abroad.

4.2.41 Percent Distribution of Higher Education Students provided with Loans by sex

Number of higher education students provided with loans expressed as percentage of students by sex.

4.2.42 MoEVT Budget Allocation as Percentage of Total Government Budget

Budget of MoEVT expressed as percentage o total government budget.

4.2.43 Share of Government Budget on Education Sub-Sectors as Prcentage o Total Government Budget on Education Sector

Budget of educatin sub-sectors expressed as percentage of total government budget in the education sector.

4.2.44 Pupil/Student Qualified Teacher Ratio (PQTR)

Average number of pupils/students enrolled in a first grade of a given level of education who reach final grade of that level.

4.2.45 Pupil/Teacher Ratio (Primary School)

Number of primary school pupils per teacher.

$$PTR = \frac{Number\ of\ Primary\ Pupils}{Total\ Number\ of\ teachers}$$

4.2.46 Student/Teacher Ratio (Secondary School)

Number of secondary school students per teacher.

$$STR = \frac{Number\ of\ Secondary Pupils}{Number\ of\ teachers}$$

CHAPTER FIVE

HEALTH STATISTICS



Health is a state of physical, social and mental well-being: it is not the absence of disease or infirmity. The health status helps to show the welfare of a person. On the other hand, poor health status represents a major manifestation of poverty. Inadequate health services, lack of food, safe water, income or education are inter-linked factors.

Health and medical statistics incorporate a variety of data types. The most common statistics reported are vital (birth, death, marriage, divorce rates), morbidity (incidence of disease in a population) and mortality (the number of people who die of a certain disease compared with the total number of people). Other common statistical data reported are health care costs, the demographic distribution of disease based on geographic, ethnic, and gender variables, and data on the socioeconomic status and education of health care professionals

5.0 Morbidity

It is the relative frequency of occurrence of disease, illness, injuries, and disabilities in a population.

- Disease is a disorder with a specific cause and recognizable signs and symptoms; any bodily abnormality or failure to function properly, except that resulting directly from physical injury.
- Illness refers to poor health resulting from disease of body or mind.
- Injury is a disease or impairment of a person's body or mind.

5.1 Disease Incidence

Measures the number of new cases of a particular disease arising in a population at risk in a certain time period.

5.2 Disease Prevalence

Measures all cases of the disease existing at a point in time.

Alternatively: Prevalence = $Incidence \times Average duration$

5.3 Notefiable disease.

Is any disease that is required by the law to be reported to the government authorities to allow monitoring of the disease and provide early warning of possible outbreaks

5.4 Sanitation

Is the hygienic means of promoting health through prevention of human contact with the hazards of wastes.

5.5 Family planning

Refers to the planning of when to have, and the use of birth control and other techniques to implement such plans.

5.6 Trachoma

Is an infectious eye disease, and leading cause of world's infectious blindness.

5.7 Antenatal care

Concerns with the care and treatment of unborn child and pregnant woman (antenatal clinic).

5.8 Medicine

Is a science and art of healing it encompasses variety of health care practices evolved to maintain and restore health by the prevention and treatment of illness.

5.9 Diagnosis

Is an art of identifying a disease from its signs and symptoms.

5.10 Impairment

Impairment is any loss or abnormality of psychological or anatomical structure or function.

5.11 Disability

It is any restriction or lack (resulting from impairment) of ability to perform an activity in the manner or within the range considered normal for a human being. It is a limitation in regard to the kind or amount of activities a person can do due to long-term physical condition, mental condition or health problem.

5.12 Handicap

Handicap is the condition of being unable to perform as a consequence of physical and mental unfitness (depending on age, sex, social and cultural factors) for that individual e.g. reading disability or hearing disability.

5.13 Orphan

It is a child under 18 years who has lost one or both parents.

5.13.1 Maternal Orphan

It is a child under age 18 years who has lost his/her mother

5.13.2 Paternal Orphan

It is a child under 18 years who has lost his/her father

5.14 Doctor Patient Ratio

This is the number of people served by one doctor.

$$DPR = \frac{Number\ of\ Patients}{Doctor}$$

5.15 Nurse Patient Ratio

Refers to number of patients attended by one Nurse.

5.16 Hospital Beds

A bed used for patients (as in hospital) that can be adjusted, especially to raise the head end, foot end or middle as required.

- **Licensed Beds:** The maximum number of beds for which a hospital holds a license to operate. Many hospitals do not operate all of the beds for which they are licensed.
- Physically Available Beds: Beds that are licensed physically set up, and available for
 use. These are beds regularly maintained in the hospital for the use of patients, which
 furnish accommodations with supporting services (such as food, laundry, and
 housekeeping). These beds may or may not be staffed but are physically available.
- Staffed Beds: Beds that are licensed and physically available for which staff is on hand to attend to the patient who occupies the bed. Staffed beds include those that are occupied and those that are vacant.

- Un-staffed Beds: Beds that are licensed and physically available and have no current staff on hand to attend to a patient who would occupy the bed.
- Occupied Beds: Beds that are licensed, physically available, staffed, and occupied by a patient.
- Vacant/Available Beds: Beds that are vacant and to which patients can be transported immediately. These must include supporting space, equipment, medical material, ancillary and support services, and staff to operate under normal circumstances. These beds are licensed, physically available, and have staff on hand to attend to the patient who occupies the bed.

5.17 Anthropometric Measurements

Anthropometric Measurements are used to assess the nutritional status of children by collecting anthropometrics data which includes age, height and weight measurement. The nutrition status indicators are categorized in three standard indices which are:

Height - for- Age (Stunting)

Stunting is the outcome of failure to receive adequate nutrition over an extended period and is also affected by recurrent or chronic illness. Children whose height- for- age is below minus two standard deviations from the median of reference population are stunted or short for their age.

Weight - for- Height (Wasting)

Wasting represents the failure to receive adequate nutrition in the period immediately before the survey, and typically is the result of recent illness episodes especially diarrhea, or a rapid deterioration in food supplies. Children whose weight- for- height is below minus two standard deviations from the median of reference population are considered wasted or thin.

Weight - for- Age (Underweight)

Underweight reflects the effects of both acute and chronic under nutrition. Children whose weight -for -age is below minus two standard deviations from the median of the reference population are considered underweight.

5.18 Body Mass Index (BMI)

Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems.

Alternatively: Body mass index (BMI) is a measure of body fat based on height and weight that applies to both adult men and women (except for pregnant women).

$$BMI = \frac{Weight(Kg)}{(Height(m))^2}$$

BMI Categories:

- Underweight = <18.5
- Normal weight = 18.5-24.9
- Overweight = 25-29.9
- Obesity = BMI of 30 or greater

5.19 Anemia

A condition in which the blood is deficient in red blood cells or oxygen-carrying proteins. Hemoglobin is the oxygen-carrying pigment in the blood, the predominant protein in the red blood cells. In the routine laboratory test for hemoglobin (Hb), it is usually measured as total hemoglobin and the result is expressed as the amount of hemoglobin in grams (gm) per deciliter (dl) of whole blood a deciliter being milliliters.

The normal ranges for hemoglobin depend on the age and beginning in adolescence and the sex of the person.

The normal ranges are:

Newborns: 17-22 gm/dl

One (1) week of age: 15-20 gm/dl

One (1) month of age: 11-15gm/dl

Children: 11-13 gm/dl

Adult males: 14-18 gm/dl

Adult women: 12-16 gm/dl
Men after middle age: 12.4-14.9 gm/dl

Women after middle age: 11.7-13.8 gm/dl.

Any person falling in the above specified groups, whose hemoglobin is below the respectively specified group will be termed to have Anemia.

5.20 Low Birth Weight

Low Birth Weight refers to infants who weigh less than 2.5 kg at birth.

5.21 Arm Circumference

Refers as a Public Health Index of Protein-Calories Malnutrition of early childhood. Arm circumference indicators of nutritional status are such as simple arm circumference, arm circumference-for-age and arm circumference-for- height.

5.22 Outpatient attendance ratio.

Refers to total number of OPD attendance in a year divided by total population in a year.

5.23 Proportion of births attended in health facility

Refers to number of deliveries conducted in health facilities divided by projected number of births.

5.24 Proportion of births attended by skilled health personnel

Refers to number of deliveries conducted by skilled health personnel divided by projected number of births

5.25 Pharmacist patient ratio

Refers to number of people served by one pharmacist

5.26 Nurse midwife patient ratio

Refers to number of people (pregnant women) served by one nurse midwife.

5.27 Contraceptive prevalence rate.

Refers to number of contraceptive active users excluding condom or including condom divided by number of women of child bearing age.

5.28 Surveillance

Surveillance is the monitoring of the behavior, activities, or other changing information, usually of people for the purpose of influencing, managing, directing, or protecting them.

5.29 Curative Services

Curative care refers to treatment and therapies provided to a patient with an intent to improve symptoms and cure the patient's medical problem. Antibiotics, chemotherapy, a cast for a broken limb -- these are examples of curative care.

5.30 Preventive Services

Routine health care that includes check-ups, patient counseling and screenings to prevent illness, disease and other health-related problems

5.31 Folk Education

Folk Education are skills provided to adult especially in rural area for capacity building to rural area community to obtain skills for self employment, income generation and ability to tackle immediately problems appeared in their environment.

5.32 Gender

Is the participating between men and women, their roles, access to and control over resources, division of labor, interests and needs.

5.33 Gender Based Violence (GBV)

Are all forms physical, sexual and psychological violence directed against a woman simply because she is a woman or violence that affects women disproportionately.

5.34 Violence Against Children (VAC)

Are all forms physical, sexual and psychological violence directed against Children.

5.35 Influential People

People whose actions and opinions strongly convince the course of events

5.36 Female Genital Mutilation (FGM)

Female genital mutilation (FGM) comprises all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for non-medical reasons.

5.37 Adoption

Is a process whereby a person assumes the parenting of another, usually a child, from that person's biological or legal parent or parents, and, in so doing, permanently transfers all rights and responsibilities, along with affiliation, from the biological parent or parents.

5.38 Most Vulnerable Children

Are children under the age of 18 years falling under extreme condition characterized by severe deprivation as to endanger their health; well being and long term development like those who live in a house with chronically ill parent; Maternal Orphan, Paternal Orphan; Stigmatized; marginalized or discriminated; child without both parents; abandoned child; child forced to work; child in harassment situation; children living institutional care; children born in prison,

children with Disabilities; early childhood bearing; street children and those living in child headed households.

5.39 Matrimonial Problems:

Problems related to marriages.

5.40 Gerontology:

Is the Study of Social problems for the older Persons/People.

5.41 People with Disabilities:

Can be defined as Persons with physical, intellectual, sensory or mental impairment and whose functional capacity is limited by encountering attitudinal, environmental and institutional barriers.

5.42 Rehabilitation:

Means Combined efforts in the domain of health, education, vocational training, psychology, public awareness and work including community based rehabilitation intended to raise functional level of a person with disability so as to enable him, take part in the normal life of the community.

5.43 Settlements

A public building established for the purpose of providing welfare requirements of the needy persons with disabilities.

5.44 Social Protection

Means family or community Support structures, and interventions by state or non state actors that support individuals, households and communities to prevent manage, overcome the risks threatening their security and well-being.

5.45 Social Support

Means a support or assistance given to a person with disability in order to help that person to cope with his situation in a given environment.

5.46 Psychosocial Support

Is an approach to victims of disaster, catastrophe or violence to foster resilience of communities and individuals. It aims at easing resumption of normal life; facilitate effected people

participation to their convalescence and preventing pathological consequences or potentially traumatic situations.

5.47 Older Persons:

According to the National Ageing Policy 2003 An older person is a person with 60 years and above.

5.48 Technical Devices:

Assistive Devices are those assistance be a person or equipment that supports a person with disability to work in same pace as a non disabled person e.g Sign Language interpreter; Wheel Chairs, Visual Aids (Glasses, Braille and White Cane).

5.49 Civil Registration

Is defined as the continuous, permanent and compulsory recording of the occurrence and characteristics of vital events and as provided through decree of regulation in accordance with the legal requirement of each country.

5.50 Insolvency

Is the condition of having more debt (liabilities) than total assets, which might be available to pay them. In other way it can be defined as the inability to pay for debts upon the date when they become due in ordinary course of business; the condition of an individual whose assets and property are inadequate to pay individual's debt.

5.51 Vital Statistics

Vital statistics are information systematically collected and compiled in numerical form, relating to or derived from vital events, that is deaths, births, marriage and divorces.

5.52 Trustee

Is a legal term, which refers to any person who holds property, authority or position of trust or responsibility for the benefit of another. It can also be defined as

An individual person or member board given control or power of administration of property in trust with legal obligation to administer it solely for the purposes specified.

5.53 Marriage

Is an act, ceremony or process by which the legal relationship of husband and wife is constituted. The legality of the union may be established by civil, religious or other means as recognized by the laws of each country (United Nation, 2001). In other ways marriage is simply defined as legally or formally recognized union of a man and a woman as partners in relationship, it is the intimate union and equal partnership between man and woman.

5.54 Birth

Is the emergence of a baby from the body of its mother, the start of life as physically separate being.

5.55 Death

Is a permanent disappearance of all evidence of life at any time after live birth has taken place (post natal cessation of vital functions without capacity of resuscitation). This definition therefore excludes fetal death.

5.56 Divorce

Is referred to a final legal dissolution of a marriage that is separation of husband and wife, which confers on the parties the right to remarriage under civil, religious and/or other provisions, according to the laws of each country.

5.57 Vital Event

A Vital event refers to the live birth, death, foetal death, marriage, divorce, adoption, legitimating, recognition of parenthood, annulment of marriage or legal separation.

5.58 HIV incidence

In general, HIV incidence is expressed as the estimated number of persons newly infected with HIV during a specified time period (e.g., a year), or as a rate calculated by dividing the estimated number of persons newly infected with HIV during a specified time period by the number of persons at risk for HIV infection.

It is important to understand the difference between HIV incidence and new diagnoses of HIV infection. HIV incidence refers to persons newly infected with HIV, whereas individuals newly diagnosed with HIV may have been infected years before being diagnosed.

5.59 HIV prevalence

The number of persons living with HIV disease at a given time regardless of the time of infection, whether the person has received a diagnosis (aware of infection), or the stage of HIV disease. Although prevalence does not indicate how long a person has had a disease.

CHAPTER SIX

LABOUR AND PRICE STATISTICS



6.0 Labour Statistics

These statistics are concerned with economic activity of the population and are collected through censuses, household based surveys such as labour force surveys, establishment surveys and administrative records.

6.1 Economic Activities

Covers all market production and certain types of non-market productions, including production and processing of primary products for own consumption, own account construction (owner occupied dwellings) and other production of fixed assets for own use. It does not cover unpaid production of services for own consumption, such as housework and care of other household members as defined by the SNA of 1993 and revised in 2008.

6.1.1 Economically Active Population

Comprise all persons above a specified age (usually 15 years or above) who were either workings or actively looking for work and available. They include both the employed and unemployed persons.

There are two approaches used to measure the economically active population namely currently and usually economically active population. The currently economically active population, also referred to as the labour force, is measured in terms of a short reference period such as one week or one day. The usually economically active population is measured in terms of a longer reference period, such as a year. In Tanzania, the twelve calendar months preceding day of the survey interview was used as the reference period.

6.1.2 Employment

According to the international definition, the employed population includes all persons above a specified age (usually 15 years or above) who did some work (for one hour or more) in the reference period either for pay in cash or in kind (paid employees) or who were in self employment for profit or family gain, plus persons temporarily absent from their work. Self employment includes persons working on their own farms or doing any other income generating activities. Unpaid family workers in family businesses are included in the category of employed persons.

6.1.3 Main and Secondary Activity

Main activity refers to an activity that an employee spends most of the time in case he/she has more than one activity, while the other activity is categorised as a secondary activity.

6.1.4 Temporary Absences from Employment

Refers to persons who did not work in the reference period but have a work from which they are temporarily absent and they keep a strong attachment to the job and there is a definite expectation that they will return to it.

6.1.5 Status in Employment

Status in employment is distinguished by the following categories:-

6.1.5.1 Paid employees

Are persons who perform work for a wage or salary in cash or kind. It includes permanent, temporary and casual paid employees.

6. 1.5.2 The self-employed (non-agriculture)

Are persons who perform work for profit or family gain in their own non-agricultural enterprise. This includes small and large business persons working on their own enterprises. The category is sub-divided into those with employees and those without employees.

6.1.5.3 Unpaid family helpers (non-agriculture)

Are persons working completely without payment in cash or kind in family enterprises other than in the family farm.

6.1.5.4 Agricultural workers

Are persons working on their own farms either in crop growing, forestry, livestock or fishing as either self-employed persons or as unpaid family helpers.

6.1.6 Other Concepts includes;

Regular Employees are all permanent and temporary wage earners and salaried persons who were engaged throughout the working days of the reference month.

Casual Workers are persons receiving daily wages and permanent or temporary wage earners and salaried persons who were engaged for a period of less than one month during the reference period.

6.1.7 Unemployment

Under the internationally recommended definition, a person is classified as unemployed if she/he meets all the following three conditions during a specified period (usually one week), that he/she is:

- a. without work,
- b. available for work, and
- c. seeking work (had taken specific steps in a specified period to seek paid employment or self-employment).

This type of unemployment is termed as **Strict International Definition**.

Relaxed International definition of unemployment allows the relaxation of condition (c) above, i.e. seeking work, especially in countries where a large proportion of the population is engaged in agriculture and informal activities with generally low knowledge of labour market developments in the rest of the economy.

The **national definition of unemployment** is the sum of unemployed who fulfilled categories A and B and working persons with extreme marginal attachment to their employment.

6.1.8 Discouraged Workers

The discouraged workers are persons who are without work and available for work but did not seek work because they felt that no work would be available to them. These are those who have given up any hope of finding work for reasons such as lack of proper qualifications, no suitable work is available or does not know where or how to look for work.

6.1.9 Underemployment

Underemployment reflects underutilisation of the productive capacity of the employed population. It refers to persons whose actual hours of work were less than 40 per week due to economic reasons if he/she indicated to be availability for more work.

6.1.10 The Economically Inactive (not in the labour force)

These are persons who were neither employed nor unemployed in the reference period. This includes persons doing solely unpaid domestic work in their own houses; those engaged in full time studies and persons not working because they were sick, retired or did not want to work.

6.1.11 Usual Activity

The usually employed refer to persons who were usually economically active and spent six or more months working. The usually unemployed refer to persons who spent six or more months not working but available for work. The usually economically inactive refer to persons who did not work and were not available for work for more than six months.

6.1.12 Informal Sector

Informal sector comprises all units/enterprises that are engaged in production of goods or services aiming at generating employment and incomes for persons concerned. These are private unincorporated enterprises (excluding quasi corporations) owned by individuals or households that are (i) not constituted as separate legal entities independent of their owners, and for which no complete accounts are available (ii) They are not registered under specific forms of national legislation and/or their employees (if any) are not registered (iii) All or at least some of the goods or services produced are meant for sale or barter (iv) Their employment size is less than 5 employees (v) They are engaged in non agricultural activities, including secondary non agricultural activities of enterprises in the agricultural sector.

6.1.13 Informal Employment

Informal employment refers to jobs that generally lack basic social or legal protections or employment benefits and may be found in informal sector, formal sector enterprises or households.

6.1.14 Vulnerable Workers

The vulnerable workers include contributing family and own account workers. These two status groups are considered as vulnerable because such workers are unlikely to have formal employment arrangements or access to benefits or social protection programmes, and they are more at risk to the effects of economic cycles.

6.1.15 Child Labour

Child labour is a work which is hazardous or is likely to be harmful to the child's health and development and that affect the child's attendance at school, participation in vocational orientation or training programmes approved by the competent authority or the child's capacity to benefit from the instruction received.

6.2 Price Statistics

6.2.1 Consumer Price Index (CPI)

CPI is a measure estimating the average price of consumer goods and services purchased by households. It measures changes in the price of a fixed basket of consumer goods and services commonly purchased by households over a period of time on a monthly basis

6.2.2 Price Index

Price index is a normalized average of prices for a given class of goods and services in a given region, during a given interval of time. It is a statistic designed to help to compare how these prices, taken as a whole, differ between time periods or geographical locations.

6.2.3 Laspeyres Price Index

Is the Price Index taking the bundle of goods using current prices and current quantities as the numeraire.

6.2.4 Paasche Price Index

Is the price index where the numeraire is the bundle of goods using base year prices but current quantities.

6.2.5 Inflation

Inflation is defined as a sustained increase in the general level of prices for goods and services over a period of a year.

Several variations on Inflation:

Deflation is when the general level of prices is falling.

Hyperinflation is unusually rapid inflation. In an extreme cases, this can lead to the breakdown of a nation's monetary system.

Stagflation is the combination of high unemployment and economic stagnation with inflation.

6.2.6 Base period

Is a point in time used as a reference point for comparison with some later period. E.g. NBS produces the NCPI using October 2010 as base price period and weights are derived from the 2007 HBS results

6.2.7 Consumption

Is any activity in which households use goods and/or services to satisfy their needs and wants but not for business purposes nor for the acquisition of wealth. Thus investment in all forms of assets is excluded.

6.2.8 Price relative

Ratio of a single price at a given point in time to the corresponding price in the previous period.

6.2.9 Weight

Is the relative consumption share of an item or group of items to the total consumption of households. It measures the importance attached to an item or group of items in the basket of goods and services e.g. on average 47.8% of a household's consumption in Tanzania is on food and non alcoholic beverages.

6.2.10 Basket of goods and services

refers to a sample of goods and services that are commonly purchased by persons including all expenditure groups and households in the country.

6.2.11 A representative item

Is an item that has been selected to represent the consumption pattern in the basket of selected items in the Consumer Price Index. This should be an item that has the largest share of consumption compared to the items of the same type, e.g. 'lemon cream' may have the largest share of consumption compared to other cream biscuits. There are 224 items in the CPI basket.

6.2.12 Brand

Is the trade name of the item which may be the manufacturer's name or the name that the item. Note that the same brand name may be used for different items, e.g. cooking oil, maize, salt etc.

6.2.13 An Outlet

Are places where goods and services are sold to the final consumers, e.g. shops, markets, supermarkets etc

6.2.14 Consumption

Is any activity in which households use goods and/or services to satisfy their needs and wants but not for business purposes nor for the acquisition of wealth. Thus investment in all forms of assets is excluded.

6.2.15 An item variety

Is the description and specification of the representative item to be priced. The item name may be too broad e.g. biscuits. The variety includes specification of quality, kind, style, size quantity and the brand name. Take special note that item variety means the full item specification.

Example: Representative item :Maize,

Item variety Specification : 5kg, white
Brand : Red Seal

6.2.16 Substitution

This refers to the replacement of either item varieties or Outlets.

CHAPTER SEVEN

POVERTY AND WELFARE STATISTICS

7.0 Poverty

Poverty refers to an assessment of the basic costs of a minimum standard of living in a particular society and measures the number of households and/or the proportion of the population that are deemed not to be able to meet these basic needs. Poverty analysis tries to identify within each society who are the poor, where they live and what are the characteristics that set these poor households apart from those that are better-off. The goal of the analysis is to be able to develop targeted pro-poor poverty reduction or alleviation strategies that will help to understand why some are poor and others are not.

Poverty is a result of many and often mutually reinforcing factors, including lack of productive resources to generate material wealth, illiteracy, prevalence of diseases, discriminative socioeconomic and political systems, natural calamities such as drought, floods, HIV and AIDS and man-made calamities such as wars.

7.1 Welfare

It is the level or standard of living of an individual, household or community. Two approaches are commonly used to measure welfare. The first approach is in terms of needs satisfaction. The more an individual, household or community satisfies its needs, the higher the level of welfare and vice versa.

The second approach is in terms of the household's command over resources in terms of food, money, property, health, schooling, working conditions, housing, security against crime, means of transport & communication as well as liberty. This enables individuals to have the capacity to satisfy their needs and broaden their opportunities and choices.

7.1.1 Human Poverty Index (HPI)

Measures deprivations in the three basic dimensions of human development such a lack of a long and healthy life, lack of knowledge and lack of a decent standard of living.

7.1.2 Poverty Head Count Ratio

The poverty headcount ratio is the proportion of the national population whose incomes are below the official threshold (or thresholds) set by the national government. National poverty lines are usually set for households of various compositions to allow for different family sizes. Where there are no official poverty lines, they may be defined as the level of income required to have only sufficient food or food plus other necessities for survival.

7.1.3 Poverty line

A poverty line typically specifies the income (or level of spending) required to purchase a bundle of essential goods (typically food, clothing, shelter, water, electricity, schooling and reliable healthcare). Or it implies a minimum consumption expenditure level required by a person to procure a standardized basket of goods and services to satisfy basic needs.

7.1.4 Poverty Gap Index (PGI)

This is a measure of the depth/intensity of poverty. Poverty gap index is an improvement over the poverty measure headcount ratio which simply counts all the people below the poverty line in a given population and considers them equally poor.

Poverty gap index (PGI) is calculated as:
$$PGI = \sum_{i=1}^{n} \left(\frac{z - y_i}{N} \right)$$

Where: N is the total population, n is the total population of poor who are living at or below the poverty line, z is the poverty line, and yi is the consumption of the poor individual

7.1.5 Depth of poverty (poverty gap).

This provides information regarding how far off households are from the poverty line. This measure captures the mean aggregate income or consumption shortfall relative to the poverty line across the whole population.

7.1.6 Squared Poverty Gap Index (SPGI)

This is a measure of the severity of poverty being experienced by a population or subpopulation. Squared poverty gap is related to poverty gap index but it's calculated by averaging the square of the poverty gap ratio, by squaring each poverty gap data, the measure puts more weights the further poor persons observed income falls below the poverty line. The squared poverty gap index is one form of a weighted sum of poverty gaps, with the weight proportionate to the poverty gap. Poverty severity (squared poverty gap) takes into account not only the distance separating the poor from the poverty line.

7.1.7 Gini Coefficient and Quintile Ratios:

The Gini Co-efficient and Quintile ratios are the most common indices or indicators used to measure the depth of inequality (by per capita income) of a distribution

7.1.8 The Gini Co-efficient

is the measure of inequalities among the population. It refers to the extent to which income is distributed in an uneven manner among the population and ranges from 0 (every person has the same consumption) to 1 (one person has all of the consumption in the country). It is

defined as the ratio between the area demarcated by the diagonal and the Lorenz curve and the triangular region underneath the diagonal of the Lorenz plot.

7.1.9 The Quintile Ratio

is a ratio of consumption of the richest 90 percent to consumption of the poorest 10 percent.

7.1 10 Relative poverty lines:

These are defined in relation to the overall distribution of income or consumption in a country; for example, the poverty line could be set at 50 percent of the country's mean income or consumption.

7.1.11 Absolute poverty lines:

For monetary measures, these absolute poverty lines are often based on estimates of the cost of basic food needs, that is, the cost of a nutritional basket considered minimal for the health and well-being of a typical family, to which a provision is added for non-food needs.

7.1.12 Food Poverty

Food poverty is the inability to access a nutritionally adequate diet and the related impacts on health, culture and social participation.

7.1.13 Food Poverty line

This is the cost of buying the food bundle or basket that can provide the minimum nutritional requirements of a poor person. It is calculated by having prices of all food items in the basket.

7.1.14 Basic Needs Poverty line

This is the cost of expenditure on non-food essentials.

7.1.15 Indicator

It is a measure that reflects progress, stagnation or deterioration in a particular phenomenon or situations such as literacy, economic, heath and poverty over time.

7.1.16 Monitoring

It is a process of following up the course of an event or process towards a pre-determined destination or target.

For monitoring purposes the following are essential requirements:

• There must be a set of monitoring indicators that will be used to measure changes in a given situation over time.

 A monitoring system must be in place. This includes actors or institutional set-up, the frequency of monitoring and the mode of monitoring.

7.1.17 Food Security

Food security refers to a situation under which an individual, household or community has access to an adequate supply of food throughout the year. This situation is determined by the amount of available food in relation to actual daily calorific requirement of the individual, household or community. Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

7.1.18 Food Insecurity

Is a situation where by a Household/Village/District/Regional/National level faces food deficit. For example, percentage of household with adults eating less than 2 meals a day (1 meal or no meal), and percentage of children aged 6 months to 59 months eating less than 3 meals per day, can be a cut off point for households considered food insecure. It also relates to the nutrition status of a family and food shortage at the household level. However, the criteria are subjective and may need other objective criteria to specify food insecurity at the household level.

7.2 Human Development Indices

Human Development is a process of enlarging people's choice at all levels of development. The process therefore, focuses on formulation of human capabilities such as improved health, knowledge and skills and utilization of their acquired capabilities.

7.2.1 Human Development Index (HDI)

Is a summary measure of human development. It measures the average achievements in three basic dimensions of Human Development indicated as;

$$HDI = LEI + LRI + GDPI$$

A long and health life, measured by life expectancy at birth.

$$LEI = \frac{LE - 25}{85 - 25}$$

Where; LEI is Life Expectancy Index

 Knowledge, measured by adult literacy rate and the combined primary, secondary and tertiary gross enrollment.

$$LRI = \frac{2}{3}ALR + \frac{1}{3}GER$$

• A decent standard of living, as measured by GDP per capita.

$$GDPI = \frac{\log(GDP) - \log(100)}{\log(4000) - \log(100)}$$

7.2.2 Life Expectancy at Birth.

It is an estimate of the average number of years a new born baby would live subject to the mortality risks prevailing for the cross – section of the population at the time of its birth.

7.2.3 Literacy Rate

It is the number of literate persons of a specified age group expressed as a percentage of total persons of that age group.

7.2.4 Gross Enrolment Ratio

It is the total enrolment of pupils in grade or cycle or level of education regardless of age, expressed as a percentage of the corresponding eligible official age-group population in a given school year.

7.2.5 Gross Domestic Product

Refers to the sum of the gross values added of all resident institutional units engaged in production plus any taxes, and minus any subsidies on products not included in the value of their outputs.

a) Gross Domestic Product at Market Prices

Refers to the producers' value of the gross output of Resident Producers less the purchasers' values of their intermediate Consumption plus import duties.

b) Gross Domestic Product at Factor Cost

Refers to the value of all goods and services produced by the Resident without including the excess of indirect taxes over subsidies.

7.2.6 Human Poverty Index (HPI)

The HPI measures poverty in developing countries. It brings together in one composite index the deprivation in four basic dimensions of human life - a long and healthy life, knowledge, economic provisioning and social inclusion.

7.2.7 Probability at Birth of Not Surviving to Age 40

Is calculated as 1 minus the probability of surviving to age 40 for a given cohort. Probability of new-born infant surviving to age 40 is subject to prevailing patterns of age-specific mortality rates.

7.2.8 Improved/Unimproved Water Sources

Improved water source includes, piped water, public and private well (protected), spring (protected). While unimproved water source refers to public and private well (unprotected), spring (unprotected), river, dam and lake.

7.2.9 Gender-Related Development Index (GDI)

The GDI measures achievements in the same dimensions and 3-2 variables as the HDI; but captures inequalities in achievement between women and men. The greater the gender disparity in basic human development, the lower a country's GDI compared with its HDI.

7.2.10 Gender Empowerment Measure (GEM)

It measures the disparity of active participation of women and men in key areas of economic and political life as well as decision-making.



7.3 Statistical Unit

This is the social entity from which the required data are collected.

7.3.1 Household

Refers to people who live together and share income and also basic needs. In other words, residents of a household share the same centre of production and consume from that centre.

In other words it is referred to as a person or group of persons who reside in the same homestead or compound but not necessarily in the same dwelling unit, have same cooking arrangements, and are answerable to the same household head except for collective household.

7.3.2 Types of households

A household may **be one-person** or **multi-person-household**. There are two types of common households used. These include;

a) One person household which is a person who lives alone in whole or part of housing unit and has independent consumption;

b) *Multi-person household* is a group of two or more persons who occupy the whole or part of a housing unit and share their consumption. Usual households of this type comprise husband, wife and children. Other relatives, borders, visitors and their persons are included as members of the household if they pool their resources, share their consumption and have been living with the household for at least two weeks.

7.3.3 Private Household

Is defined as a person or group of persons who reside in the same homestead or compound but not necessarily in the same dwelling unit, having the same cooking arrangements, and are answerable to the same household head.

7.3.4 Collective Households

Is a group of persons residing in one dwelling or compound having no head of household. Boarding schools, hospitals and camps are examples of collective households

7.3.5 Household Size

This is the number of persons who usually live in the household including boarders and servants etc.

7.3.6 Average Household Size

Is the average number of persons per private household. Average household size is obtained by dividing the total number of persons living in private households to the total number of private households.

7.3.7 Head of Household

Is a member of the household who holds the role of decision maker in that household. Other normally recognize this individual as their head. In most cases the household head should take part in the economy, control the welfare of the household in general.

7.4 Marital Status

Refers to a civil status of each individual in relation to the marriage laws or customs of the country i.e Marriage, Divorced Person, Living Together, Never Married, Separated and Widowed

7.4.1 Divorced Persons

Are those persons who were once married but their marriages were permanently terminated and have not remarried since then. Note that in polygamous marriages the divorce of one or more wives does not categorize the husband as divorced if he still lives with the other wife (wives).

7.4.2 Living Together

Refers to an act of persons who are not formally married but are in a consensual unions or are living in a socially recognized stable unions.

7.4.3 Marriage

Is an act of persons who are living together or separately but are formally married irrespective of the type of marriage, which may be customary, civil or religious marriage.

7.4.4 Mean Age at First Marriage

Is defined as the average length of single life expressed in years among those who marry before age 50.

7.4.5 Never Married

Means persons who have remained single all their lives excluding persons who have lived with another person and are now living alone.

7.4.6 Separated

Is the act of persons who were once married but now are living apart. Those who live apart because their spouses are employed far away from home or for similar reasons are considered to be married.

7.4.7 Widowed

Is the act of persons whose marriages were terminated by death and have not remarried since. Note that in polygamous marriages the death of one or more wives does not make the husband a widower if he still has other wife (wives).

7.4.8 Housing/Dwelling Unit

This is all the living space occupied by one household regardless of the physical arrangement of facilities available. It may be one room or more occupied by lodgers or it may be one, two or more housing units occupied by an extended family.

7.4.9 Household Budget

This comprises of household income and household expenditure both in cash and in kind.

7.4.10 Household Income

This is made up of:

- Wages, salaries, bonuses and others
- Net profit from farming and non-farming activities
- Property income such as rent, royalties, interest and dividends
- Transfer payments received such as an assistance payment, pension and others
- Income in kind: the value of goods and services received and consumed (including imputed rental value of owner occupied dwelling or received free from other sources)

 Other cash receipts such as insurance proceeds, lottery winnings and other "windfall" gains.

7.5 Household Expenditure

It consists of:

- The amount spent on goods and services used for living purposes
- The value of goods and services received as part of pay, home produced and consumed items (including rental value of owner occupied dwelling) or received from other sources
- The amount spent for taxes, contributions, insurance premiums, lottery tickets, interest on debts and other non-consumption items.

7.6 Household Direct Expenditure (Consumption Expenditure)

This refers to expenditure on goods and services incurred by the household during the reference period for direct consumption by the household. This involves foods, non-durables, semi-durables, and durable goods and services. It includes taxes and duties paid, pensions and security contributions, remittances, gifts and other transfers.

7.7 Household Indirect Expenditure (Domestic Non- Consumption Expenditure)

This refers particularly to transfers such as direct taxes, interest, legal aid charges, fees, fines and penalties, contributions during funerals, mosques, schools and churches as well as gifts received and other transfer.

CHAPTER EIGHT

CRIME, JUSTICE AND SECURITY STATISTICS

8.0 Introduction

Crime, Justice and Security Statistics covers statistics from Tanzania Police Force, Judiciary of Tanzania, Tanzania Prison Services, Probation and Prosecution. It is to be noted that the criminal justice system is very complex, involving Police, Prosecution, Judiciary, Prison and probation as well as social economic situation in which crimes occur.

The following points should be taken into consideration when dealing with criminal justice and security statistics:

- (a) When comparing figures it should be realized that police and judiciary figures are based on offences but prison figures are based on offenders, and that many offenders are sentenced for more than one offence.
- (b) Offences can sometimes be reclassified during the court process, usually downwards through prosecution to final court sentence. This is usually due to evidence not being as robust as at first thought.

8.1 Police Statistics

The Tanzania Police Force has its origin in the Constitution of the United Republic of Tanzania 1977, Cap. 2 R.E. 2002 and is constituted under section 3 of the Police Force and Auxiliary Police Services Act, Cap 322 R.E. 2002 for the preservation of peace, the maintenance of law and order, the prevention and detection of crime, the apprehension and guarding of offenders and the protection of property in Tanzania.

The Police Force usually compiles annual reports that include two types of statistics. These are crime statistics and administrative statistics. Administrative statistics include equipment, human and financial resources. Whereas crime statistics include all criminal cases that are regularly reported in all police stations in the country. The Tanzania Police Statistics is responsible for collecting, analyzing, storing and disseminating criminal offences and road traffic offences statistics. There are different types of offences which are major and minor criminal offences and major and minor road traffic incidents. Criminal offences are divided into three categories; offences against person, offences against property and offences against public tranquility.

8.1.1 Criminal offences

Are defined as offences that are punishable by laws.

8.1.1.1 Major Criminal Offences

Are those offences, which Police give priority due to the seriousness of events committed such as murder, robbery, illicit drugs etc

8.1.1.2 Minor Criminal offences

Are those offences, which Police identify, that if committed the results can not cause serious consequence but can annoy or do some minor harm to an individual, e.g. common assault, abusive language, gambling etc.

8.1.2 Road traffic offences

Includes road accidents, road accidents causing deaths, and road accidents causing injuries and damages of vessels.

8.1.2.1 Major traffic incidents

Are those incidents after occurring in roads they result in causing deaths, injuries and damages to properties.

8.1.2.2 Minor traffic incidents

Are those incidents when committed may or may not bring direct major effects, example of these incidents include wrong parking, driving without license, overspeeding and passing no entry. in these circumstances an offender can be fined by notifications or given warning.

8.1.3 Accidents

An un-intended event that involves property damage or personal injury or loss of life (deaths) as a result of motor vehicle in motion or any other moving object

8.1.4 Vehicle

A machine or implement of any kind drawn or propelled along roads whether by animal, mechanical, electrical or any other motive power.

8.1.5 Motor Vehicle

Means any propelled vehicle intended or adapted for use in roads

8.1.6 Offence

Is an act or omission forbidden by law.

8.1.7 Offences against person

Are offences which affect the personality of a person and his/her life. These offences include murder, rape, unnatural offence, child theft and child dissertation.

8.1.8 Offences against property

Are offences associated with any kind of property which is either under individual ownership, company ownership or public ownership. It includes stealing of arms, armed robbery, robbery with violence, burglary, theft, motorcycle theft, motor vehicle theft, counterfeit notes, stock theft, theft in banks, theft in public corporations, theft in cooperatives, theft in local Government, theft in Central government, theft in political parties, arson, fire accidents, and frauds.

8.1.9 Offences against public tranquility

Are offences against society's ethics such as drug abuse, bhang, khat (*mirungi*), Government trophies, corruption, smuggling, illicit liquor (*moshi*), etc.

8.1.10 Murder

Is the death caused by of another person by any unlawful act or omission.

Murder may be lawful and therefore not punishable.

8.1.11 Robbery

Is stealing of anything, and, at or immediately before or immediately after the time of stealing it, the robber uses or threatens to use actual violence to any person or property in order to obtain or retain stolen or prevent or overcome resistance to it being stolen or retained.

8.1.12 Rape

The action of having unlawful carnal knowledge of a woman or a girl without her consent, or with her consent if the consent is obtained by force or by means of threats or intimidation of any kind.

8.1.13 Theft

The process of stealing or fraudulently taking something from somebody without his/her consent.

8.1.14 Burglary

The act of breaking into or entering in any building, tent or vessels used as human dwelling, with intent to commit any offence.

8.1.15 Investigation

Is an inquiry into unfamiliar or questionable activities thoroughly and systematically. It is the process of trying to find out details or facts about something in order to discover who or what caused it or how it happened.

8.1.16 Under Investigation

Simply means the state of being investigated and the result of the matter investigated not yet completed.

8.1.17 Accused Person

Is the one charged with an offense the defendant in criminal case.

8.1.18 Closed cases

Are cases which are after police investigation, it is revealed that there is no evidence to prove it. The case is closed by the officer in charge of that police station.

8.1.19 Suspected person

Any person who is alleged to commit a crime.

8.1.20 Arrested

The detainment or restraint of a person or a thing for the purposes of determining legal rights as regard a thing, or suspicion of criminal activity as regard a person.

8.1.21 Statement

Is an explanation given by either witness, Accused, Suspect, or complainant the explanation will either testify, or reject or support the fact in issue before either Police officer, Magistrate, probation officer or any other person with an authority to determine the matter brought before him/her and whether the matter is civil or criminal.

8.1.22 Refugee

Is a person who runs out of his/her country for fear or persecution due to ethnic crashes, Political issues, Religious conflicts, and that fear endanger his/her life and cause to seek asylum in another country.

8.1.23 Offences committed by Refugees

Are those acts or omission forbidden by law for the refugee in camps.eg in Tanzania offences committed in camps at Kigoma, Rukwa ect.

8.1.24 Cyber Crimes.

These are criminal offences committed through the use of computers, mobile phones and all other electronic equipment capable of storing data in a computerized network. Offences facilitated by cyber technology include theft, fraud, murder, threats, harassment, abusive language and distributing information endangering national security.

8.1.25 Terrorism

It is an act of violence committed by a person or group of person that they consider themselves to be victimized by some notable wrong historically, this action could seriously damage the country, organization or individual to lead to significantly stabilize or destroy the fundamental political, economic or structure of the country or international organization or attacks on a person's life which may cause death or injury.

8.1.26 Juvenile Offences

Juvenile Offences, is participation in illegal behavior by minors (people under 18).

8.1.27 Gender-based Violence

Gender-based violence are actions that directed against a person on the basis of gender or sex. These actions affect a person physically, psychologically and emotionally which can negatively affect health, security, survival, development and a person's dignity.

8.1.28 Handling of Cases

The Handling of cases in general involves receiving of reported cases, investigation of the cases and taking authorized cases to court.

8.1.29 Money Laundering

Means engagement of a person or persons, direct or indirectly in conversion, transfer, concealment, disguising, use or acquisition of money or property known to be of illicit origin and in which such engagement intends to avoid the legal consequence of such action and includes offences

8.2 The Judiciary of Tanzania

The Judiciary of Tanzania is one of the three pillars of a democratic state. This pillar is charged with the function of administration of justice with equity and compassion according to the laws of the land in the state as provided for under Article 4 (2), 107A (1) and 107B of the Constitution of the United Republic of Tanzania. Article 107A of the Constitution of the United Republic of Tanzania of 1977 states that; The Judiciary shall be the authority with final decision in dispensation of justice in the United Republic of Tanzania. Article 107B of the constitution further states that "In exercising the powers of dispensing justice, all courts shall have freedom and shall be required only to observe the provisions of the Constitution and those of the laws of the land"

The vision of the Judiciary, the final impact of all collective efforts is to realize: 'Timely and accessible Justice for all'. The mission is to administer Justice for all through timely provision of quality, fair, transparent and impartial decisions.

8.2.1 Types of Courts in Judiciary of Tanzania

There are five (5) types of courts constituting the Judiciary of Tanzania. On top of the hierarchy, there is Court of Appeal of Tanzania; followed by the High Court of Tanzania; then the Resident Magistrates Court; the District Court and finally the Primary Court. Each of these courts has its own territorial and pecuniary jurisdiction. The Chief Justice has power to establish courts in different areas of the country wherever need arises.

8.2.1.1 The Court of Appeal of Tanzania

The Court of Appeal of Tanzania was established by Article 117(1) of the Constitution of the United Republic of Tanzania and Act No.15/1979 known as the Appellate Jurisdiction Act. Currently, this court is the final appellate body of the whole court system under Judiciary of Tanzania and ranks first in hierarchy.

8.2.1.2 The High Court of Tanzania

The High Court of Tanzania ranks second in hierarchy. The High Court was first established by Article 17 (1) of the Tanganyika Order-in-Council, 1920, the High Court now derives its establishment from Article 108 (1) of the 1977 Union Constitution as the High Court of The United Republic of Tanzania

The High Court of Tanzania had embarked upon reforms so as to speed up disposal of cases. One of these transformations is the introduction of specialized divisions of the High Court commonly known as Divisions of the High Court. These specialized divisions are Commercial, Labour and Land Divisions of the High Court of Tanzania.

8.2.1.2.1 Commercial Division

This was established under Rule 5A of the High Court Registries Rules 1985 as amended by GN. No.141 of 1999 (High Court Registries Rules of 1985 have been replaced by GN. No.96/2005). The objective is to adjudicate on commercial disputes efficiently, effectively and timely, in order to provide a positive climate for investment and economic development.

8.2.1.2.2 Labour Division

The Labour Division was established by Rule 5E of the High Court Registries Rules 1985 as amended by GN No.63 of 2001) of the High Court of Tanzania. The objective is to adjudicate on labour and employment disputes between employees and employers within the pecuniary jurisdiction of the High Court efficiently, effectively and timely, in order to enhance and protect industrial harmony.

8.2.1.2.3 Land Division

The Land Division was also established by Rule 5E of the High Court Registries Rules 1985 as amended by GN No.63 of 2001 with the objective to adjudicate land disputes by hearing and deciding cases without undue delays.

8.2.1.2.4 High Court Registries

Apart from those divisions of the High Court which have their own registries, there is the Main registry of the High Court and other 14 District Registries sometimes called zones of the High Court. Every High Court Centre in fourteen (14) High Court District Registries act as a sub-registry of the Court of Appeal. Those 14 District Registries of the High Court are situated in Arusha, Bukoba, Dar Es Salaam, Dodoma, Iringa, Mbeya, Moshi, Mtwara, Mwanza, Songea, Sumbawanga, Shinyanga, Tabora, and Tanga. It is the plan of the Judiciary of Tanzania to have District Registries in each and every Region of Tanzania mainland.

8.2.1.3 The Resident Magistrates Courts

Resident Magistrate's Courts are established by Section 5 of the Magistrate's Courts Act of 1984 with the objective of adjudicating on civil and criminal matters subject to the provisions of any law for the time being in force over an administrative region comprising of several districts.

8.2.1.4 The District Courts

The District Courts are established by Section 4 of the Magistrates Court Act of 1984. Their objective is to adjudicate on civil and criminal matters subject to the provisions of any law for the time being in force within the District in which it is established.

8.2.1.5 The Primary Courts

This is the lowest level according to courts hierarchy, established by Section 3 of The Magistrates Court Act of 1984. It is a court which exercises jurisdiction within the whole district in which it is established and therefore may, for purpose of improving equitable access to justice, be held at any place within the local limits of its territorial jurisdiction.

In this regard the Judiciary of Tanzania among other things has responsibilities of monitoring the performance of court system in delivering justice through, collecting, analyzing, interpreting and reporting on various case statistics. The following are various terms used in regard to case statistics;

8.2.1.6 Filed Cases

Refers to number of cases registered in court.

8.2.1.7 Pending cases

Refers to number of outstanding cases in court.

8.2.1.8 Case load

Refers to total number of outstanding cases including number of cases filed during the period under consideration.

8.2.1.9 Disposed/Decided Cases

Refers to number of finalized cases.

8.2.1.10 Case Backlog

Refers to number of cases which has been outstanding (pending) in court for more than two years.

8.2.1.11 Clearance rate

This is the percentage of the number of decided cases over number of filed cases in a particular period of time.

8.2.1.12 Disposal rate

This is the percentage of decided cases calculated as the ratio of decided cases and total number of cases (filed cases plus pending cases) in particular period of time.

8.2.1.13 Civil (proceedings) Case

Means proceedings brought for the purpose of enforcing or declaring right or for recovery of money or property.

8.2.1.14 Criminal Case

Refers to proceedings brought to court for the purpose of enforcing the law against Criminal offenses.

8.2.1.15 Conviction

The judgment of a jury or judge that a person is guilty. The state of being found or proved guilty.

8.2.1.16 Appeal

Is the process of taking a case to a higher court with power to act on the decision of the court that has made complained of.

8.2.1.17 Jurisdiction

Is a power of a court or other body to hear and decide a case or make an order.

8.2.1.18 Acquittal

The decision by a judge that a person accused of a crime is not guilty.

8.3 Prison

Is a building designated by law for the confinement of persons held while awaiting trial, and or persons sentenced after conviction.

8.3.1 Prisoner

Is any person, whether convicted or not, under detention in any prison. Individuals are prisoners if they are in any kind of penal institution such as prison, jail, or juvenile offenders facility, and their ability to leave the institution is restricted.

8.3.2 Adult prisoner

Means any prisoner of the apparent age of eighteen years or more.

8.3.3 Appellant prisoner

Means any convicted criminal prisoner who is detained in a prison as a result of a conviction which is the subject matter of an appeal which has been entered or lodged but the decisions in regard to which has not been given.

8.3.4 Civil prisoner

Means a debtor, a person ordered to be detained in custody under the provisions of the Mental Disease Act or a detainee under the Preventive Detention Act.

8.3.5 Criminal prisoner

Means any person dully committed to custody under a writ, warrant or order of any court or authority exercising criminal jurisdiction or by order of court-martial or a special Tribunal.

8.3.6 Convicted criminal prisoner

Means any criminal prisoner under sentence of a court or court martial or a special Tribunal and includes a person detained in prison under the Criminal Procedure Act.

8.3.7 Unconvicted prisoner

Means any person on remand or awaiting trial or, in cases of juveniles awaiting admission to an approved school, or any person detained for safe custody under the Immigration Act, or the Preventive Detention Act, or any written law repealing and replacing any of the said Acts and includes person detained for safe custody.

8.3.8 Young prisoner

Means a person between the apparent ages of sixteen and twenty- one years.

8.3.9 Camp

Means a small prison established for specific undertaking(S) which caters for few or certain types of prisoners having not more than twelve months to serve before release.

8.3.10 Central Prison

Means a large maximum-security prison which caters for all types of prisoners serving any lengths of sentences and is controlled by an Officer of or above the rank of Senior Superintendent.

8.3.11 Child

Means a person under the age of twelve years.

8.3.12 Community Service

Means a rehabilitation programme administered under the Community Service Act, 2002.

8.3.13 District prison

Means a maximum-security prison which is a reception center for remandees in a district and caters for prisoners serving sentences of up to ten years. It is controlled by prisons Officer of a rank of or above an Assistant Superintendent.

8.3.14 Farm Prison

Means a large, open prison situated in rural area specialized in one or more agricultural activities and catering for certain types of prisoners who have not more than ten years to serve before release.

8.3.15 Incorrigible

Means a prisoner who is a persistent offender and has developed a habit of demonstrating a character that is incompatible with good order and security in prison.

8.3.16 Juvenile

Means any prisoner under the age of eighteen years.

8.3.17 National Parole Board

Means the National Parole Board established under Section 3 of the parole Boards Act No.25/94.

8.3.18 Parole

Means the conditional release of a convicted prisoner from prison before the expiration of his sentence.

8.3.19 Parole Board

includes the National Parole Board and the Regional Parole Boards.

8.3.20 Prison for Women

Means a prison which deals with the security and rehabilitation of women prisoners.

8.3.21 Prison for Young Offenders

Means a prison which deals only with the security and training of young offenders of all classes.

8.3.22 Recidivist Prison

Means a maximum-security prison which has been selected as a center for the detention and rehabilitation of habitual offenders.

8.3.23 Regional Prisons Officer

Means a Senior Prisons Officer who has been appointed to be in charge of all matters connected with the Service in a Region by the Principal Commissioner.

8.3.24 Regional Parole Board

Means the Regional Parole Board established under Section 3 of the Parole Boards Act, No.25/94

8.3.25 Visiting Justice

Means a person appointed to be a Visiting Justice under Section 100 of the Prisons Act 1967.

PART THREE: PRODUCTION AND ENVIRONMENT SECTOR

CHAPTER NINE

AGRICULTURAL STATISTICS



9.0 Agricultural Statistics

Is the aggregate of numerical information of different fields of agriculture and its economy. These include food and cash crops, livestock, and livestock products, poultry and poultry products, fisheries and forestry.

Agricultural statistics is classified under two major headings namely, Basic Agricultural Statistics and Current Agricultural Statistics.

9.1 Basic Agricultural Statistics

These are statistics dealing with enduring characteristics of agriculture such as agricultural holdings, their numbers, form of land tenure, land utilization, agricultural population, agricultural implements and machinery. These statistics are enduring characteristics in that they do not change so frequently. Basic Statistics are mainly collected through censuses at a periodicity of 5-10 years.

9.2 Current Agricultural Statistics

These statistics provide information on the more dynamic aspects of agriculture. These activities include areas under crops, production of crops, yields of crops, livestock and their products and prices. These statistics change more often than the Basic Agricultural Statistics. Current Statistics are collected more frequently (i.e., annually, semi-annually or quarterly).

9.2.1 Area Statistics

Concepts and definitions of area in agricultural statistics depend on the use to be made of that area. An insight into the basic structure of agriculture can be obtained if the total area of the country is broken down according to classification known as land utilization. The purpose of this classification is to show what part of the total land in a given country can be used for different types of agricultural production.

9.2.2 Land Use

This provides a classification of the holding according to the activity, which is directly related to the land, makes use of its resources or has an impact upon it.

The major categories of land utilization include land under temporary and permanent crops, land under pastures, wood and forests and all other land not elsewhere classified.

9.2.3 Arable land

This is land used in most years for growing temporary crops including the land lying fallow or has not been sown due to unforeseen circumstances. Arable land does not include land under permanent crops or land under protective cover. Arable land is not meant to indicate that the land is potentially cultivatable.

Arable land is subdivided into the following categories: land under temporary crops, land under temporary meadows and pasture, land under temporary market or kitchen gardens, land under fallow and all other arable land. These categories are further defined as:

a) Land under Temporary Crops

This is land in the open air, used for crops with less than one year growing cycle which must be newly sown or planted for further production after harvest. Some crops that remain in the field for more than one year may also be considered as temporary crops: asparagus, strawberries, pineapples, bananas and sugar cane, for example, may be grown as annual crops in some areas. Such crops should be classified either as temporary or permanent crops according to the custom in the country. Vegetables, flowers, bulbs and kitchen gardens should also be included in this category.

b) Land under Temporary Meadows and Pasture

This is land temporarily cultivated with herbaceous forage crops for mowing or pasture. A period of less than five years should be considered as temporary to avoid practical difficulties when differentiating between temporary and permanent meadows.

c) Land Temporarily Fallow

This is land put under prolonged rest before re-cultivation. Land remaining fallow for too long may acquire characteristics requiring it to be reclassified, as permanent meadows and pastures (if used for grazing) or woodland forest under fallow (if overgrown with trees that could be used as timber, firewood, etc.), or all other land (if it becomes wasteland). Land is not considered temporarily fallow unless it has been or is intended to be kept at rest for at least one agricultural year. Land temporarily fallow should be distinguished from land abandoned by shifting cultivation; the former is part of the holding whereas the latter is not. Fallow land temporarily used for grazing should be classified as fallow if the land is normally used for cultivating temporary crops.

d) All Other Arable Land

This includes all rotation land not put to the uses mentioned under 9.2.3.(a-c) during the reference year. For example, arable land temporarily damaged by floods and land prepared for cultivation but not sown due to unforeseen circumstances.

9.2.4 Land under Permanent Crops

This is land planted with long - term crops, which do not have to be replanted for several years. This includes land under trees and shrubs producing flowers (i.e., roses and jasmine) and nurseries (except those for forest trees which should be classified under woodland or forest). Permanent meadows and pastures are excluded from land under permanent crops. A nursery is a piece of land where young plants are cultivated for transplanting and/or sale.

9.2.5 Land under Permanent Meadows and Pasture

This includes land used permanently (for five years or more) to grow herbaceous forage crops, through cultivation or naturally (wild prairies or grazing land). Permanent meadows and pastures on which trees and shrubs are grown should be recorded under this heading only if the growing of forage crops is the most important use of the area.

9.2.6 Wood and Forest

This is woodland and tracts of timber (natural or planted), constituting part of the holding which has or will have value as wood, timber or other forest products or for protection. Forest tree nurseries should be included in this category.

9.2.7 Forest Products

All materials obtained from forest, include all wood and non-wood forest products.

9.2.8 Wood Products

All forest products that have fibrous substance making up the trunks and branches of trees and shrubs including timber, firewood and poles.

9.2.9 Non-Wood Forest Product

All goods for commercial, industrial or subsistence use derived from forests and their biomass, which can be sustainably extracted from forest ecosystem in quantities and ways that do not downgrade the plant communities' basic reproductive functions. Therefore, non-wood forest product – any natural resource from the forest except timber, include medicines, honey, fodder, food and fruits, vegetables, shade, craft materials, gums and resinous.

9.2.10 All Other Land

This is all other land on the holding, not elsewhere specified, whether or not potentially productive. It covers unused and undeveloped land potentially productive for agriculture but not yet developed (i.e., land that can be brought into production with little more effort) or land on holding not elsewhere specified (such as roads, parks, and land under buildings,).

9.2.11 Land Tenure

Land tenure refers to arrangements or rights under which the holder holds or uses land (Land Act (No 4 & 5) of 1999)

A holding may be operated under one or more tenure forms.

a) Land Owned

This refers to the land for which the holder possesses title of ownership and has the right to determine the nature and extent of its use. It excludes the area owned but rented to others.

b) Land Rented from Others

This refers to the land area rented or leased by the holder from other persons, usually for a limited time period. It includes land rented for an agreed sum of money or a share of produce or land rented in exchange for services and land operated under other rental arrangements such as area granted rent-free.

9.2.12 Soil Degradation

Refers to a process by which one or more of the potential ecological functions of the soil are harmed. Two categories of soil degradation processes are recognized, one that relates to displacement of soil material (i.e., soil erosion by water, wind, etc) and another that is associated with soil deterioration (i.e., loss of nutrients or organic matter).

9.2.13 Irrigation

Refers to the artificial application of water to the soil for the purpose of supplying the moisture essential for a plant growth. Irrigation water is supplied to supplement the water available from rainfall.

9.2.14 Drainage

Refers to the removal of excess water from land surface and/or the upper soil layer to make the non-productive wetland productive.

9.2.15 Planted Area

It is the total area where a crop has been planted.

9.2.16 Harvested Area

Refers to the total area in acres that the household got most of its production from. This is equal to the area planted minus the area that was not harvested due to pests, wild animals, drought and the like.

9.2.17 Field

It is a continuous piece of land cultivated as one by a holder, even if planted with different crops. An individual holding may consist of one or more such fields.

9.2.18 Plot

Refers to a portion of a field planted with one specific crop. For example, maize or sorghum, or a crop mixture, for example maize/beans mixture.

9.3 Crop Statistics

Concepts and definitions of crop in agriculture statistics depend on the planting pattern of the crops. The cropping patterns are divided into six categories as follows; mixed cropping, successive cropping, associated cropping, shifting cultivation, continuous planting and/or harvesting and pure stand.

9.3.1 Mixed Cropping

Refers to two or more permanent or temporary crops grown simultaneously on the same field/plot. The crops can either be randomly planted together or they can be planted in a particular pattern e.g., intercropping (one row of maize and one row of beans).

9.3.2 Successive Cropping

Refers to where the same crop or different crops are grown and harvested successively on the same land several times during the agricultural year.

9.3.3 Associated Cropping

Refers to a situation where both temporary and permanent crops are grown simultaneously in the same field, each crop is referred as an associated crop.

9.3.4 Shifting Cultivation

Refers to a land utilization method whereby a particular piece of land is cultivated for some years and then abandoned for a period sufficient for it to restore its fertility by natural vegetation growth before being re-cultivated. The distinguishing characteristic of shifting cultivation is that neither organic nor non-organic fertilizers are used to retain soil fertility.

9.3.5 Continuous Planting and/or Harvesting

Refers to an operation of planting/harvesting, which is repeated in intervals of time. *These repetitions could be once a year, two or three times a year.*

9.3.6 Pure Stand

Refers to a single crop cultivated in a field/plot at any one time.

9.3.7 Inter-planted Crops

Crops planted between rows of another crop (e.g. maize or beans between sisal rows, or groundnuts between maize or sorghum rows).

- It is desirable to assign the inter-planted crop area to individual crops in proportion to the area occupied by each crop.
- Yields of some mixed crops may be as large as when grown alone (for example, sweet
 potatoes, and maize, maize and peas or beans), but the total of area equivalents assigned
 to individual crops should be equal to the total area under the mixture, even when
 favorable interactions, in the case of special mixtures, may result in increased yields.

9.3.8 Planted and Harvested Area (Current Year Production)

It is important to distinguish clearly between the planted area and the harvested area particularly in respect of the long-duration crops like cassava, yam, plantains, etc. Three situations may arise in the case of such crops:

- a. Planted and harvested wholly or substantially in the same agricultural year;
- b. Planted in the previous year and harvested wholly or substantially in the current year, and
- c. Planted in the current year, but to be harvested wholly or substantially in the next year.

These three situations should be normally recorded separately or distinctly, and the production for the current year should be related only to the harvested areas (a) and (b).

If in the above example, in the year next to the year of planting only cassava and yam are found in the field, then in the year, this field should be treated under cassava-yam mixture only.

9.3.9 Temporary Crops

Crops that mature within one or more rain seasons e.g. beans and maize, but are destroyed after harvesting.

9.3.10 Perennial Crops

Plants that need not to be replanted after each harvest e.g. bananas, sugar canes, etc.

9.3.11 Permanent Crops

Crops which are not re-planted but are continuously harvested, e.g. mangoes, coffee, etc. They are crops whose maturity exceeds one season.

9.3.12 Cash Crops

Crops grown specifically for sale. Examples of traditional cash crops grown in Tanzania Mainland include: coffee, cotton, tea, sisal, tobacco, pyrethrum and cashewnuts. Non-traditional cash crops includes low-value food staples (maize, beans and other cereals), spices and high-value industrial crops (vanilla, ginger and chilies) and Oil seeds, horticultural crops (flowers, vegetables, pineapples).

Prices for major cash crops are set in commodity markets with global scope, with some local variation (termed as "basis") based on freight costs and local supply and demand balance. A consequence of this is that a nation, region, or individual producer relying on such a crop may suffer low prices should a bumper crop elsewhere lead to excess supply on the global markets.

9.3.13 Food Crops

Food crop is a term used to refer to crops that are mainly grown for food consumption. However, many of these crops have in the recent years been sold for cash in export markets, e.g. Maize, Simsim, Beans, Soya Beans, etc. Other main food crops are: sorghum, wheat, millets, cassava, potatoes (Sweet & irish potatoes), banana, pulses (beans, cowpeas, pigeon peas, chick peas, bambaranuts, etc.), Horticultural crops (onions, tomatoes, cabbages, etc.), Fruits (mangoes, oranges, pawpaws, guavas, etc.)

9.4 Fertilizers and Pesticides

These are inputs, which are added to the soil or applied to the plants to increase nutrients to the soil and or control and eliminate crop diseases/pests.

9.4.1 Fertilizers

These are inorganic or organic substances, which are applied to soil, irrigation water or hydroponics medium, to supply plants with the necessary nutrients. These include, inorganic fertilizers and organic substances.

a) Inoganic or Chemical Fertilizers

Fertilizer materials derived from minerals, atmospheric gases, water, and inert materials. It can be natural or synthetic products of chemical reactions. These are classified into two types namely: NPK and Ammonium Phosphates.

b) Organic_Sources

These are materials of organic origin, either natural or processed, used as source of plant nutrients. They contain at least 5 percent of one or a combination of the three primary nutrients (N; P2O5; K2O). These include farm yard manure, compost, green manure and seaweeds.

(i) Farm yard Manure

This refers to farm feaces and urine mixed with litter mainly straw, to absorb the urine or animal manure which is a mixture of soil and excreta of animals with litter used for their bedding.

(ii) Composite

Consists of organic materials of animal, plant or human origin partially decomposed through fermentation.

(iii) Green manure

This is a crop, such as sand hemp mustard, etc., grown specifically to be ploughed back into the soil to provide humus. Green manure crops are often planted before the rains.

(iv) Mineral Fertilizer

Are fertilizers, which are obtained through an industrial process.

9.4.2 Pesticides

These are used for mitigation, controlling or eliminating pests troublesome to crops or livestock. These include insecticides, fungicides, fumigants, herbicides, rodenticides and various other materials mostly synthetic chemical produced in concentrated form but diluted for application with various substances such as water, talc, clays, and kerosene.



Stockpiles of obsolete pesticides

9.4.3 Herbicides

Chemicals used to control undesirable or noxious plant growth, generally called weeds, in areas dedicated to crop production or in non-crop areas where plant growth is unwanted.

9.4.4 Insecticides

Natural or synthetic substances which kill insects. Natural insecticides (i.e. those produced from plant extracts) are less harmful to the environment than synthetic insecticides (that are chemically based), which, though effective, are often persistent and kill not only insects but also larger animals when they get into the food chain. Insecticides are used in a number of ways, including spraying and dusting, or in granular forms as seed dressings.

9.4.5 Fungicides

Chemicals used to kill fungi or restrict their growth. Fungicides are available as sprays or dusts for use on crops.

9.5 Livestock Statistics

This refers to statistics on animals and fowls kept in the holding (irrespective of ownership) and their products.



9.5.1 Livestock

Refers to all tamed animals kept in households or large-scale farms.

9.5.2 Indigenous Livestock

Refers to livestock commonly reared naturally in the villages, without special attention. Such livestock are neither fed by special feed nor special housing.

9.5.3 Improved Livestock

Refers to livestock, which are bred specifically for producing meat and milk. These may be cross - bred or pure bred.

9.5.4 Poultry

These are fowls commonly kept in households or Large Scale Farms (such as chicken, ducks, and guinea fowls.).

9.5.5 Improved Poultry

These are fowls commonly kept in households or Large Scale Farms (such as chicken, ducks, and guinea fowls.) specifically for producing meat and eggs. These may be cross - bred or pure bred.

9.5.6 Indigenous Poultry

Refers to fowls commonly kept in the households, without special attention. Such poultry are neither fed by special feed nor special housing.

9.5.7 Farming Household (Agriculture Household)

Refers to a household where one or more persons are holder(s). In peasant farming there will normally be a one-to -one correspondence between the farming household and the holding.

9.5.8 Flock

Is a grouping of livestock (sheep, poultry).

9.5.9 Herd

Is a group of single species of animal (cattle, swine, sheep and goat)

9.5.10 Litter

Is multiple off springs produced at one birth by a multifarious mammal also called brood.

9.5.11 Animal

Means any vertebrates or invertebrate other than a human being.

9.5.12 Artificial Insemination

Is the technique of collecting semen from male animals, processing it and inserting it via pipette into the female reproductive tract.

9.5.13 Crossbreeding

Means mating animals of two or more different breeds, strains or lines.

9.5.14 Diary

Means any premises used for the production, processing or manufacturing of milk into milk products for sale.

9.5.15 Embryo Transfer

Is the technique of removing an embryo from one female (donor) and inserting it into the reproductive track of another female (recipient).

9.5.16 Exotic Breed

Means 'foreign' Livestock species that originate from foreign countries being introduced in the country.

9.5.17 Local Breed

Means a breed that is adapted to a specific habitat and that has been shaped, often over centuries, by the cultural preferences of a particular community or ethnic group.

9.5.18 Veterinary Medicines

Veterinary medicines include pharmaceuticals, chemical and biological used for treating, preventing and diagnosing diseases of animals for promoting productivity.

9.5.19 Range Land

Is an extensive area that is not cultivated, and contains forages which can sustain animals. Range development consists of pasture improvement, water development and conservation.

9.5.20 Semen

Means the male sperm and fluids produced in the testicles and other glands of the male reproductive system.

9.5.21 Zoonosis

Means diseases that can be transmitted from animals to human beings and vice versa.

9.5.22 Birth Rate

The number of animals born alive as a percentage of number of females actually reproducing.

9.5.23 Take-off Rate

The percentage of all animals of the species which are taken from the national herd during the year for slaughter in the country or in other countries.

9.5.24 Primary Products

Those products coming directly from slaughtered animals, including meat, offal, raw fats, fresh hides and skins.

9.5.25 Processed Products

These are derived from the processing of primary products and include sausages, lard and salted hides.

9.5.26 Chicken

Chick is a newly hatched or a very young chicken.

Broilers is a chicken that is 6 to 13 weeks of age used for meat production.

Pullet is a young domestic hen, usually one that is less than one year old.

Hen is an adult female chicken. Cockerel is an adult male chicken.

9.5.27 Cattle

Calf is a sexually immature young cattle.

Heifer is a young female cattle which has not yet had a calf.

Cow is a mature female cattle.

Steer is a castrated male cattle.

Bull is a sexually mature male cattle.

9.5.28 Goat

Kid is a young goat.

Wether is a castrated male goat.

Doe is a female goat.

Buck is a sexually mature male goat.

9.5.29 Pig

Barrowis a young, castrated male pig.

Boar is a sexually mature male pig.

Gilt is a young female pig.

Hog is a mature pig.

Sow is a mature female pig.

9.5.30 Sheep

Ewe is a female sheep.

Lamb is a sheep less than one year in age.

Ram is a male sheep.

Wether is a castrated male sheep.

9.5.31 Rabbit

Kit is a young rabbit.

Doe is a female rabbit.

Buck is a male rabbit.

9.6 Fisheries

9.6.1 Fish Farming

Is the principal form of aquaculture, while other methods may fall under mar culture. Fish farming involves raising fish commercially in tanks or enclosures, usually for food (Fisheries).

9.6.2 Aquaculture

Means the practice of breeding and raising aquatic organisms in a controlled aquatic environment.

9.6.3 Brackish Water or Briny Water

Is water that has more salinity than fresh water, but not as much as seawater. It may result from mixing of sea water with fresh water, as in estuaries, or it may occur in brackish fossil aquifers.

9.6.4 Fisheries

According to the FAO, a fishery is typically defined in terms of the "people involved, species or type of fish, area of water or seabed, method of fishing, class of boats, and purpose of the activities or a combination of the foregoing features. The definition often includes a combination of fish and fishers in a region, the latter fishing for similar species with similar gear types.

9.6.5 Aquaculture Products

Means all fishery products born and raised in controlled conditions untill placed on a market.

9.6.6 Artisanal Fisheries

Means a category of fisheries that is of small scale using relatively small amount of capital.

9.6.7 Beach Management Unit

Means a group of stakeholders in a fishing community whose main function is management, conservation and protection of fish in their locality in collaboration with the government.

9.6.8 Cage Culture

Means the practice of breeding and raising aquatic organisms in structures made of net webbings, weld mesh or any other material placed in a water body.

9.6.9 Capture Fisheries

Means fishing practices in natural and man-made communally owned water bodies.

9.6.10 Coastal Areas

Means the area from the baseline of Territorial Sea landward side to 60 meters as prescribed by the Land Act, No. 4 of 1999 the land adjacent to natural or man-made water bodies or water mark.

9.6.11 Critical Habitat

Means a habitat that is essential for maintaining the integrity of an ecosystem, species or assemblages of species.

9.6.12 Deep Sea

Is the lowest layer in the ocean, existing below the thermo cline and above the seabed, at a depth of 1800 meters or more. Little or no light penetrates this part of the ocean and most of the organisms that live there rely for subsistence on falling organic matter produced in the photic zone.

9.6.13 Exclusive Economic Zone (EEZ)

Means an area beyond 12 nautical miles up to 200 nautical miles (370 kilometres) off the coast. Within this area, nations claim and exercise so sovereign rights and exclusive fishery management authority over all fish and all Continental Shelf fishery resources.

9.6.14 Fish

Means all forms of aquatic or amphibious life including finfish, dolphin, whale, dugong, shell fish, turtles and includes spat, brood, fry, spawn, ova and young of all such fish, but does not include any aquatic or amphibious animal which the provisions of the Wildlife Conservation Act, 2008, apply or young of any such animal.

9.6.15 Landing Site

Means designated areas along the beach where fishers land and sell their catch.

9.6.16 Fish Market

Means an establishment where fish or fishery products are displayed for sale.

9.6.17 Fisher

Means an individual who takes part in fishing conducted from the fishing vessel, a platform whether fixed or floating or from the shore.

9.6.18 Fisher Folk

Means a person or group of people involved in aquaculture, fishing, net mending, boat building, fishing vessels repair, fish trading and fish processing.

9.6.19 Fisheries Establishment

Means any premise or vessel where fish or fish products are prepared, processed, frozen, packaged or stored, but does not include auction and wholesale markets.

9.6.20 Fisheries Industry

Is a term used to describe activities involving all aspects of fisheries development.

9.6.21 Fisheries Support Services

Means activities that support fisheries industry. These include training, research, extension, credit, aquatic health, input manufacturers and delivery system, processing, storage and transport.

9.6.22 Fishing

Means collecting, capturing, gathering, snaring or trapping of fish or aquatic flora.

9.6.23 Fishing Community

Means a group of people sharing same interests in fisheries.

9.6.24 Fresh Water Aquaculture

Means the practice of aquaculture in fresh water environment.

9.6.25 Large Scale Fish Farmer

Means a person or group of people involved in breeding or raising aquatic organism in an area exceeding one hectare.

9.6.26 Marine Water Aquaculture/ Mari Culture

Means the practice of aquaculture in the marine water environment.

9.6.27 Marine Parks

Means a legally designated area of marine or fresh water and its overlaying interland which is managed for the purpose of sustainable resources utilization.

9.6.28 Fresh Water

Is naturally occurring water on the Earth's surface in ponds, lakes, rivers and streams. Fresh water is generally characterized by having low concentrations of dissolved salts and other total dissolved solids. The term specifically excludes sea water and brackish water.

9.6.29 Marine Water

Is most frequently associated with seas and oceans, it may thus reflect water that contains high salt concentration like as in seas and oceans. Marine portrays a deeper sense; much deeper than sea. Marine environment comprises water, fishes, plants, and other organisms that thrive in the depths of the water.

9.7 Other Agricultural Statistics

9.7.1 Agricultural Holding

Refers to an economic unit of agricultural production under single management. It consists of all livestock kept and all land used for agricultural production without regard to title.

9.7.2 Type of Agriculture Holdings

Crops only: A holding is referred to be a crops only holding if it has cultivated a piece of land equal or exceeding 25 square Meter. This also applies to all households owning or have kept livestock whose number does not qualify such household to be an agricultural holding (No cattle, less than 5 goats/sheep/pigs, less than 50 chickens/turkeys/ducks/rabbits)

Livestock only: A holding is referred to be a Livestock only holding if it has exercised Livestock husbandry only during the reference agricultural year. The number of livestock has to be at least 1 head of cattle, 5 goats/sheep/pigs or 50 chickens/turkeys/ducks/rabbits. This also applies to all households owning or have cultivated a piece of land less than 25 square meter, which does not qualify such household be an agricultural holding.

Both crops and livestock: A holding is referred to be a both crops and livestock if it has cultivated a piece of land equal or exceeding 25 square meter and if such households is owning or have kept livestock whose number qualify such household be an agricultural holding.

Livestock pastoralism: This refers to a household which practices livestock production as its major income generating activity and a means of subsistence, but moves from one place to another searching for water and pasture for the livestock. This movement usually involves long distances and in many cases the whole household unit moves with the livestock and they have no permanent place of residence.

9.7.3 Holder

Is a person who exercises management control over the agricultural holding operation and who takes major decisions regarding resource utilization or disbursement.

9.7.4 Agricultural Production

Refers to growing and harvesting of different types of crops. It also includes keeping of livestock and poultry.

9.7.5 Agricultural Year

This is a twelve months cycle in which production of annual crops takes place. For Tanzania Mainland, the agricultural year commences on the 1st of October and ends on the 30th of September of the following year.

9.7.6 Large Scale Farms

These are farms with at least 20 hectares of cultivated land or 50 herds of cattle or 100 goats/sheep/pigs or 1,000 chickens. In addition to this, they should fulfill all of the four listed conditions:

- Greater part of the produce should go to the market
- Operation of farm should be continuous
- There should be an application of machinery/implements on the farm
- Should have at least one permanent employee.

9.7.7 Small Scale Farms

These are farms, with at least 25 square metres of planted land and /or one herd of cattle, 5 goats/sheep/pigs, 50 chicken/ducks/guinea fowls/rabbits. These do not qualify to any of the criterion of Large Scale Farms given.

9.7.8 Operator

Is an individual or organization that exercises management control over the agricultural operation and who takes major decisions regarding resource utilization or funding/disbursements.

9.7.9 Long rainy (Masika) Season

Refers to long rain season covering months of February through May, same year.

9.7.10 Short rainy (Vuli) Season

Refers to short rain season covering months of October through January of following year.

9.7.11 Hunting and Gathering

Refers to use of non-farmed resources from uncultivated land for food and/or sale (i.e., killing wild animals, collecting mushrooms, berries, wild honey, and roots.)

9.7.12 Bee Keeping

Refers to rearing of bees in man-made hives, normally done for harvesting of honey and other bee products. Honey gathering (wild honey) is different as no rearing activities take place.

9.7.13 Pasture Land

This is an area of owned/allocated land which is set aside for livestock grazing. It can be improved pasture where the farmer has planted grass, applied fertilized or applied other production increasing technologies to improve the grazing. Or it can be rough pasture.

9.7.14 Fallow

This is the area of land that is normally used for crop production, but is not used for crop production during a year or a number of years. This is normally to allow for self-generation of fertility/soil structure and is often an integral part of the crop rotation system.

9.7.15 Natural Bush

Land which is considered productive but is not under cultivation or used extensively for livestock production and has naturally growing shrubs and trees.

9.7.16 Investment activities

Investment activities refer to medium to long term farm development structures and projects. This can be Irrigation structures, erosion and water harvesting structures or other permanent or semi-permanent investment made on the land that the household owns.

9.7.17 Source of irrigation Water

The main source of water from which water is obtained for irrigation.

9.7.18 Method of obtaining water

The mechanism, by which the water is extracted from the source.

CHAPTER TEN

INDUSTRIAL STATISTICS



Industry covers the sectors of Mining and Quarrying, Manufacturing, Electricity, Gas, Steam and Air Conditioning and Water Supply; Sewerage, Waste Management and Remediation activities. All the activities classified as industry in the International Standard of Industrial Classification (ISIC Rev. 4) are engaged in the production of non-agricultural commodities.

Industrial Statistics involves collection, compilation, analysis, interpretation and dissemination of the Industrial Statistics.

10.0 Industrial Activity

This means the four major divisions of International Standard of Industrial Classification (ISIC Rev. 4) of all Economic Activities: - Mining and quarrying; Manufacturing; Electricity, gas, steam and air conditioning supply and Water supply; sewerage, waste management and remediation activities.

10.1 Mining and Quarrying

It involves the extraction, dressing and beneficiating of minerals occurring naturally as solids such as coal and ores, liquids such as crude petroleum and gases such as natural gas. It includes underground and surface mines, quarries and wells and all supplementary activities for dressing and beneficiating ores and other crude materials such as crushing, screening, washing, cleaning, grading, milling, flotation, melting, pelting, topping and other preparations needed to render the materials marketable. However, it excludes;

- Works performed on contract or fee basis in the preparation of mineral properties and sites
- Prospecting for minerals (technical Services)

- Collection, purification and distribution of water
- Bottling of natural spring water
- Crushing, grinding or otherwise tearing of certain earth, rocks and minerals not carried out in conjunction with mining and quarrying activities.

10.1.1 Building materials

Includes all forms of rock, stones, gravel, sand, clay, soils, volcanic ash or cinder or other minerals being used for the construction of buildings, roads, dams, or similar works but does not include gypsum, limestone being burned for the production of lime, or materials used for the manufacture of cement.

10.1.2 Energy minerals

Means a group of minerals comprising of coal, peat, uranium, thorium and other radioactive minerals.



Gold

10.1.3 Industrial minerals

Means a group of minerals comprising of phosphate, kaolin, lime, gypsum, dolomite, diatomite, pozzollana, salt, beach sands, and other than metallic minerals, normally used in industries.

10.1.4 Metallic minerals

Metallic minerals are minerals that contain metallic elements. They are extracted from mineral deposits, which are concentrations of metallic minerals produced by geological processes. Some metallic minerals contain valuable metals, such as copper, gold, nickel, lead, zinc or platinum.

10.1.5 Gemstones

It includes Diamonds, emeralds, and other germ varieties of beryl, opal, ruby, topaz, spinel, moonstone and amethyst.

Other germ varieties of quartz, garnet, zoisite, tanzanite, and scapolite, in rough and uncut form.

Any other rough and uncut stone which maybe declared to be a gemstones by the Minister by notice in the Gazette.

10.1.6 Holder

Means the person in whose name a Mineral Right is registered

10.1.7 Mine

Means any place, excavation or working in or on which any operation connected with mining is carried on together with all buildings, premises, erections and appliances belonging or appertaining there to, above or vertically below the ground within horizontal boundaries of the licence, the purpose of mining, treating or preparing minerals.

10.2 Manufacturing

It means physical or chemical transformation of materials, substances or components into new products, whether the work is performed by power driven machines or by hand, whether it is done in a factory or in the worker's home and whether the products are sold at wholesale or retail. Assembling of the component parts of manufactured products is considered manufacturing except in cases where the activity is appropriately classified in construction.

The assembly and installation also repairing and manufacturing of specialized parts of machinery and equipment in mining, manufacturing, commercial and other establishments, when carried out as a specialized activity, is classified in the same group of manufacturing as the manufacture of the items installed. When the activities are performed as a service incidental to manufacture on trade, they should be classified with the principal activity of the establishment.

Note that: Specialized maintenance and repair of industrial, commercial and similar machinery and equipment is included in manufacturing. However, the repair of computers and personal and household goods and the repair of motor vehicles are not included in manufacturing. As a general rule, the activities in the manufacturing section involve the transformation of materials into new products.

10.2.1 Statistical Unit

Statistical unit is an economic unit, which engages under a single control; in one or predominantly one kind of industrial activity at a single location i.e. an individual firm. The statistical unit in the ISIC comprises the Establishment, Local Unit, Kind-of-Activity Units, Enterprise, Enterprise Group, and Homogeneous Unit of Production.

10.2.2 Establishment

The establishment is defined as an enterprise or part of an enterprise that is situated in a single location and in which only a single productive activity is carried out or in which the principal productive activity accounts for most of the value added.

In other words, an establishment can be defined, ideally, as an economic unit that engages, under a single ownership or control - that is, under a single legal entity – in one, or predominantly one, kind of economic activity at a single physical location – for example, a mine, factory or workshop. This ideal concept of the establishment is applicable in many of the situations encountered in industrial inquiries, particularly in manufacturing.

10.2.3 Establishment name

This refers to the registered name of the business or the name under which the production unit does business. For a small unit, which does not have business name, the name of the owner or one of the partners will do. Names should be given in full.

10.2.4 Local Unit

This comprises of all economic activities carried on at a single location under a single control.

10.2.5 Kind-of-Activity Unit (KAU)

A kind-of-activity unit is an enterprise, or a part of an enterprise, which engages in only one kind of (non-ancillary) productive activity or in which the principal productive activity accounts for most of the value added

10.2.6 Enterprise

It is a multi establishment business entity comprised of all economic activities carried out under a single control. In this case both restrictions on location and type of activity are relaxed.

10.2.7 The Enterprise Group

An enterprise group consists of all the enterprises under the control of the same owner. When a group of owners has control of more than one enterprise, the enterprises may act in a concerted way and the transactions between them may not be driven by the same concerns as "arm's length" transactions. The Framework for Direct Investment Relationships can be used to determine which enterprises are under control or influence of the same owner. A multinational enterprise group consists of all the enterprises located in different economies and under the control or influence of the same owner wherever located.

10.2.8 The homogeneous unit of production

The distinguishing feature of a unit of homogeneous production is a unique activity which is identified by its inputs, a particular process of production and its outputs. The products which constitute the inputs and outputs are themselves distinguished not only by their physical characteristics and the extent to which they are processed but also by the technique of production used: they can be identified by reference to a classification of products

10.2.9 Activity of the Establishment

Is the description of the economic task/activity of an establishment as its registered activity or activity defined in the foundation regulation or document.

10.2.10 Principal Activity/Main activity

Refers to main economic activity of an economic entity that contributes most to the value added of the entity, or activity of which its value added exceeds that of any other activity of the entity.

10.2.11 Auxiliary Activity

Refers to minor or less important kind of activity in terms of value added contribution as compared to the principal activity.

10.2.12 Persons Engaged

Refers to all persons who during a specified period, worked in or for the establishment i.e. they were attached to it. It includes working proprietors, unpaid family workers and employees (operatives, managerial and professional staff). It includes even those who during the specified period were temporary absent from work eg. on sick leave, casual leave or vacation leave. It excludes persons on military leave, pension and other forms of unlimited leave.

10.2.12.1 Operatives

These are persons who are directly engaged in the production or related activities of the establishment and who receive pay, in cash or in kind, at regular intervals. Therefore, Operative skilled are persons with specialized skills, for example are persons engaged in fabricating, processing or assembling, fitters, packers, repairmen, record-keeping personnel, foremen and inspectors.

10.2.12.2 Other Employees

This includes all paid up workers of the establishment other than operatives. They include all personnel in production management above the working foremen. These are administrative, technical and clerical personnel as well as salaried managers/directors, laboratory and

research workers, clerks, typists, watchmen, bookkeepers, administrative supervisors, salesmen and the like.

10.2.12.3 Working Proprietors

These are owners of the establishment who are actively engaged in the work of the establishment. It excludes silent or inactive partners as well as members of a proprietor's family. The owners are considered to be active only if they work one third or more of the reference period. This category is not applicable to incorporated or similar enterprises where ownership is represented by equity shares. All working cooperative members are regarded as employees.

10.2.12.4 Unpaid Workers

These are all persons working in the establishment without regular pay that is, without an agreed amount to be paid for work done. They include members of religious institutions, prisoners, servicemen and militia members and persons living in the household of any of the proprietors i.e. owners of the enterprise and working in the establishment without regular pay. All these persons however should have worked for the establishment for at least one third of the working time normal to the establishment. This category is not applicable to any incorporated or similar enterprise where ownership is represented by equity shares.

10.2.12.5 Total Persons Engaged

This is the total labour force and is the sum of all those persons working with or without pay, full or part time, temporary or permanent.

10.2.13 Labour Costs

Refers to gross wages/salary, overtime payments, reimbursement of travel expenses, payments in kinds, employer's contributions to social security schemes, training expenses to employees and other labour costs related to employees.

10.2.13.1 Gross Wages

It includes all payments, in cash to operatives in connection with work done. It includes all cash payments made for bonuses, commissions, overtime, cost-of-living allowances and payments made during periods of vacation, sick leave, maternity or casual leave. It includes taxes and social security contributions and the like paid by the employee but deducted by the employer. Lay-off payments and compensation for unemployment are included if made by the employer. Social insurance and pension contributions and the like payable by the employer are excluded but treated as a separate part of compensation to employees.

10.2.13.2 Gross Salaries

These refer to cash payments paid to other employees in connection with work done. This term includes bonuses, commissions, overtime, vocation pay, sick leave, maternity and casual leave payments.

10.2.13.3 Benefits in Kind

These are payments made, in kind other than cash to employees. It is the net cost to the employer of those goods and services (which are clearly and primarily of benefit to the employees as consumers) furnished to employees free of charge or at markedly reduced cost. They include food, beverages, tobacco, housing, clothing (not uniforms) and medical expenses. Excluded are costs relating to recreational facilities.

10.2.13.4 Social Security Schemes

These are the employers' contribution to the social security schemes and pension funds e.g. the National Social Security Fund (NSSF), Parastatal Pension Fund (PPF) and other funds of this nature organized by the establishment concerned.

10.2.14 Output

This is the final product produced by the alternative combinations of input.

10.2.14.1 Principal Products

These are goods made by the establishment during the reference year for which the quantities are given in standard units e.g. kilogrammes, square metres, litres etc. The goods are valued at ex-factory prices i.e. sales price less indirect taxes. Goods made for the establishment by other establishments from materials supplied by the establishment are also considered to be part of the establishment's products.

10.2.14.2 Receipts for Industrial Services Rendered

This is the amount charged for work done for others or for services of an industrial nature rendered to others: For example, contract or commission work done for other establishments on their material or repair and maintenance work on machinery and equipment. The value reported should be the total cost charged for the work or service performed.

10.2.14.3 Receipts for Non-Industrial Services

This is the amount charged for services of non-industrial nature rendered to others. These are services such as management, research and development, data processing, legal fees, accountancy and the like.

10.2.14.4 Sales of Goods as Purchased

This is the sales value, ex-establishment, of all goods that are sold without any transformation i.e, in the same condition as purchased. These goods are not subjected to any further manufacturing process and are normally known as trade goods.

10.2.14.5 Fixed Assets (or Capital Goods) Produced for Own account

This is the value of new fixed assets (buildings, machinery etc), addition and improvements to existing fixed assets made by the establishment's own labour and materials for its own use. It includes value of installations, extensions and major repairs.

10.2.14.6 Gross Output

This is equal to the sum of the following:

- Value of Principal Products
- Receipts for Industrial Services Rendered
- Receipts for Non-industrial Services
- Sales Value of Goods Shipped as Received
- Value of Fixed Assets Produced for Own-account
- Value of Increase on work in progress

10.2.15 Inputs

These are factors of production used to produce a given level of output. Inputs can either be labour, capital, raw materials and Land.

10.2.15.1 Increase in Work-in-progress

This is the value of work-in-progress at the end of the year less the corresponding value at the beginning of the year. It refers to the value of all materials, which have partially been processed by the establishment, but which are not usually sold, shipped, or turned over to other establishments without further processing.

10.2.15.2 Raw Materials and Components

This is the value of raw materials, components and parts that are physically incorporated in the products of the establishment. Also, included are all auxiliary materials such as lubricants, water, packaging materials, small tools, parts, materials for repair and maintenance provided that working life is less than one year, and office supplies. Only materials consumed should be considered here. Excluded are materials used in own account construction of fixed assets as well as materials supplied by other establishments under contract manufacture.

10.2.15.3 Material for Own-account Construction of Fixed Assets

This is the value of materials used in own account construction of fixed assets e.g. buildings, machinery, installations, extensions, improvements and major repairs.

10.2.15.4 Value of Fuel and Lubricants

This is the value of all fuels and lubricants consumed by the establishment in the production process (excluding gasoline and other fuels for vehicles) except those reported as materials under 10.10.2.

10.2.15.5 Cost of Electricity Purchased

This is the total cost of electricity purchased by the establishment during the reference year.

10.2.15.6 Transport Costs

They include costs for own and hired transport.

10.2.15.7 Cost of Industrial Services Received

These are the payments made by the establishment for contract and commission work done by others during the reference year on materials supplied and controlled by the establishment. It also covers the total cost to the establishment for repair and maintenance services on buildings and other fixed assets of the establishment provided by others during the reference year.

10.2.15.8 Cost of Non-industrial Services Received

This is the cost of all non-industrial services rendered by other establishments to the establishment. They involve activities pertaining to economic activities other than mining, manufacturing and production and distribution of electricity, gas and water.

10.2.15.9 Production Costs

Includes all the costs that are involved in acquiring or making a product

10.2.16 Value Added

It is the measure of the additional value created by a process of Production in the economy for the reference period.

10.2.16.1 Gross Value Added

This represents the difference between Gross Output and Production Costs.

Gross value added is equal to gross output less the value of the intermediate consumption/production cost. The sum of the value added of all domestic producers gives the contribution to the Gross Domestic Product (GDP). Gross value added may be at factor

cost, basic prices or at producers' prices depending on the treatment of taxes on production and subsidies. Value added at basic prices is obtained as the difference between gross output and intermediate consumption whereby output is valued at basic prices and intermediate consumption at purchasers' prices.

10.2.16.2 Net Value Added

It is the difference between Gross Value Added and Depreciation.

10.2.17 Value of Stocks or Inventory

It is the total opening and total closing Balance Values of the following items:

- Materials, Fuels and Stores
- Work-in-Progress
- Finished Goods Produced.

10.2.17.1 Value of Materials, Fuel and Stores

It is the value of materials, fuel and stores in stock at the beginning and end of the reference year.

10.2.17.2 Work-in-Progress

Refers to semi-finished products. It includes goods that have partially been processed but not ready for shipment.. Work-in-progress on own-account construction of fixed assets should be excluded and treated as part of the fixed capital formation.

10.2.17.3 Finished Goods Produced

Refers to all goods made by an establishment which are ready for sale or shipment as of the reference dates. Included, are finished goods processed and held by other establishments from raw materials supplied and controlled by the respondent establishment. Excluded are finished goods held by the respondent establishment but made from materials owned and supplied by other establishments.

10.2.18 Fixed Assets

Refers to assets used repeatedly, or continuously, in processes of production for more than one year. They consist of both tangible fixed assets (dwellings, other buildings and structures, machinery and equipment cultivated assets) and intangible fixed assets (mineral exploration, computer software and other intangible fixed assets). Inventories and valuables that are not used repeatedly in production are not counted as fixed assets. Neither do natural assets that are not produced.

10.2.18.1 Land

Land refers to all land used for buildings, shed, etc. within the premises where the establishment's economic activity is carried out.

10.2.18.2 Land Improvements

Includes fencing, drainage system, sewage and water system, roads, rail siding, communication lines and the like.

10.2.18.3 Buildings and other construction works

This category includes factories, offices and warehouses, elevators and other equipment, which form part of the buildings as well as any land improvements. The value of land before improvement should not to be included here.

10.2.18.4 Machinery and other equipment

This item includes all industrial machinery and other equipment such as construction machinery, cranes, fork-lift equipment and the like; power generating machinery; computers and other data-processing equipment; metalworking machinery; mining machinery; office machinery, equipment and furniture; and similar machinery and equipment and major renovations and alterations to these.

10.2.18.5 Transport Equipment

Includes trucks, cars, trailers, aircrafts, animal carts and wagons. but only those connected with the industrial activity.

10.2.18.6 Disposals

Disposal means sale, retirement, exchange or transfers of fixed assets.. Disposals to others should be valued ex-establishment excluding discounts and direct taxes but including subsidies received.

10.2.18.7 Depreciation

It represents the estimated allowance for wear and tear of fixed assets during the reference year. It refers to annual and not cumulative depreciation.

10.2.19 Sales and Related Items

10.2.19.1 Sales of Own Goods

It represents the total sales in the reference year from own production whether or not the goods sold were produced in the reference year. The value shown should be the actual amount charged to customers on delivery. Excluded are indirect taxes, rebates, discounts and duty drawbacks.

10.2.19.2 Indirect Taxes

These are taxes paid when buying goods e.g. Value Added Tax (VAT), excise duty, stamp duty and the like.

10.2.19.3 Discount

Reduction to a basic price of goods or services. Are the amount of money which may be taken off the full price.

10.2.19.4 Rebates

The amount of money by which a debt, tax may be reduced. For instance there is often a rebate if the account is settled before a given date.

10.2.19.5 Duty Drawback

The amount paid back to the establishment as duty surcharge. Is the refund of custom duties and fees paid on imported merchandise that is either re-exported or destroyed under custom supervision.

10.2.20 Other Income

10.2.20.1 Profits from Sale of Fixed Assets

This is the difference between the sale value and the book value of the fixed assets sold.

10.2.20.2 Royalties in Industrial Sector

The amount paid to the establishment by others on the use of the establishment's patents, trademark or copyright

10.2.20.3 Dividends

The amount received by types of shares held by the establishment.

10.2.20.4. Interest

The amount received by the establishment on loan given to others.

10.2.20.5 Subsidies

Amount given to the establishment (as aid or support) by the government proportioned on production, sales or exports.

10.2.21 Total Income

It is the sum of all incomes received by the establishment. It includes sales of own goods, sales of trade goods, receipts on industrial and other services rendered to others and other receipts received by the establishment.

10.2.22 Others

10.2.22.1 Installed Capacity of Production

It is the ability or efficiency of a machine to produce. It represents the maximum production, which could be achieved (as specified by manufacturers) if all combinations of production such as labour, availability of raw materials, power, maintenance and repair, remain normal.

10.2.22.2 Producer Price Index (PPI) of the Manufacturing Sector

It is the measure of the average change in the selling prices (ex-factory) received by manufacturing establishments. In Tanzania, PPI is being measured by surveying establishments each engaging an average of 50 or more person.

10.2.22.3 Other payments beneficial to employees

This is the payment by the employer on accounts incurred by the employees such as medical bills, school fees, and telephone accounts and so on. If these are for the employees just because of their employment, they must be counted as part of their earnings.

10.2.22.4 Revenue

Revenue is a business term for the amount of money that a company/business receives from its activities in a given period, mostly from sales of products and/or services to customers.

Gross revenue: Gross revenue is the money generated by all of the company's operations, before deductions for expenses.

10.2.22.5 Sales

The exchange of goods or services for an amount of money or its equivalent; the act of selling. These include sales of bought goods for resale, sales of accommodation and sales of food and drinks.

10.2.22.6 Other operating income

This includes agency fees, commission receivable, rent receivable and other incomes.

Non-operating income: This includes interest receivable, share dividend receivable, subsidies and incentives from government and other non-operating incomes.

10.2.22.7 Purchases

Ownership of a security or other asset in exchange for money or value, which include purchase of goods for resale and for other purposes.

10.2.22.8 Purchase of goods for resale

To achieve its goals of making profits, a trading business buys goods to sell after adding some mark-up to cover costs and make the profit. Traders may buy and sell goods without changing them in any way; or they may merely unpack them from large bulky containers and sell them in small packets or small quantities.

10.2.22.9 Running expenses and other costs

These include costs for fuel used to run the business, vehicle registration and business license fees, depreciation, electricity, water charges, bank charges, interests, insurance, postage and telephone, advertisement, rents paid, repair, production tax and other costs of this nature.

10.2.22.10 Inventory

It includes opening stock and closing stock at the start and at the end of the reference period. It represents the value of trading goods held. Those values may change for the following reasons:

- i. The real level or quantity of goods has changed over time;
- ii. The type of goods carried has changed from low value goods to high value goods or vice versa; and
- iii. The prices of goods have changed a lot over the period.

10.2.22.11 Investment expenditure

This includes items of expenditure for the establishment e.g. cost of housing, other buildings, vehicles, machinery and other equipments and office equipments.

10.2.22.12 Additions

This is the value assigned to fixed assets acquired by the establishment during the reference period. It also includes all the costs actually incurred in their acquisition and installation.

10.2.22.13 Intermediate or production costs

Intermediate consumption/production costs of industries covers durable and non-durable goods and services used up in production, including repairs and maintenance of the capital stock, research and direct outlays in the financing of capital formation such as transfer costs involved in purchases of land and intangible assets. The consumption of materials and supplies is the total cost of purchases adjusted by change in stocks of raw materials.

10.2.22.14 Inventory of working capital

Value of stocks of materials and stores, finished products and work in progress at the beginning and at the end of the accounting year.

10.2.22.15 Expenditure on fixed assets and depreciation

Capital expenditure on land, buildings and structures, machinery/equipment, vehicles and other fixed assets during the accounting year. Depreciations and disposals made on the respective fixed assets.

10.2.22.16 Basic price

The basic price is the amount receivable by the producer exclusive of taxes on products and inclusive of subsidies on products. It includes taxes on production.

10.2.22.17 Purchasers' price

The purchasers' price is the amount payable by the purchaser exclusive of deductible taxes on products (e.g. deductible value added tax).

10.2.22.18 Inputs/purchases

Value of raw, packaging and chemical materials consumed, cost of re-sales, services received and other costs.

10.2.22.19 Gross operating surplus

Gross operating surplus is defined as the excess of value added over the cost of workers' compensation.

10.2.22.20 Expenditure on fixed assets

This is the sum of the cost of new or old capital equipment acquired and value of assets produced on own account construction. Improvements and major alterations to existing fixed assets are also included

10.2.22.21 Gross additions to fixed assets

This is the expenditure on fixed assets (additions) less total disposals of fixed assets

10.3 Electricity, gas, steam and air conditioning supply

Economic activities included under this section are the activity of providing electric power, natural gas, steam, hot water and the like through a permanent infrastructure (network) of lines, mains and pipes. The dimension of the network is not decisive; also included are the distribution of electricity, gas, steam, hot water and the like in industrial parks or residential buildings. This section therefore includes the operation of electric and gas utilities, which generate, control and distribute electric power or gas. Also included is the provision of steam and air-conditioning supply. This section excludes the operation of water and sewerage utilities, (typically long-distance) and transport of gas through pipelines.

10.4 Water supply; sewerage, waste management and remediation activities

This section includes activities related to the management (including collection, treatment and disposal) of various forms of waste, such as solid or non-solid industrial or household waste, as well as contaminated sites. The output of the waste or sewage treatment process can either be

disposed of or become an input into other production processes. Activities of water supply are also grouped in this section, since they are often carried out in connection with, or by units also engaged in, the treatment of sewerage.

10.4.1 Water

Harmonized Indicators, relevant definitions and descriptions at the Ministry of Water as have been compiled in this section

MKUKUTA GOAL: To ensure access to clean, affordable and safe water, sanitation, decent shelter and a safe and sustainable environment.

10.4.2 Safe Water

Water drawn from improved sources which include piped water, protected well and springs that have been enclosed to prevent contamination.

According to National Water Policy of 1991, safe water should be available within a radius of 400 meters from each home.

10.4.3 Piped Water

Water provided within a housing unit by pipe from community-wide systems or from individual installation such as pressure tanks and pumps.

10.4.4 Housing Unit

Housing units with piped water means water supply inside the housing unit or outside the housing unit but within 100 meters from the door.

10.4.5 Access to safe water

Access to adequate amount of safe drinking water located within a convenient distance from a user's dwelling. It is important to note that the concepts of that access, adequate amount, safe and convenient distance vary from country to country.

According to MMMPI of 2006, access implies duration of 30 minutes to go, collect and return from fetching water.

10.4.6 Water Pollution

Presence in water of harmful and objectionable material obtained from sewers, industrial wastes and rain water run-off in sufficient concentration to make is unfit for use.

10.4.7 Rural Water Supply Services Coverage

Access to clean and safe water in the community by household within four hundred meters to a water source.

10.4.8 Percentage of people with access to improved water source

Percentage of number of people in the district or region with access to clean and safe water to the total district or region population. the population served with water within 400m to a water sources in which time taken to fetch some water should not exceed 30 minutes(go, wait, collect water and return home).

10.4.9 Percentage of functional water points (improved water source)

This is the ratio of the number of functional water points built in the rural and peri urban areas to the total number of water points in the rural and peri urban areas. It is expressed in to percentage.

10.4.10 Number of water points built

The number of water points built in the rural areas to supply clean and safe water services to the group of people within 400m with time of 30 minutes (go, collect, return to be taken into consideration).

10.4.11 Percentage of people with access to improved sanitation facilities

The ratio of the number of people with adequate sanitation facilities in the district (region) to the total population in the district (region).

10.4.12 Percentage of water points with actively functioning water and sanitation committees

It is defined as the number of water points built in rural areas to supply clean and safe water services with actively functioning water and sanitation committees to the total number water points built in rural areas.

10.4.13 Percentage of water and sanitation committees with women holding key positions

Is the ratio of the number of water committees with women holding key positions in rural and peri urban areas to the total number of existing water committees in rural and peri urban areas.

10.4.14 Number of people sensitized and trained on sanitation

It is defined as the number of people sensitized and trained on water and sanitation in the rural and peri urban areas.

10.4.15 Water Samples

It is a portion of water taken at a source of water point for test water quality whether complies with national and international standards for human conception.

10.4.16 Total number of samples tested

It is defined as the number of products of sampling stations and number of weeks in a year(52), for chemical tests the number of weeks in a year(52), for chemical tests the number of samples tested will be the number of sampling station times two.

10.4.17 Percentage samples meet quality standards

It is the ration of samples taken and tested that meet current quality standards to total number of samples taken and tested. It is the measure of the quality of water delivered to customers. (Standards: 99.4% - 100%).

10.4.18 Water quality Test

Water sample are collected from the borehole and be taken and to Water Laboratory for Physical, bacteriological and Chemical analysis in order access its suitability for human consumption.

10.4.19 Total number of samples tested

It is defined as the number of products of sampling stations and number of weeks in a year(52), for chemical tests the number of samples tested will be the number of sampling station times two.

Note that, Chemical tests are conducted twice in a year while others are conducted once in every week. The recommended chemical tests to be tested are, Iron (Fe), Fluoride (F), Potassium permanganate (KMnO4), Manganese (Mn), Nitrite Nitrogen, Nitrate Nitrogen, Hardness (CaCO3), Calcium (Ca), Sodium (Na), Potassium (K) and Chlorine (Cl), Potassium others if applicable.

10.4.20 Hydrogeological survey

Activities carried out in order to determine potential sites for underground water exploitation.

10.4.21 Reconnaissance survey

The expert visit the site in order to identify areas for detailed survey, the geomo phological condition, hydrogeology of the area, accessibility of the drilling equipments to the site and historical background of the area in groundwater bases.

10.4.22 Detailed survey

The survey is done to identify areas for obtaining data which will be interpreted to determine the type of the rock, depth to drill and the possibility of underground water potential zones. The equipments for the survey are resistivity meter, Magnetometer/Electromagnetic, GPS and Geological compass.

10.4.23 Population coverage (%)

It is the ration of population served to total population.

10.4.24 Proportion of water produced to meet demand.

Is the ratio of water produced to water demand.

10.4.25 Revenue collection efficiency%

Is the ratio of the amount of revenue collected in the current financial year to the amount of revenue of water billed. It is recommended to be greater than ^% %

10.4.26 Unit cost of produced water

Is the Operation and maintenance (O&M) costs with depreciation (without investment costs and debt servicing) divided by Total water production.

10.4.27 Percentage of unaccounted for water (UFW)

Is the ratio of water distributed less consumption to volume of water distributed lost unknowingly as from the water produced. This indicator is the measure of leakage and other system losses. It is taken to include leakage and theft, but also un-metered provision of public water such as fire hydrants, etc. It should be less than 20%.

10.4.28 Area coverage(%)

Is the ratio of area with network to total service area.

10.4.29 Percentage of water coverage with kiosks.

Population served with kiosks over total population times 100.

10.4.30 Water service coverage (pop)(%)

Population served with domestic connections plus population served with kiosks over total population times 100.

10.4.31 Water coverage with domestic connections.(%)

Population served with kiosks/Total population times 100.

10.4.32 Billable water

Is water available for distribution less water used in the treatment process.

10.4.33 Billing efficiency (%)

Is defined as the volume of water billed to the customers divided by the volume of water estimated to be distributed. It measures the percentage of water billed over water produced. This ratio is dependent on waters losses as well as metering accuracy. It is recommended to be greater than (80%).

10.4.34 Daily water distribution per capita served

It an indicator that describes the average daily volume of water distributed per person with either direct access to a domestic connection or to a water kiosk. It does not describe the actual consumption of these customer groups as part of the distributed volume is e.g. consumed by other customer groups or lost through leakages.

10.4.35 Disconnection ratio

It is the percentage of connections (without kiosks) that are currently reported to be disconnected.

10.4.36 Non Revenue Water (NRW)

It is the amount of water that provider produces (or purchases from other entities) minus the amount that is sold to consumers, presented as a percentage of water produced or as an amount per length of the distribution system. NRW can be the result of physical (leaks, overflow) and commercial (illegal connections, collection of revenue) losses. The recommended value is less than 20%.

10.4.37 Pollute

Means directly or indirectly to alter the physical thermal, chemical, biological or radioactive properties of water so as to render such water less fit for any beneficial purpose for which it is or may reasonably be used or cause a condition which is hazardous or potentially hazardous to public health, safety welfare or to animals, birds, fish or aquatic life, or organism or to plant and "pollution" has corresponding meaning.

10.4.38 Public tap

Means any fountain, standpipe, tap, trough, valve or other appliance or structure erected, provided or maintained by or on behalf of (water supply and sanitation authority or a

community owned water supply organisation) the purpose of supplying water to its consumers

10.4.39 Population coverage (%)

It is the proportion of population served with water to the total population living in the service area.

10.4.40 Population with Direct Access to Domestic Connection

Is the number of people with direct access to domestic connection. Direct access might comprise all people living on a plot, which is connected to a network and does not include people from neighbourhood premises.

10.4.41 Population with Access to Kiosk

Is the number of people served at a kiosk connection. The kiosk should be owned by the provider

10.4.42 Water point

Means a single source of water, which may be a well, a borehole, a tap or a public tap.

10.4.43 Water supply

Means the provision of appropriate facilities and services for the sourcing, treatment and distribution of potable water.

10.4.44 Waterworks

Includes all gathering grounds, off-takes, reservoirs, dams, weirs, tanks, cisterns, tunnels, filter beds, conduits, aqueducts, mains, pipes, meters, fountains, sluices, valves, hydrants, pumps, prime movers and all other structures and appliances used or constructed for the storage, conveyance, supply, measurement or regulation of water, which are used or have been constructed by or on behalf of a water supply and sanitation authority or a community owned water supply organization.

10.4.45 Waterworks area

Means any area of land or of water delineated by the Minister as an area connected with the supply of any waterworks.

10.4.46 Water for domestic purposes

It is the use of water solely for the purpose of meeting household and domestic needs and excludes any commercial activities

10.4.47 Water Point Mapping

It is the process of locating water infrastructure and collecting related information using any available technology, the information that is collected is later on subjected to different uses.

10.4.48 Water Point Mapping System

It is an integration of hardware, software, methodologies, data, processes and users dedicated to collecting, storing, processing and analyzing water related information and giving feedback for public use.

10.4.49 Sanitation

Means the provision of appropriate facilities and services for the collection and disposal of human excreta and wastewater.

10.4.50 Sanitation works

Means sewers, drains, pipes, ducts or channels, whether open or closed, used for the drainage of human excreta or waste water from buildings or land and on-site systems for the reception of human excreta and wastewaters, which do not connect to a sewer.

10.4.51 Sewer

Means any pipe or conduit other than a drain used, or for use, for the conveyance of sewage.

10.4.52 Private Sewer

It includes a privately constructed pipe, conduit; underground gutter or channel, other than a building sewer, which may be connected to a private sewerage installation for the conveyance of sewage or trade waste; or for other private purposes and not being part of a public sewerage system vested in or constructed by a water authority potable.

10.4.53 Private Sewerage Installation

Includes privately constructed latrine, septic tank or other sewerage system and all fittings connected thereto but does not include a building sewer.

10.4.54 Sewerage coverage (%)

Is the number of domestic connections times average household size or best estimate over total population times 100.

10.4.55 Sewerage Main rehabilitation (%)

Is the Length of sewer mains rehabilitated during the year per total sewer mains length.

10.4.56 Sewerage services connection rehabilitation (%)

Is the number of sewer connections replaced or renovated during the year per total number of sewer connections.

10.4.57 Total Collection

It is a total collection from water and sewerage services including billing of water sales, sewerage, meter rent and other operating income. Collections from non-billing related items, which mean other income, are not considered.

10.4.58 Trade waste agreement

Means an agreement between a water authority and any person for the discharge of waste into a sewer or storage or treatment of waste by the water authority, and shall include such terms, manner and periods as the water authority may decide or. as may be prescribed.

10.4.59 Treatment of collected Wastewater (%)

Is the maximum daily volume of sewerage treated in a treatment plants during the assessment period per maximum daily capacity of the existing treatment plants.

10.4.60 Wastewater quality compliance (%)

Is the percentage of the sewerage effluent samples that pass all allowable quality tests as per Tanzanian sewage quality standards.

CHAPTER ELEVEN

TRADE, TRANSPORT, TOURISM AND INTERNATIONAL MIGRATION STATISTICS



11.0 Trade Statistics

Trade Statistics are compiled according to International Standards and United Nations recommendations, regard to methodology, concepts and definitions and standard classifications...

The main sources of external trade data are Customs Administration. Customs Data are captured electronically using Tanzania Customs Integrated System called TANCIS.. Customs Data is then processed using Excel and Access programs to produce necessary statistical tables for the country's foreign trade.

11.1 Distributive Trade

Distributive Trade refers to wholesale and retail trade, which can be defined as an activity comprising purchase of goods and their disposal by way of sale without intermediate physical transformation of goods. Distributive trade is an important economic activity providing employment to a significant part of the population and contributing greatly to the GDP.

11.1.1 Wholesale Trade

Wholesale trade is the resale (sale without transformation) of new and used goods to retailers, business-to-business trade (for example, to industrial, commercial, institutional or professional users) or to other wholesalers, or involves acting as an agent or broker in buying merchandise for, or selling merchandise to, such persons or companies.

Wholesalers can be thought of as "middle men" who supply goods to industrial or business customers, such as retailers, restaurants, manufacturers, or construction companies

11.1.2 Retail Trade

Retail trade is the resale (sale without transformation) of new and used goods mainly to the general public for personal or household consumption or utilization, by shops, department stores, stalls, e-commerce retailers, mail - order houses, hawkers and peddlers, consumer cooperatives, auction houses etc. The main characteristic of retailers is that they sell goods primarily to consumers or households.

11.2 Trade Establishment

A trade establishment is an economic unit engaged in wholesale or retail trade of goods within the national territory under a single ownership or control, i.e. under a single legal entity at a single fixed location. In other words, a trade establishment is that establishment having three characteristics: economic activity (trading), legal status (registered one) and fixed location (housed in fixed structure).

11.3 Foreign Trade Statistics

Foreign trade statistics generally refer to the flow of goods between the statistical territory of the country and the rest of the world, with the exception of goods in transit. Statistical territory refers to customs territory, the area in which the customs law of a country applies full control over entry and exit of goods.

11.3.1 Imports

Refers to an inflow of goods into a statistical territory (country).

a) Direct Imports

Refers to goods entered at the time of importation for consumption or for warehousing in Tanzania.

b) Imports for Home Use

Refers to imports declared directly for national use from abroad and from national free zones, free ports and warehouses.

11.3.2 Exports

Refers to outflows of goods from a statistical territory (country)

a) Domestic Exports

The term domestic export refers to exportation of goods produced or grown in a country or goods having undergone substantial transformation in the exporting State.

b) Re-exports

Refers to goods exported in the same condition as imported or after undergoing minor operations, which leave them not substantially changed.

11.3.3 Gross Weight

It refers to actual weight of goods including packaging.

11.3.4 Net Weight

Refers to actual weight of goods excluding packaging.

11.3.5 Packaging

Refers to any cases, boxes, containers, wrappings and covering materials including related accessories and supports.

11.3.6 Standard Measurement Unit

This is the quantity unit of measurement. For example, the net weight in kilograms.

11.3.7 Supplementary Unit

It is a unit of measurement of quantity other than Kilogram.

11.3.8 Country of Consignment

Refers to the country from which the goods were initially dispatched to the importing state.

The term Country of Consignment in the case of exports means the country to which goods are dispatched by the exporting country, without (as far as it is known at the time of exportation) being subject to any commercial transactions or other operations which change the legal status of the goods taking place in any intermediate country.

11.3.9 Country of Origin

Refers to the country from which goods originate. This is the country from where goods were grown, produced or manufactured according to the laid down rules of origin.

11.3.10 Country of Destination

The term Country of Consignment in the case of exports means the country to which goods are dispatched by the exporting country, without (as far as it is known at the time of exportation) being subject to any commercial transactions or other operations which change the legal status of the goods taking place in any intermediate country. It is the final known country to which exported goods were dispatched.

11.3.11 Country of Last Consignment

It is the last country where the goods were loaded.

11.3.12 Country of First Destination

It is the country where the mode of transport, from the border of another country changes.

11.3.13 Value of Imports

It refers to the value of imported goods as determined by Cost, Insurance and Freight charges (CIF). It should be noted that C.I.F is a term of the contract of sale of goods being shipped where the seller pays the cost of the insurance and transport of the goods to the destination

11.3.14 Statistical Value of Exports

Refers to the value of exported goods as determined by Free On Board valuation system (FOB). FOB type value includes the transaction value of the goods and the value of services performed to deliver goods to the boarder of exporting country.

11.3.15 Cost

Refers to the authenticated invoice value.

11.3.16 Freight

Refers to charges for transportation of goods from the country of consignment to the country of destination.

11.3.17 Insurance

Refers to charges for safeguarding against losses on goods being transported from the country of consignment to the country of destination.

11.4 Transport Statistics

Transport is a critical input to the development of the economy. All national development programs hinge around efficient and effective transport infrastructure and services. The concepts and definitions presented under this section relates to all modes of transport and communications. It includes transport on road, air, marine and railway as well as posts and telecommunication services.

11.4.1 Road Transport Statistics

Road transport include all transport of Goods and Passengers by road In Tanzania road is classified (according to Roads Acts 2007) as Trunk roads, Regional roads (which are under management of TANROADS), District roads, Urban roads and feeder or collector roads which are managed by local government authorities under PMORALG. The road is either paved or unpaved.



11.4.1.1 Motorcycle

Two-wheeled road motor vehicle with or without side-car, including motor scooter, or three wheeled road motor vehicle not exceeding 400 kg (900 lb) unladed weight. All such vehicles with a cylinder capacity of 50 cc or over are included, as are those under 50 cc which do not meet the definition of moped.

11.4.1.2 Passenger Car

Road motor vehicle, other than a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver). The term "passenger car" therefore covers micro cars (need no permit to be driven), taxis and hired passenger cars, provided that they have fewer than ten seats. This category may also include pick-ups.

11.4.1.3 Light or Semi-Commercial Vehicles

All vehicles used for goods transport mainly Gross weight of maximum 3,500 kgs e.g. Pickups.

11.4.1.4 Commercial Vehicle Trucks

All vehicles used commercially for goods transport having gross weight of over 3,500 kgs e.g. lorries.

11.4.1.5 Special Vehicle

This category includes passenger car transporter, Fire fighting vehicles, Ambulance, Breakdown vehicle, Cesspool emptier, and Refuse collector, Tankers, Bulk Transporter, Log Transporter, Concrete transporter/mixer, Mobile workshop, Mobile Library, Mobile shop, Mobile Bank and Motor caravan.

11.4.1.6 Other Vehicles

Include, Forklift, Mobile crane, container crane, Bulldozer, grader, loader, excavator, steamroller, asphalt layer etc.

11.4.1.7 Commercial Motor Vehicles (CMV)

All vehicles used for business purposes (i.e. Transportation of Passengers from one point to another).

11.4.2 Road Network Length.

Road Network Length is the measure of a distance in kilometers (km) of roads as stipulated in the Road Act 2007 and any subsequent amendment. Paved roads are the length of all roads that are surfaced with crushed stone (macadam) and hydrocarbon binder or bituminized agent with concrete or cobblestones. Unpaved roads are all roads surfaced with gravel or earth material.

Condition of Paved Road Network

Good Condition

Road in a good conditions include paved roads, largely free of defects requiring only routine maintanance and perhaps surface treatment.

Fair Condition

Roads in fair condition include roads with minor defects and weakened structural resistance, they require resurfacing of the pavement but without the need to demolish the existing pavement.

Poor Condition

Roads in poor condition include roads with major defects and weakened structural resistance, they require rehabilitation of the pavement which involves demolishing the existing pavement.

Condition of Unpaved Road Network

Good Condition

Road in a good conditions includes unpaved roads, largely free of defects requiring only routine maintenance and localized repair.

Fair Condition

Roads in fair condition include roads with minor defects which they require grading and additional new gravel plus drainage repair in some places.

Poor Condition

Roads in poor condition include roads with major defects like pot holes, loss of camber and gravel materials, they require rehabilitation which involves reshaping of the road, and additional new gravel and drainage repair in some places.

11.5 Aviation Statistics / Air transport

Aviation industry is a worldwide monitored transport system, which involves movement by an aircraft, existing of aerodromes and ground handling.



11.5.1 Aerodrome

Refers to a defined area on land or on water (including any buildings, Installation and equipment) intended to be used either wholly or in part for the arrival, departure and movement of aircraft.

11.5.2 Domestic Traffic

Refers to traffic on flights whose origin and destination terminal are both in the state in which the aircraft is registered.

11.5.3 International Traffic

It is defined as traffic on flights of national or foreign aircraft whose origin or destination is located in the territory of a state other than the United Republic of Tanzania.

11.5.4 Aircraft Movements

Refers to the total sum of every landing and every take-off.

11.5.5 Private Movements

Refers to landing and take-off by aircraft operating for private purpose and solely for the benefit of the owner.

11.5.6 Charter Movements

Refer to landing and take-off by aircraft operating for hire or reward but not according to published schedule.

11.5.7 Commercial Movements

Refers to landing and take-off of aircraft engaged in commercial flights. They include both scheduled and non-scheduled (charter, hire and not according to published timetable) commercial flights.

11.5.8 Non-commercial Movements

Refers to landing and take-off by aircraft operating solely for the benefit of the owner or for the purpose of positioning. This includes flights made by the Government and military aircraft and unscheduled return flights by aircraft to their point of departure for safety reasons.

11.5.9 Scheduled Flights

Refers to flights performed for remuneration according to published timetables and which are available to the public at fixed rates.

11.5.10 Non-Scheduled Flights

Refers to flight performed on an irregular basis.

11.5.11 Passengers Embarked and Disembarked

Refers to passengers who are commencing or completing their journeys but excluding transit passengers.

11.5.12 Transit Passengers

Refers to passengers who are continuing their journey in the same or different aircraft without checking out. Transit passengers are counted once.

11.5.13 Freight and Mail

Refers to freight and mail loaded or off-loaded by all aircraft which served an airport excluding aircraft fuel, stores and cargo remaining in the aircraft. Commercial freight excludes diplomatic freight/mail, post office, mail and excess luggage.

11.5.14 Revenue Passengers

Refers to passengers paying full fares.

11.5.15 Passenger Load Factor

Is equal to (Passenger-km performed)/(Passenger-km available) x 100

11.5.16 Weight Load Factor

Is equal to (Tone-km performed)/(Tone-km available) x 100.

11.5.17 Aircraft Movement

Is an arrival or departures of an aircraft. Normally one arrival and one departure shall be counted as two movements

11.6 Shipping Statistics



11.6.1 International Sea-borne Traffic

A person or consignment of goods is said to have moved in International Sea borne traffic if after having been loaded in a port of foreign country, it made a voyage to a port in another country and was unloaded there.

11.6.2 Container Traffic

Number of TEU (Twenty-foot Equivalent container Unit) passing through the port in specified period of time.

11.6.3 Average Import full Container Dwell time

The average time between arrival and departure of the full import container in the terminal. it is measured in days.

11.6.4 Berth Occupancy (%)

Is the proportion of time berth terminal is occupied by ship(s), indicating the level of demand for port services over a particular time interval (hours, days, weeks, months, years). It is measured in percentage.

11.6.5 Modal Split

Proportion of container delivery by mode (Rail or Road) in specific period (days, weeks, months, year).

11.6.6 Ship turn around time

The ship turn-round time is the duration of the vessel's stay in port and is calculated from the time of arrival at outer anchorage to the time of departure.

11.6.7 Piracy

Piracy is attacks by individuals or groups who robs or plunders at sea without a commission from a recognized sovereign Nation. They usually targets other ships but have also attacks targets on shore.

11.6.8 Gross Registered Tonnage (GRT)

Refers to space measurements, one cubic metre being regarded as equal to one tone. It is the capacity of the entire space within the frames and ceiling of the hall together with those closed-in spaces above deck available for cargo stores, passenger or crew.

11.6.9 Net Registered Tonnage (NRT)

Refers to what remains of the 'gross registered tonnage' after deducting the spaces occupied by propelling machinery, fuel and other stores, crew quarters, master cabin and spaces. It represents the spaces available for cargo and passengers. Both Gross and Net registered tonnage are measurement of cubic capacity and not weight.

11.6.10 Dead Weight Tonnage (DWT)

This measures in weight (tones) the amount of cargo that a ship can carry when a vessel is down to its local line. The weight of cargo is gross weight because it includes the packing of goods. A vessel is said to have entered a port with cargo if it touches at the port and unload goods. A vessel is said to have cleared a port if it leaves the port after having loaded goods.

11.6.11 International Sea-borne Traffic

A person or consignment of goods is said to have moved in International Sea borne traffic if after having been loaded in a port of foreign country, it made a voyage to a port in Tanzania and was unloaded there.

11.6.12 Coastwise Traffic

Refers to traffic by sea between the ports of Tanzania. Every arrival or departure with cargo in coastwise traffic is counted no matter how many ports are touched during a voyage. If a ship making international voyage stops to unload or load goods in commercial coastwise traffic the resulting arrivals or departure is counted as such.

11.7 Railway Statistics



11.7.1 Train

One or more railway vehicles hauled by one or more locomotives or railcars, or one railcar travelling alone, running under a given number or specific designation from an initial fixed point to a terminal fixed point. For the purpose of these statistics, we shall take it to mean a locomotive with the accompanying wagons for goods trains; or passenger coaches and the accompanying brake/luggage van and restaurant car; for passenger trains.

11.7.2 Working Train

A train which is required to stop in a block section for such purposes as shunting at a siding loading or unloading or track maintenance.

11.7.3 Passenger Train

A train primarily intended for conveyance of passengers.

11.7.4 Goods Train

Any train other than a departmental train on which less than four units of loaded passenger stock are conveyed. Goods include luggage animals (alive or dead) and all other moveable property of any description.

11.7.5 Block Train

A goods train carrying freight traffic from origin to destination without loading or unloading while on transit.

11.7.6 Mixed Train

Is a train primarily intended for the carriage of goods, but conveying four or more units of loaded passenger stock.

11.7.7 Train Kilometers

Unit of measure representing the movement of a train over one kilometre. The distance to be covered is the distance actually run.

11.7.8 Tonne kilometers

Unit of measure representing the movement of one tonne available in a wagon when performing services for which it is primarily intended over one kilometre. The distance to be considered is that actually run. Shunting and other similar movements are excluded.

11.7.9 Passenger kilometers

Sometimes termed as passenger journeys. It is total kilometers train passengers cover from the point of boarding to destination i.e. No. of passengers * kilometers covered.

11.7.10 Wagon Kilometers

Unit of measure representing any movement of a wagon loaded or empty over a distance of one kilometre. The distance to be considered is that actually run. Shunting and other similar movements are excluded. All wagon journeys are included irrespective of the ownership of the wagon.

11.7.11 Gross Tonnes

Unit of measure representing the movement over a distance of one kilometre of one tonne of railway vehicle including the weight of tractive vehicle. Included are weights of: tractive unit, hauled railway vehicle and its load. Passengers and their luggage are excluded. Shunting and other similar movements are excluded.

11.7.12 Net Tonnes

Unit of measure representing the movement over a distance of one kilometre of one tonne of hauled vehicles (and railcars) and contents. The weight of railcars is included, whereas the weight of locomotives is excluded. Passengers and their luggage are excluded. Shunting and other similar movements are excluded. Refers to weight in tones of the consignment alone.

11.7.13 Locomotive Reliability

Is the distance in kilometers a locomotive travels before it fails i.e. kilometers per failure.

11.7.14 Locomotive Utilization

It is the distance a locomotive covers per day it is in use i.e. kilometers per day in use.

11.7.15 Loaded Ratio (%)

It is the ratio of loaded wagon kilometers to total wagon kilometers covered in a certain period i.e. loaded wagon kilometers/total wagon kilometers * 100.

11.7.16 Load Coefficient (%)

It is the ratio between net tonne-kilometers to gross tonne-kilometers covered in a given time i.e. net tonne-kilometers/gross tonnekilometers * 100

11.7.17 Railway Network Density

Is the ratio of the total length of the railway network, excluding sidings, to total area. It is expressed in km/1000 sq. kms.

11.8 Tourism Statistics



In the system of the National Accounts 110103 (SNA 103), tourism is not one economic activity but appears, and is counted for, in different economic activities, namely, agriculture (in the hunting sub-division); trade, hotels and restaurants; transport and communication; financial and business services (in the business services sub-division); and public administration and other services (education, health and other services). Consequently it has been difficult to quantify tourism as a single economic activity. Tourism satellite Account (TSA) is a new statistical framework proposed by the World Tourism Organization (WTO) aimed at enhancing analysis of the impact of the tourism sector in national economies.

Tourism Economy includes Tourism Sector (indirect effects) and Tourism Industry (direct effects) as follows:

Tourism Sector: Consists of a set of institutional units whose principal economic activity is a tourism characteristic activity, e.g. transport, retail, laundry, security, etc. The sum of the value added generated by all industries in response to tourism consumption.

Tourism Industry: All establishments whose principal productive activity is a tourism characteristic activity, i.e. the sum of all tourism characteristic activities, e.g. accommodation establishments, tour operators, travel agencies. A group of establishments whose principal productive activity is a tourism characteristic activity.

The UNWTO defines the TSA as an output that consists of 10 tables as follows:

- Total Internal Tourism expenditure which is a summation of
 - o Domestic expenditure,
 - o Domestic proportion of outbound expenditure,
 - o Inbound expenditure, plus
- Value added Demand and Supply and Number of Jobs which is a product of Total Internal Tourism expenditure (consumer prices) less Tourism production (producer prices), plus
- Summation of Capital Investment from Tourism and Other value added; which is equal to
- Tourism Contribution to the Economy

System of Tourism Statistics (STS) STS is the system that provides reliable, consistent and appropriate statistical information on the socio-economic structure and the developments of tourism, integrated within all the economic and social statistics related to other fields, at different territorial levels.

Components of STS

• Basic Statistics

Tourism Consumption

Tourism Supply

Production Factors

• Classification relating to tourism statistics

Tourism Specific Products

SIC of tourism activities

• Tourism Satellite Account

TSA Concepts

TSA Aggregates

Classifications for TSA

TSA tables of results and extensions

• Tourism Balance of payments

Tourism Consumption consists number of key concepts as follows:

	Tour	Tourism Consumption	
Tourism	Visitor	Traveler	
Domestic tourism	Tourist	Usual environment	
Inbound tourism	Inbound tourist	Country of residence	
Internal tourism	Domestic tourist	Duration of the visit	
Outbound tourism	Same day visitor	Purpose of visit	
		Tourism accommodation	
	Describe these concepts	Describe these concepts to describe items in the first column.	

To be outside the "usual environment"

The person should travel more than 40 kilometres from their place of residence (one way) AND The place should NOT be visited more than once a week. This includes:

- Place of work
- Place of study

Leisure and recreational trips are included irrespective of the frequency.

Note: A minimum distance of 40km's was chosen as opposed to 60km or more to accommodate for the coastal areas where trips are taken closer to the place of residence.

The definition of usual environment is therefore based on the following criteria:

Minimum distance travelled to consider a person a visitor;

Minimum duration of absence from usual place of residence;

Minimum change between localities or administrative territories.

11.8.1 Tourism

Refers to the activities of persons travelling to and staying away from places of their usual residence for not more than one year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited.

a) Domestic Tourism

Refers to activities of residents of a given country or other area travelling to and staying in places inside that country or other area but outside their usual environment for not more than one year for leisure, business and other purpose.

■ Inbound tourism

Refers to activities of non-resident visitors in a given area that is outside their usual environment for not more than one consecutive year for leisure, business and other purpose.

Outbound Tourism

Refers to residents travelling to another country

b) International Tourism

Refers to inbound and outbound tourism

c) Tourism Industry

Refers to all recipients of direct spending incurred by tourists. This includes pretrip expenditure, during travel, and bookings, and all spending at the destination.

11.8.2 Visitor

Refers to a person who travels to a country other than that in which s(he) has his/her usual residence and that is outside his/her usual residence for a period not exceeding one year, and whose main purpose of visit is other than the exercise of an activity remunerated from within the country visited.

11.8.3 Tourist

Refers to a person who travels to a country other than that in which he/she has his/her usual residence for at least one night and at most one year.

11.8.4 International Visitor

Refers to any person who travels to a country other than his/her usual residence, but outside his/her usual environment for a period not exceeding twelve months and whose main purpose of visit is other than the exercise of an activity remunerated from within the country visited. This definition covers two classes of visitors; i.e. 'International tourist' and 'International same-day visitor'.

11.8.5 International Tourist

Refers to an international visitor who travels to a country and stays for at least one night in collective or private accommodation and whose main purpose of visit may be classified under the following groups:

a) Leisure, Recreation and Holidays

Refers to sight-seeing, shopping, attending sporting and cultural activities, non-professional active sports, trekking and mountaineering, use of beaches, cruises, gambling, rest and recreation for armed forces, summer camp, and honeymooning.

b) Visiting Friends and Relatives

Refers to visits to relatives or friends, home leave, attending funerals, care of invalids.

c) Business and Professional

Refers to attending meetings, conferences or congresses, trade fair and exhibition; giving lectures or concerts; government mission, diplomatic, military or international organization personnel; paid study, education and research; incentive travel; installing equipment, inspection, purchases, sales for foreign enterprises and other business.

d) Health Treatment

Refers to spas, fitness, thalassotherapy, health resorts and other treatments and cures.

e) Religion/Pilgrimages

Refers to those attending religious events.

f) Other Purposes

Refers to aircraft and ship crews on public carriers, transit and other or unknown activities.

11.8.6 International Same-day Visitor

Refers to an international visitor who visits another country for less than 24 hours and does not spend the night in collective or private accommodation in the place visited. This definition includes: -

a) Cruise Passengers

Refers to persons who arrive in a country on a cruise ship and return to the ship each night to leep on board even though the ship remains in port for several days. Also included in this group are by extension, owners or passengers of yachts and passengers on a group tour accommodated in a train or truck.

b) Crew Members

Refers to persons who do not spend night in the country of destination; this group also includes crews of warship on a courtesy visit to a port in the country of destination, and who spend the night on board ship and not at the destination.

11.8.7 Domestic Visitor

Refers to any person residing in a country, who travels to a place within the country and outside his/her usual environment for a period not exceeding twelve months and whose main purpose of visit is other than the exercise of an activity remunerated from within the place visited. This definition covers two classes of visitors; i.e. 'Domestic tourist' and 'Domestic same-day visitor'.

11.8.8 Domestic Tourist

Refers to an internal visitor whose visit is for at least one night and whose main purpose of visit may be classified under the following six groups:

a) Leisure, Recreation and Holidays

Refers to sight-seeing, shopping, attending sporting and cultural activities, non-professional active sports, trekking and mountaineering, use of beaches, cruises, gambling, rest and recreation for armed forces, summer camp, and honeymooning.

b) Visiting friends and relatives

Refers to persons visiting relatives or friends, also persons on home leave, attending funerals, care of invalids.

c) Business and Professional

Refers to persons attending meetings, conferences or congresses, trade fair and exhibition; giving lectures or concerts; government mission, diplomatic, military or international organization personnel; paid study, education and research; incentive travel; installing equipment, inspection, purchases, sales for foreign enterprises and other business.

d) Health treatment

Refers to spas, fitness, thalassotherapy, health resorts and other treatments and cures.

e) Religion/pilgrimages

Refers to persons attending religious events.

f) Other purposes

Refers to aircraft and ship crews on public carriers, transit and other or unknown activities.

11.8.9 Domestic Same-day Visitor

Refers to a 'Domestic Same-day Visitor' describes a domestic visitor whose visit lasts less than 24 hours and does not involve overnight.

11.8.10 Walking Tourists

Refers to tourists who are normally knowledgeable of the potential attractions and prices. They make their own arrangements by establishing contact with local tour operators or service providers.

11.8.11 Package Tours

Refers to visitors arriving in mass with their travel arrangements made abroad. The volume of their expenditure is relatively bigger.

11.8.12 Nights

Refer to the number of nights spent by a person in accommodation establishments. If a person travels to a country/place and spends five nights there, that makes five tourist nights.



11.8.13 Tourism Accommodation

Refers to any facility that regularly or occasionally provides overnight accommodation for visitors. The tourism accommodation is divided into two main groups:-

a) Collective Accommodation Establishments

These are establishments providing overnight lodging for the visitors in a room or some other unit, but the number of places it provides must be greater than a specified minimum for groups of person exceeding a single family unit and all the places in the establishment must come under a common commercial-type management, even if it is non-profit-making. The standard classification of collective accommodation establishment includes:-

- Hotel and similar establishments
- Specialized establishments such as health establishment's work and holiday
- Camps, public means of transport and conference centres
- Other collective establishments such as holiday dwellings, tourists' campsites and others.

b) Private accommodation and establishments

These are establishments providing a limited number of places for rent or without charge. Each accommodation unit (room or dwelling) is then independent and is occupied by visitors, usually by week, fortnight or month or by its owners as a second

or holiday home. The standard classification of private accommodation establishment includes:-

- Owned dwellings
- Rented rooms in family homes
- Dwellings rented from private individuals or professional Agencies
- Accommodation provided without charge by relatives or friends
- Other private establishments.

11.8.14 Town Hotel

A commercial establishment, located within or near an urban centre, where the majority of clients are business and/or transit travelers.

11.8.15 Vacation Hotel

A commercial establishment, located within or near a holiday attraction area, normally in sub urban areas and in which the majority of clients are holiday makers or leisure travelers.

11.8.16 Lodge

A commercial establishment, located within or near natural habitat rich in fauna and flora, normally in or near conservation areas, in which the majority of clients are leisure or adventure seekers.

11.8.17 Tented Camp

A commercial establishment of permanent, semi -permanent and/or mobile tented facilities usually located close to or within popular areas such as beaches, rivers, lakes, protected areas, national parks, game reserves or forests.

11.8.18 Villas and Cottages

Refer to commercial establishments, located in sub-urban or country side areas and characterized by being autonomous, semi-detached or in a cluster to let units for holiday accommodation. They may or may not provide full hotel services and facilities. The establishments include residential premises used for holiday making by owners, friends or relatives.

11.8.19 Serviced Apartments

Commercial establishment's offering facilities and services like a hotel for Guests staying a few days or weeks. They currently represent the trendiest place where to stay for corporate, leisure travelers, people relocating to new cities and those seeking transit accommodations. By nature, they have catering facilities in form of kitchenette which offers Guests the flexibility of preparing own meals.

11.8.20 Motel

A commercial establishment, located along a highway or motor way, catering mainly to motorists and other highway and road users.

11.8.21 Camping /Caravan Site

Refers to an area set aside for camping and providing appropriate safety, security, running water and other hygiene facilities and services.

11.8.22 Guest House

Refers to a commercial establishment providing lodging, with or without meals, and other modest and limited Guest services.

11.8.23 Home Stay

A form of tourism and/or study abroad programme that allows the visitor to rent a room from a local family. The house is usually part of the normal residence of the owner but with the business of accommodating paying Guests. This arrangement involves staying in a furnished, private bedroom and a shared living room.

11.8.24 Hostel

A supervised lodging place for travelers and/or students,, especially young people, providing budget-oriented accommodation, usually with shared rooms, in double, triple or dormitory arrangements.

11.8.25 Eco-lodge

A type of tourism commercial establishment, providing lodging, meals and other Guest facilities and services. It is deliberately designed, constructed and operated in such a way as to have least negative impact on the natural environment in which it is situated.

11.8.26 Farm Stay

A type of tourism commercial establishment, providing shared family unit or separate self contained lodging, meals and other Guest facilities and always situated on a farm, with involvement in farm activities, tours and rural life experiences as part of the package.

11.8.27 Nationality of a Visitor

Refers to the government issuing the visitor his/her passport or other identification document, even if he/she normally resides in another country.

11.8.28 Arrivals

Refer to the number of arrivals of visitors and not to the number of persons. The same person who makes several trips to a given country during a given period will be counted each time as a new arrival.

11.8.29 Departures Abroad

Refer to the 'Number of departures i.e. the visits that each person makes from his country of usual residence to any other country for any purpose other than exercising a remunerated activity in the country visited.

11.8.30 Duration of Stay

Refers to the time spent in the place or country.

11.8.31 Average Length of Stay

Refers to the average number of nights spent by a tourist in the country visited.

11.8.32 Mode of Transport

Refers to type of transport used by international visitors or tourists arriving in the country.

11.8.33 Number of Rooms

Refers to the total number of rooms in all establishments offering accommodation available during the peak period of the tourist season.

11.8.34 Number of Bed-placed

Refers to the total number of bed-placed in all establishments offering accommodation available during the peak period of the tourist season.

11.8.35 Occupancy Rates

The occupancy rate corresponds to the relationship between available capacity and the extent to which it is used. This rate may refer either to the use of rooms or beds. Occupancy rates are based on the number of nights of both domestic and international tourist.

11.8.36 Room Occupancy Rate

It is the proportion utilized, in percentage, of the number of room nights available during specified period, that is: -

$$Room\ Occupancy\ Rate\ (\%) = \frac{Room-nights\ Utilized}{Room-nights\ Available} \times 100$$

11.8.37 Bed Occupancy Rate

It is the proportion utilized, in percentage, of the number of bed-nights available during specified period, that is: -

$$Bed\ Occupancy\ Rate(\%) = \frac{Bed-nights\ Utilize}{Bed-nights\ Available} \times 100$$

11.8.38 International Tourist Receipts

Refers to receipts of a country resulting from expenditures by tourists. i.e. payments for goods and services, made by international visitors to use for themselves or give away.

11.8.39 International Tourist Expenditure

Refers to the total expenditure made by a visitor or on behalf of a visitor for and during his/her trip and stay at the destination. i.e. payments for goods and services, made by residents of a country visiting abroad.

11.9 International Migration Statistics

Labour migration across nations has been in existence for a long time and it is a process that occurs due to pull and push factors including involuntary or forced migration due to wars and political instabilities and voluntary reasons. The increased migration is a result of several factors; wars, social instabilities economic reasons such as hardships and increased unemployment, education reasons among others.

11.9.1 International Migration

Refers to movement of people between Tanzania and other sovereign states.

11.9.2 Immigration Control System

Refers to a system whereby movements of people between countries are controlled, traveling documents including passports and visas are issued to immigrating people to ensure that only legal migrants are allowed entry and stay in the country.

11.9.3 Travel Document

Refers to a valid passport or an internationally recognized document containing the personal particulars, signature or finger print and clear recent photograph of the holder and which is issued by or on behalf of the Government of a member state of which the visitor is a citizen and on which endorsement may be issued and may include an approved laissers -passer of boarder pass.

11.9.4 Immigration

Refers to movement from one country to the other for the purpose of settling or visiting. Migrants include refugees, tourists, residents and others traveling across boarders within a certain specific country.

11.9.5 Immigrant

Refers to any foreign person moving, who seeks entry in another country for the purpose of visiting. (or any purpose other than mentioned above).

11.9.6 New Immigrants

Refers to persons who enter Tanzania and plan to stay for at least six months. Included in this category are students studying abroad but with parents in Tanzania.

11.9.7 Emigrant

Refers to any foreign person moving from his/her own country abroad for purpose of settling or visiting.

11.9.8 Permanent Emigrants

Refers to Tanzanian residents who leave Tanzania permanently.

11.9.9 Temporary Emigrants

Refers to Tanzanian residents who leave Tanzania and intend to come back

11.9.10 Residents

Refers to persons who have stayed or plan to stay in Tanzania for at least six months.

11.9.11 Returning Residents

Refers to Tanzania residents returning from abroad. Included in this category are students studying abroad or Tanzania residents coming back from holiday trips, business trips, and so on.

11.9.12 Visitor

Refers to any person traveling to any place other than that of his/her usual environment for less than 12 months and whose purpose of the trip is other than the exercise of an activity reenumerated from within the place visited.

11.9.13 Visitors on Holidays

Refers to persons who enter Tanzania and whose main purpose of the journey is holiday trip. Included in this group are children on school vacation in Tanzania if their parents are not residents of Tanzania.

11.9.14 Visitors on Business

Refers to persons who enter Tanzania and whose main purpose of journey is business trip.

11.9.15 Visitors on Holiday, Business or in Transit

Refers to persons who leave Tanzania, after a holiday trip, business trip or after an in transit stop.

11.9.16 Persons in Transit

Refers to persons who enter Tanzania and either stay at the airport in transit or hold an intransit passes valid for a period of up to one month.

11.9.17 Country of Departure

Refers to the country where the recent journey started.

11.9.18 Country of Final Destination

Refers to the country where the final journey will end.

11.10 Wildlife Statistics

11.10.1 Authorised Association

Refers to a community based organization whose primary objective is to conserve wildlife resources for the benefit of local community members ordinarily residing in that area and given the mandate by the Directors to do so on village land.

11.10.2 Biological diversity

Refers to the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and ecosystems (adopted from CBD)

11.10.3 Community- Based Conservation

Refers to conservation of wildlife and wetlands resources based on the participation of the village communities.

11.10.4 Core Protected Areas

Refers to Nation Parks, Game reserves, Ngorongoro conservation Area and wetlands reserves.

11.10.5 Corridor

Refers to land area used by wild animals in their movements from one part of the ecosystem to another at any given time in search of basic requirements such as water, food, space and habitat.

11.10.6 Ecosystem

Refers to a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit (adopted from CBD).

11.10.7 Farming

Refers to intensive husbandry (breeding/raising) of one or few wildlife species on relatively small areas (less than 25 ha) whenever suitable infrastructures and services available in urban areas, totally enclosed, and under more-or-less heavily managed conditions that tend to domesticate the animals, with the purpose of engaging in different forms of wildlife utilization.

11.10.8 Game sanctuary

Refers to a place where wild animals are reared in captivity, relatively in a large area in a natural state primarily for educational and recreational purposes.

11.10.9 General Management Plan

Refers to a tool to guide management and development programmes of PA and wetlands.

11.10.10 Habitat

Refers to the place or type of site where an organism or population naturally occurs (adopted from CBD)

11.10.11 High conservation value

Refers to wetland areas that provides vital values and functions described in Section 2.5 of policy, including those with high degree of endemism, harbor endangered or rare species or habitat which is under-represented in the Tanzania protected area networks.

11.10.12 In-situ conservation

Refers to the conservation of ecosystem and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings (modified fro CBD)

11.10.13 Land use

Refers to activities carried out on a given piece of land.

11.10.14 Local Communities

Means as described to it in the Local Government (District Authorities Act of 1982).

11.10.15 Local Government Authority

Means as described to it by the local Government (district Authorities) Act of 1982 as well as by the Local Government (urban Authorities) Act of 1982.

11.10.16 Management Authority

Refers to recognized established institutions with the mandate to manage a particular PA or piece of land or wetland.

11.10.17 Man made wetland

Refers to constructed wetlands area or terrestrial area purposely impounded with temporary or permanent water with the aim of collecting or storing water to supply goods and services such as electricity, fishery, water and sports

11.10.18 Migration

Refers to the movement of wild animals commonly birds and mammals over large distances in search of basic needs.

11.10.19 Migratory route

Refers to an area, strip or zone of land used by wild animals during their migratory cycles or seasonal movements.

11.10.20 Modified wetland

Refers to naturally occurring wetland area used for crop cultivation or transformed in the process of or for the purpose of undertaking sports.

11.10.21 National Game

Refers to animal species declared so by the minister.

11.10. 22 Natural Resources

Refers to biological resources which include forestry, aquatic fauna and flora, bees and wildlife.

11.10, 23 Protected Area

Refers to a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives (adopted from CBD)

11.10. 24 Protected Species

Refers to an animal or plant species protected by an international convention, or laws of Tanzania or any other country, including a National Game.

11.10. 25 Ramsar Site

Refers to wetland area of international importance as ascribed by the Ramsar Convention on Wetland (Iran 1971)

11.10. 26 Sustainable utilization/use

Refers to human use of wildlife and wetland resources in a way and at a rate that does not lead to long term decline of the resources, thereby maintaining its potential to meet the needs and aspirations of present and future generations (modified from CBD)

11.10, 27 Wetlands

Refers to areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salty including areas of marine water the depth of which at low tide does not exceed six metres. It may also incorporate riparian or coastal zones adjacent to the wetlands, and island or bodies of marine water deeper than six metres at low tide lying within the wetlands.

11.10.28 Wildlife Protected Areas

Refers to National Parks, Game Reserves, Ngorongoro Conservation Area, Game controlled Area and Wetland Reserves.

11.10.29 Wetland Reserves

Refers to any wetland area declared to be a wetlands reserve as ascribed in Article 4 of the Convention on wetlands (Ramsar, 1971) by an order made under the wildlife Act.

11.10.30 Wetlands Resource

Refers to all resources including soils, water, fauna and flora found in wetlands whose meaning is ascribed in this policy.

11.10.31 Wildlife Resources

Means resources as described in the meaning of wildlife.

11.10.32 Wildlife sector

Refers to wildlife division, Tanzania National parks, Ngorongoro Conservation Area Authority, Tanzania wildlife Research Institute, college of Africa Wildlife Management, private sector and individuals directly dealing with wildlife related matters in Tanzania.

11.10.33 Wildlife

Refers to those species of wild and indigenous animals and plants, and their constituent habitats, including wetlands and ecosystems, to be found in Tanzania, as well as those exotic species that have been introduced to Tanzania, and those are temporarily maintained in captivity or have become established in the wild.

11.10.34 Wildlife Management Area

Refers to an area set aside by village Council for the purpose of conservation of wildlife and other biological natural resources, under the wildlife Act.

11.10.35 Wise Use

Refers to sustainable utilization of wetlands for the benefit of mankind in a way compatible with the maintenance of the natural properties of ecosystems.

11.10.36 Zoo

Refers to a place where wild animals are kept in captivity, normally in cages or padlocks for recreation, research and educational purposes.

11.11 Forest

Refers to all land bearing a vegetative association dominated by trees of any size, exploitable or not, and capable of producing wood or other products of exerting influence on the climate or water regime or providing shelter to livestock and wildlife.

11.11.1 Forest administration

Comprises Government of Tanzania administration of forestry.

11.11.2 Forest authorities

Comprise Government of Tanzania authorities of forestry.

11.11.3 Forest land

Refers to an area of land covered with trees, grass and other vegetation but dominated by trees.

11.11.4 Forest land lease

Refers to forest land or land suitable for afforestation is leased to the private sector. The terms of the lease define the management principles and obligations. The management planning and plan implementation is carried out by the lessee. The lease is renewed after certain periods provided that the land is well-managed. The government collects an annual lease fee.

11.11.5 Forest product

Refers to all wood and non-wood forest products.

11.11.6 Forest reserve

Refers to forest area, either for production of timber and other forest produce or protective for the protection of forests and important water catchments, controlled under the Forests Ordinance and declared by the Minister.

11.11.7 Forest resources

Refers to all wood and non-wood-based resources in the forests.

11.11.8 Agro-forestry

Refers to practice where agricultural crops and trees are intercropped on one farm land.

11.11.9 Central government forest reserve

Refers to forest area administered and managed by the central government.

11.11.10 Concession

Refers to a long-term agreement between the government and a forest industry Enterprise entrusting the latter to manage a forest reserve, industrial plantation or part thereof mainly for timber production. The forest is managed in accordance with the approved management plan.

The company is responsible for all harvesting and silviculture activities including road construction and maintenance. The government collects the agreed royalties and concession fees.

11.11.11 Executive agency

Refers to an autonomous self-financing commercial agency owned by the government and created for the specific purpose of managing a forest reserve or an industrial plantation. The staff are government employees but with specific terms and conditions defined for employment by the agency.

11.11.12 Firewood

Refers to includes part of trees made up into bundles or loads or cut wood for burning, and refuse wood in general, but does not include logs or poles.

11.11.13 Game reserve

Refers to a reserved area aimed for game production and conservation with a good population and diversity of wildlife and/or critical water and/or soil resources necessary to maintain ecological integrity and support the subsistence needs of communities outside the reserve boundaries.

11.11.14 Industrial plantation

Refers to an area of land planted with trees for industrial use.

11.11.15 Joint forest management

Refers to involvement of local communities or non-governmental organisations in the management and conservation of forests and forest land with appropriate user rights as incentives.

11.11.16 Licence

Refers to a valid licence granted by the director of forestry or any person duly authorised by him in that behalf or by a local authority.

11.11.17 Livestock

Refers to cattle, sheep, goats, pigs, horses, donkeys, mules and all other domesticated animals and their young.

11.11.18 Local authority

Refers to a district council, city council, municipal council, town council, local council and village council.

11.11.19 National park

Refers to area representing outstanding natural, archaeological or cultural resources of Tanzania's heritage and/or critical water and/or soil resources necessary to maintain ecological integrity. National Parks are created and controlled through National Park Ordinance and declared by an act of Parliament.

11.11.20 National tree

Refers to any tree declared by order to be a national tree or trees reserved for a specific reason.

11.11.21 Nature reserve

Refers to a forest reserve legally declared for nature conservation of genetic resources and for scientific studies.

11.11.22 Owner

Refers to any person having a freehold or leasehold estate (or any interest deemed under any law for the time being in force to be a freehold or leasehold estate), having a right of occupancy in respect of such land.

11.11.23 Tenure

Refers to holding of land or other property through arrangements such as leasehold, freehold, customary ownership, and other such forms of holding.

11.11.24 Traditional forest

Refers to a forest reserve governed under customary law.

11.11.25 Tree

Refers to palms, bamboos, canes, shrubs, bushes, plants, poles, climbers, seedlings, saplings, and the re-growth thereof, all ages and all kinds and any part.

11.11.26 Village forest reserve

Refers to a forest which is owned and managed by the village government.

11.12 Foreign Private Investments

11.12.1 Balance of Payments (BOP)

Is a statistical statement designed to provide, for a specific period of time, a systematic record of an economy's transactions with the rest of the world. BOP refers to transactions between residents and non-residents for a period of time, usually one year. It is a statistical statement that brings together inflows and outflows of transactions classified under appropriate components, in two accounts – the current account and capital and financial accounts. BOP data are therefore concerned with transactions between residents and non-residents and NOT with the currency of transaction. Typically, a transaction in foreign currency between two residents of any country would not be considered a BOP transaction.

11.12.2 Resident, Non-Resident and Country of Residence

Residency is a particularly important attribute of an institutional unit in the Balance of Payments because the identification of a transaction between residents and non-residents underpins the system. A resident is any individual, enterprise, or other organization ordinarily residing in Tanzania. In other words, its centre of economic activity is in Tanzania. All other entities are regarded as non-residents. For statistical purposes, an individual who lives in Tanzania for more than a year is considered to be a resident, regardless of the individual's citizenship or nationality. An enterprise incorporated in Tanzania is considered a resident of Tanzania irrespective of the domicile of the owners of the enterprise. A branch of a foreign company operating in Tanzania for more than a year is treated as a resident of Tanzania.

11.12.3 Flows

Flow is a change and it takes place during a period of time. Private Capital Inflows can be seen as an increase in international indebtedness (liabilities) to a country's private sector during a specified period of time. This constitutes foreign investment in an enterprise. Capital Outflows can similarly be seen as an increase in country's Investment (Assets) abroad. This also implies Investments abroad by a domestic enterprise.

11.12.4 Categories

Flows falls under three major categories namely, transactions, holding gains or loses and other changes in Assets. Transactions are economic exchange involving two economic entities (e.g. a foreign and a local enterprise). It may be worth noting that all transactions are flows but not all flows are transactions. Holding gains and loses (also known as valuation changes or capital gain/loses) are those types of flows that involve change in stock position that is due to price changes of an asset, but not a result of economic interactions. These are types of flows which are not transactions thus not recorded in BOP.

11.12.5 Stocks

Stock refers to position at a point in time (e.g end of year position). Stocks can be divided into assets and liabilities.

11.12.6 International Standard Industrial Classification (ISIC)

Is a standardized way of dis-aggregating economic activities for international data comparison purposes. For the current census, this has been modified with further disaggregation to better cover activities in Tanzania and remains consisted with international norms.

11.12.7 Estimated- Market value

Market values or market prices are used for valuing transactions. This is the amount of money that a willing buyer pays to acquire something from a willing seller, when such an exchange is done between independent parties and on the basis of commercial considerations only. This is the best measure of economic value. The actual price at which transactions are recorded in the books of the transactors will be the market price – or a close approximation thereof. However, these transactions may be between related companies – which could impact on the 'commercial consideration' of market values. Related companies in different countries may charge transfer prices to each other (different to what they would have charged independent parties) so as to shift profits between enterprises and countries, and minimize taxes. Market values are usually difficult to estimate. The Preferred techniques of calculating market values (particular to equity) include stock exchange valuations of listed companies, auditor's estimates of market values, a recent purchase or sale between directors of the company, Director's estimate, Financial Manager's estimate, and accountant's estimate.

11.12.8 Asset

An asset is anything owned, whether in possession or by right to take possession, by a person or a group acting together.

11.12.9 Net asset value

This is the difference between assets and liabilities

11.12.10 Book values

This is the sum of equity capital + reinvested earnings + other reserves

11.12.11 Regional Classifications:

A way to define geographical distribution of economic activities, enterprises and subsidiaries in Tanzania. e.g. Dar es Salaam, Arusha, Mwanza, Mbeya, Tanga e.t.c.

11.12.12 Related Companies

Related companies with a direct investment enterprise (10% of ordinary shares) are subsidiaries (a non-resident owner owns more than 50% of the shares) and associates (50% or less). Branches (unincorporated enterprises wholly owned by non-residents).

11.12.13 Equity

These are shares in a company, and equivalent ownership interest in unincorporated enterprises. Direct equity Investment denotes ownership of 10% or more of the ordinary shares, voting power, or equivalent in an enterprise, by someone resident in another economy.

11.12.14 Non-equity

All other financial instruments including loans, trade credit and supplier credit (for goods and services), bonds, debentures, notes, money market instruments, shareholder and intercompany loans, arrears of debt or interest, and deposits.

11.12.15 Foreign Direct Investment (FDI)

This is defined as a case where a resident entity in one economy (creditor) acquires lasting interest in an enterprise in another economy (recipient) with significant degree of influence. Usually FDI is in the questionnaire of ownership of means of production like factories or equity share including equity purchase, reinvested earnings and inter-company loans and debt transactions. FDI in the census questionnaire is obtained by summing up: new equity investment plus reinvested earnings plus the sum of {shareholder and inter-company loan (long term) + shareholder and inter-company borrowing (short-term) + supplier's credit from related company (short term)}.

11.12.16 Shareholder and inter-company loans/borrowing

This is the borrowing or lending of funds (among related companies) between the direct investor (non-resident) and the direct investment enterprise (resident). These transactions can create or dissolve investment as well as maintain, expand or contract it.

11.12.17 Foreign Portfolio Investment (FPI)

Foreign Portfolio Investment (FPI) are purely financial assets, which include, Foreign Portfolio Equity Investment (FPEI), Investments in Bonds, Money market instruments and Financial derivatives other than the items included in the definition of foreign direct investment.

11.12.18 Foreign Portfolio Equity Investment (FPEI)

This is defined as a case where a shareholder owns less than 10% of equities in an enterprise. Foreign Direct Equity Investment (FDEI): Is the case of 10% or more of equity share in an enterprise.

11.12.19 Voting (Powers) Rights

This relates to the objective of obtaining a lasting interest in an enterprise resident in another economy. In the case of direct investment, a 10% or more ownership of the ordinary shares or voting rights in an enterprise is considered sufficient to empower the direct investor to have a significant influence over the key policies and management of the direct investment enterprise.

11.12.20 Dividends

These are income on equity. They are the distributed earnings allocated to shares and other forms of participation in the equity of incorporated private enterprise, cooperatives and public corporation.

11.12.21 Reinvested (or retained) earnings (profits)

These are the direct investor's share (calculated as a proportion of direct equity held) of that part of the earnings (after tax on earnings) that are not distributed as dividends by the direct investment enterprise, together with the earnings of branches that are not remitted to the direct investor. This is a component of FDI.

11.12.22 Supplier's Credits

These include trade credits. On one hand they are claims from the direct extension of credit by suppliers of goods and services to buyers, while on the other hand they are reliabilities of buyers of goods and services. In addition this concept include advance payments for work in progress, or to be undertaken, associated with such transactions. Most are short term.

CHAPTER TWELVE

ENVIRONMENTAL STATISTICS



12.0 Environment

Environment is a complex set of physical, geographical, biological, social, cultural and political conditions that cataract with individual or organism and that ultimately determines its form and nature of its survival.

12.1 Environment Statistics

Environment Statistics refers to statistics that describe the state and trend of the environmental resources and/or components (air, weather, climate, biodiversity, water, scenery, land and/or soils).

12. 1.1 Afforestation

This is deliberate establishment of forests by planting or seedling in an area of non-forest land.

12.1.2 Reforestation

Refers to re-establishment of forests

12.1.2 Air Pollution

The presence of contaminant in the air that do not disperse properly and harmful environmental effects.

12.1.3 Catchments area

Area from which various sources of water drains into river systems, lakes and seas/ocean.

12.1.4 Climate change

Terms used in reference to global warming due to greenhouse gas emissions from human activities (IPCC, 2007).

12.1.5 Deforestation

The conversion of forest to another land use or the long-term reduction of the tree canopy cover below the minimum 10 percent threshold.

12.1.6 Desertification

Land degradation in arid, semi -arid and dry sub-humid areas resulting from various factors, including climatic variations (drought) and human activities (overexploitation of dry lands).

12.1.7 Disposal of waste

Waste elimination techniques comprising landfills, containment, underground disposal, dumping at sea and all other disposal methods.

12.1.8 Emission

Discharge of pollutants into the atmosphere from stationary sources such as smokestacks, other vents, surface areas of commercial or Industrial facilities and mobile sources for example, motor vehicles, locomotives and aircraft.

12.1.9 Emission Factor (Coefficient)

It is a ratio of the amount of a pollutant generated to the amount of a given raw material processed. It may also refer to the ratio of the emission generated to the output of a production process.

12.1.10 Emission Standard

It is the maximum amount of a polluting discharge legally allowed from a single source, mobile, or stationary.

12.1.11 Environment

The totality of the external conditions affecting the life development and survival of an organism.

12.1.12 Environmental Costs

Costs connected with the actual or potential deterioration of natural assets due to economic activities.

12.1.13 Environmental Degradation

Deterioration in environmental quality from ambient concentration of pollutants and other activities and processes such as improper land use and natural disasters.

12.1.14 Environmental Expenditures

Capital and current expenditures related to characteristic activities and facilities specified in classifications of environmental protection activities.

12.1.15 Environmental Indicators

Parameter or a volume derived from parameters that points to provide information about and/or describes the state of the environment and has a significance extending beyond that directly associated with any given parametric value. The term may encompass responses (OECD, 1994).

12.1.16 Environmental Quality

State of environmental conditions in environmental media, expressed in terms of indicators or indices related to environmental quality standards.

12.1.17 Environment Statistics

Statistics that describe the state and trends of the environment, covering the media of the natural environment air/climate, water, (land/soil), the biota within the media, human settlements. Environment statistics are integrative in nature, measuring human activities and natural events that affect the environment, the impacts of these activities and events, social responses to environmental impacts and the quality and availability of natural assets. Broad definitions include environment indicators, indices and accounting.

12.1.18 Environmental Audit

An independent and objective oriented examination of whether a practice complies with expected standards. Broadly, environmental audit means a check on some aspects of environmental management, and implies some kind of testing and verification.

12.1.19 Environmental Disease

A disease that is, at least in part, caused or aggravated by living conditions, climate, water supply or other environmental conditions. Environmental factors that may affect health include psychological, biological, physical and accident related factors. Environmental diseases include in particular communicable diseases such as respiratory and vector-borne diseases such as malaria, schistosomiasis and onchocerciasis.

12.1.20 Environmental Impact

Direct effect of socio-economic activities and natural events on the components of the environment.

12.1.21 Environmental Impact Assessment (EIA)

A systematic examination conducted to determine whether or not a programme, activity or project will have any adverse impacts on the environment.

12.1.22 Energy Sources

All solid, liquid and gaseous fuels; electricity; uranium; stream and hot water; and the traditional fuels such as fuel wood, charcoal, vegetable and animal wastes.

12.1.23 Erosion

Wearing away and transport of the soil by wind or running water, glaciers or waves. Erosion occurs naturally but is often intensified by human land-clearing activities related to farming, residential or industrial development.

12.1.24 Exhaust Gases

Gases produced by the burning of petrol (gasoline) in combustion engines. Exhaust gases are harmful to human beings, plants and animals.

12.1.25 Fuel wood

All wood in the rough used for fuel purposes. It is common noncommercial biological fuel.

12.1.26 Fossil Fuels

Coal, oil and natural gas. They are derived from the remains of ancient plant and animal life.

12.1.27 Geologic Hazard

Extreme natural events in the crust of the earth that pose a threat to life and property, for example, earthquakes, volcanic eruptions, floods, drought and land slides.

12.1.28 Greenhouse Effect

Warming of the earth's atmosphere caused by a build-up of carbon dioxide and other greenhouse or trace gases that act like a pane of glass in a greenhouse, allowing sunlight to pass through and heat the earth but preventing a counterbalancing loss of heat.

12.1.29 Ground water

Water that collects in porous layers of underground formations known as aquifers.

12.1.30 Habitat

Place where an organism (human animal, plant, micro-organism) lives.

12.1.31 Hazardous Waste

Wastes that, owing to their toxic, infectious, radioactive or flammable properties pose a substantial actual or potential hazard to the health of human and other living organisms and the environment.

12.1.32 Household Waste

Waste material usually generated in the residential environment. Waste with similar characteristics may be generated in other economic activities and can thus be treated and disposed of together with household waste.

12.1.33 Hydrocarbons

Compounds of hydrogen and carbon in various combinations which are present in petroleum products and natural gas. Some hydrocarbons are major air pollutants, some may be carcinogenic and other contribute to photochemical smog.

12.1.34 Household waste

Waste material usually generated in the residential environment. Waste with similar characteristics may be generated in other economic activities and can thus be treated and disposed of together with household waste.

12.1.35 Indoor Air Pollution

Chemical biological and physical contamination of indoor air. It may result in adverse health effects. In developing countries the main service of indoor air pollution is biomass smoke which contain suspend particulate matter (SPM), nitrogen dioxide (NO₂), sulphur dioxide (SO₂), carbon monoxide (CO), formaldehyde and polycyclic aromatic hydrocarbons (PAHs). In industrialized countries in addition to NO₂, CO and formaldehyde, radon, asbestos, mercury, human – made mineral fibres, volatile organic compounds allegeus, tobacco smoke, bacteria and viruses are the main contributors to indoor air pollution.

12.1.36 Industrial waste

Liquid, social and gaseous wastes originating from the manufacture of specific products.

12.1.37 Land Degradation

Reduction or loss of biological or economic productivity and complexity of rain-fed cropland, irrigated cropland, or range, pasture, forest or woodlands resulting from nature processes, land used or other human activities and habitation patterns such as land contamination, soil erosion and distinction of the vegetation cover.

12.1.38 Marine Pollution

Direct or indirect introduction by humans of substances or energy into the marine environment resulting in harm to living resources, hazards to human health, hindrances to marine activities including fishing, impairment of the quality of sea water and reduction of amenities.

12.1.39 Overgrazing

Grazing by livestock or wildlife to the point where the grass cover is depleted, leaving bare, unprotected patches of soil.

12.1.40 Ozone

Pungent, colourless, toxic gas that contains three atoms of oxygen in each molecule. In the stratosphere, ozone provides a protective layer shielding the earth from the harmful effects of ultraviolent radiation on human beings and other biota.

12.1.41 Ozone Depletion

Destruction of ozone in the stratosphere, where it shields the earth from harmful ultraviolet radiation.

12.1.42 pH Value

Measure of the acidity or alkalinity of a liquid. A pH value in the range 0 to 7 indicates acidity, a pH value in the range of 7 to 14 indicates alkalinity, and pH value of 7 signifies neutrality.

12.1.43 Sewage

Organic waste and wastewater produced by residential and commercial establishments.

12.1.44 Vegetation cover

All trees, shrubs, herbs, deciduous plants and so forth that cover an area or region.

12.1.45 Water Pollution

Presence in water of harmful and objectionable material – obtained from sewers, industrial wastes and rain water run – off – in sufficient concentrations to make it unfit for use.

12.1.46 Biodiversity

This is the concept used in analyzing and defining the state of the planet earth and it conservation. It is coined from two words, i. e. Bio (life) + Diversity (varieties and/or variations) to explain varieties of life forms on earth. Biodiversity therefore, is the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part. This includes diversity within species, between species, and of ecosystems. Biodiversity is defined and analysed at three levels which are: species, genetics and ecosystems.

12.1.47 Ecology

Ecology is the study of interactions of organisms with one another and with their physical and chemical environment.

An understanding of ecology is very important for the survival of human being, i. e. the human species. Although it includes the study of environmental problems such as pollution, the science of ecology mainly involves research on the natural world from many viewpoints, using many techniques. Modern ecology relies heavily on experiments, both in laboratory and in field settings. These techniques have proved useful in testing ecological theories, and in arriving at practical decisions concerning the management of natural resources. Social, economic and political factors often influence the short-term distribution of resources needed by a specific human population. An understanding of ecological principles can help us understand the global and regional consequences of competition among humans for the scarce natural resources that support us.

Ecology is therefore, a science that contributes considerably to our understanding of evolution, including our own evolution as a species. All evolutionary change takes place in response to ecological interactions that operate on the population, community, ecosystem, biome and biosphere levels. Studies conducted within the scientific discipline of ecology may therefore focus on one or more different levels: on populations of a single species, on an interacting community involving populations of many species, on the movement of matter and energy through a community within and ecosystem, on large scale processes within a biome, or on global patterns within the biosphere.

12.1.48 Ecosystem

An ecosystem: a community of plants, animals (including human beings) and smaller organisms that live, feed, reproduce and interact in the same area or environment.

An ecosystem is a biological environment consisting of all the organisms living in a particular area, as well as all the nonliving, physical components of the environment with which the organisms interact, such as air, soil, water, and sunlight. It is all the organisms in a given area, along with the nonliving (abiotic) factors with which they interact. It is therefore a biological community (biotic factors) and its physical environment

The whole earth's surface can be described by a series of interconnected ecosystems. All living beings form and are part of ecosystems. They are diverse and always changing. Within an ecosystem, all aspects of the environment (both living things and their non-living settings) interact and affect one another. Every species affects the lives of those around them.

12.1.49 Ecosystem Services

Ecosystem services can be defined livelihood ingredients that people obtain from the environment. Ecosystem services are the transformation of natural assets (land, soil, plants and animals, minerals, scenery, air and water) into things that we value. These services can be viewed as provisioning such as food, water, medicine, construction/building materials, tourism and recreation; and wild genes for domestic plants and animals; regulating, for example, flood and disease control; cultural such as spiritual, recreational, and cultural benefits; or supporting like nutrient cycling that maintain the conditions for life on Earth.

The ecosystems of planet Earth are coupled to human environments. Ecosystems regulate the global geophysical cycles of energy, climate, soil nutrients, and water that in turn support and grow natural capital (including the environmental, physiological, cognitive, cultural, and spiritual dimensions of life). Ultimately, every manufactured product in human environments comes from natural systems. Ecosystems are considered common-pool resources because ecosystems do not exclude beneficiaries and they can be depleted or degraded.

12.1.50 Biosphere

Biosphere is the total sum of ecosystems on the planet. It is used to depict ecological relations that regulate the influx of energy, nutrients and climate all the way up to the planetary scale. It involves among others the following components

Species, Endangered species, Endemic species, Wetlands, Genetic Resources,

Natural Resources, Land, Terrestrial ecosystem, Aquatic ecosystems, Coastal areas, Coastlines, Global Warming, Landscape, Climate, Pollution (Air, Water and Soil) and Waste

12.1.51 Drought

Prolonged absence or marked deficiency of precipitation which may contribute to desertification.

12.1.52 Effluent

Liquid waste product (whether treated or untreated), discharge from an industrial process or human activity that is discharged into the environment.

12.1.53 Logging

Process of harvesting trees, sawing them into appropriate lengths and transporting them to a sawmill.

12.1.54 Marginal Settlements

Housing units that, lacking basic amenities, are not considered fit for human habitation.

12.1.55 Marine Park

Permanent marine reservation for the conservation of species.

12.1.56 Marine Pollution Direct or indirect introduction by humans of substances or energy into the marine environment, resulting in harm to living resources, hazards to human health, hindrances to marine activities including fishing, impairment of the quality of sea water and reduction of amenities.

12.1.57 Mercury

Heavy metal that can accumulate in the environment and is highly toxic if breathed or swallowed.

12.1.58 Methane (CH4)

Colourless, non-poisonous and flammable gaseous hydrocarbon created by anaerobic decomposition of organic compounds. Methane is an important greenhouse gas.

12.1.59 Municipal Wastes

Wastes produced by residential, commercial and public services sectors that are collected by local authorities for treatment and/or disposal in a central location.

12.1.60 Natural Disaster

Sudden calamitous event as in the case of earthquakes, tsunamis, floods, volcanic eruption, cyclones and landslide or ongoing misfortune as in conditions or processes such as drought and desertification.

12.1.61 Nitrate

Nitrogen-containing compound that can exist in the atmosphere or as a dissolved gas in water.

12.1.62 Nitrites

Nitrous oxide salts used in food preservation.

12.1.63 Nitrogen Oxygen Demand (NOD)

Quantitative measure of the amount of the dissolved oxygen required for the biological oxidation of nitrogenous material.

12.1.64 Noise Pollution

Sound at excessive levels that may be detrimental to human health.

12.1.65 Ocean Dumping

Deliberate disposal of hazardous wastes at sea from vessels, aircraft, platforms or other human-made structures.

12.1.66 Open Dump

Uncovered site used for disposal of waste without environmental controls.

12.1.67 Overgrazing

Grazing by livestock or wildlife to the point where the grass cover is depleted, leaving bare, unprotected patches of soil.

12.1.68 Pest

Species, viruses, bacteria and other micro-organism considered harmful to the health of human beings, crops and other living organisms.

12.1.69 Pesticide

Any substance or mixture of substances that is used to prevent, destroy or control pests – including vectors of human or animal disease, and unwanted species of plants or animals.

12.1.70 Physical Pollution

Pollution caused by colour (change), suspended solids, foaming, temperature conditions or radioactivity.

12.2. Lands, Housing and Human Settlements Statistics

Lands in Tanzania are divided into three parts that are reserved land, village land and general land. General and village lands are under Land Caps 113 and 114 respectively and compose the following statistics certificate of right of occupancy, certificates of customary right of occupancy certificate of village land, cadastral survey, land, land use plan, land rent, village boundary and district land and housing tribunal.

Housing sector in Tanzania falls under the National Human Settlements Policy of 2000 and has the following statistics, dwelling house, housing and dwelling unit, housing unit, temporary housing unit, temporary dwelling unit, semi-permanent dwelling units, permanent dwelling units, durable materials, durable wall materials, non-durable wall materials, non-durable flooring materials, building, residential building, non residential building, room, kitchen, toilet and a flush toilet

Human Settlements sector in Tanzania falls under the National Human Settlements Policy of 2000 and has the following statistics residential license, village, minor town, town, municipality, city, megacity and slum.

12.2.1 Certificate of Right of Occupancy

Certificate that grants a right of occupancy to a citizen who has followed acquisition and occupancy procedures of section 29 of the Land Act Cap.113.Certificate must be signed and

sealed with by the Commissioner of lands and purports to be signed and sealed by the President.

12.2.2. Certificates of Customary Right of Occupancy

Certificate granted by a village council to the citizen who remains residing in the village after following acquisition and occupancy procedures under section 29 of the Land Act Cap.113.

12.2.3. Certificate of Village Land

Certificate issued in the name of the President by the Commissioner of lands to a village that land boundaries have been demarcated and village council has approved the functions of management of the village land under and in accordance with section 7 of Land Act Cap.114.

12.2.4. Cadastral Survey

Boundary that has been approved by Chief Surveyor by using information that recorded the position of the boundary of land in separate ownership or intended to be the subject of any disposition or partition, or reestablishing such boundary on the ground or setting out new boundary on the ground.

12.2.5. Land

Is the surface of the earth and the earth below the surface and all substances other than minerals or petroleum forming part of or below the surface, things naturally growing on the land, buildings and other structures permanently affixed to or under land and land covered by water.

12.2.6. Land Rent

Is annual fee that determined by the Commissioner of lands by considering the area, use and value of land paid by a holder of the right of occupancy in the manner provided for under the provisions of the Public Finance Act.

12.2.7. Village boundary

Natural and physical features showing surveyed demarcations of a village land as approved by the Ministry responsible for lands.

12.2.8. District Land and Housing Tribunal

Body established by or under any written law which is referred to in section 167 of Land Act Cap.113 as having jurisdiction to determine land disputes at district level.

12.2.9. Residential Licence

Permission given by the Government or an occupier of land under a right of occupancy or a lessee which allows the person to whom the licence is given to occupy or use or do some act

in relation to the land comprised in the right of occupancy or the lease which would otherwise be a trespass but does not include an easement.

12.2.10. Land Use Plan

Plan prepared or adopted by a planning authority under which any parcel of or structure erected on land, or part of it is or is intended to be used, or occupied then approved under the Ministry responsible for lands.

12.2.11. Dwelling house

A house or part of a house or room used as a separate dwelling in any building and includes any garden or other premises within the cartilage of and used as a part of the dwelling house as so defined.

12.2.12. Housing and Dwelling Unit

This is all about the living space occupied by one household regardless of the physical arrangement of facilities available. It may be one room or more occupied by lodgers or it may be one, two or more housing units occupied by an extended family.

12.2.13. Housing Unit

It is a separate and independent place of abode intended for habitation by a single household, or one not intended for habitation but occupied as living quarters by a household. Thus it may be an occupied or vacant dwelling, an occupied mobile or improved housing unit or any other place occupied as living quarters by a household.

12.2.14. Temporary Housing Unit

It refers to a structure that, by the way it has been built, is not expected to maintain its durability for a long period of time, but has some of the facilities of a conventional dwelling.

12.2.15. Temporary Dwelling Unit

A dwelling unit that is provided in response to emergency situations or for temporary relocation purposes or intended to be occupied for a limited time only.

12.2.16. Semi-Permanent Dwelling Units:

These are dwelling units built with a combination of durable materials and require regular maintenance.

12.2.17. Permanent Dwelling Units:

These are built with durable materials (wall, floor and roof) that can maintain their stability for at least 15 years.

12.2.18. Durable materials:

These may be categorized as follows: Durable Roofing Materials: Iron-sheets, Tiles, Concrete and Asbestos. Non-durable Roofing Materials: Grass/Leaves, Mud and Leaves, Plastics/Box and Tent.

12.2.19. Durable Wall Materials

Are materials used for building permanent house walls such as stones, cement bricks, sundried bricks, baked bricks, timber, timber and sheets.

12.2.20. Non-durable Wall Materials

Are materials used for building temporary wall materials such as none treated poles and mud, grass and tent.

12.2.21. Non-durable Flooring Materials

Wood Planks, Palm/Bamboo, Earth/Sand and dung.

12.2.22. Building

Is any independent free-standing structure comprising one or more rooms or other spaces, covered by a roof, enclosed with external walls or dividing walls which extend from the foundations to the roof, and intended for residential, agricultural, industrial, commercial, cultural and other purposes.

12.2.23. Residential Building

Is a building that half of the floor area is used for dwelling purposes. Other buildings should be regarded as non-residential. Other information regarding building: Houses (ground-oriented residential buildings; comprising all types of houses detached, semi-detached, terraced houses, houses built in a row, etc.) each dwelling of which has its own entrance directly from the ground surface. Other residential buildings: comprising all residential buildings other than ground-oriented residential buildings as defined above.

12.2.24. Non Residential Building

Consists of buildings other than dwellings, including fixtures, facilities and equipment that are integral parts of the structures, other information: Historic monuments identified primarily as non-residential buildings are also included, Examples include warehouse and industrial buildings, commercial buildings, buildings for public entertainment, hotels, restaurants, educational buildings, health buildings, etc

12.2.25. Room

Is a space in a housing unit or other living quarters enclosed by walls reaching from the floor to the ceiling or roof covering, or to a height of at least two meters of an area large enough to hold a bed for an adult that is at least four square meters.

12.2.26. Kitchen

Is defined as a space that conforms in all respects to the criteria for a room and is equipped for the preparation of the principal meals of the day and intended primarily for that purpose.

12.2.27. Toilet

Defined as an installation for the disposal of human excreta.

12.2.28. A flush toilet

Is an installation provided with piped water that permits humans to discharge their wastes and from which the wastes are flushed by water.

12.2.29. Slum

It is a densely populated urban area which is characterized by a generally low standard of living. Comprised of dwellings with at least one of the four characteristics: (a) lack of access to improved water supply; (b) lack of access to improved sanitation; (c) overcrowding (3 or more persons per room); and (d) dwellings made of non-durable material (UN, 2008).

12.2.30. Village

Settlement with a population of less than 10,000, some villages are trading centers. To qualify as a trading centre, a village settlement has to meet the following minimum requirement:- (a) 5 retail shops and a market place; (b) A primary school; (c) A dispensary (d) A post office.

12.2.31. Minor Town

Settlement with minimum population of 10,000 with the following basic services (a) Health centre; (b) Secondary school; (c) 20 retail shops and a market facility; (d) Primary court; and (e) serves as either a ward or division headquarters.

12.2.32. Town

Settlement having a minimum of 30,000 people and meet at least 50% of the annual budget from own revenue sources. Also it has to provide the following community services and facilities.

(a) Hospital; (b) Secondary school; (c) At least 50 licensed shops; (d) Police station; and (e) Serves as divisional headquarters.

12.2.33. Municipality

Settlement having a minimum of 100,000 people and an economic base of at least 30% of employment in the non-agricultural sector, It is also required to have at least one manufacturing industry and several small scale industries. It should be self sustenance for at least 70% of annual budget; and it should have a centre providing higher order services, including cultural, educational and health facilities which serve an area beyond the administrative region such as universities, referral hospital and international conference facilities. At present, there are 18 municipal authorities in the country.

12.2.34. City

Municipality that has symbolic importance in addition to meeting the minimum requirement for being a municipality, Key attributes that define a city are: (a). Minimum of 500,000 people; (b). Self sustenance by at least 95% of annual budget; (c) historical significance; (d). Outstanding cultural importance such as a major tourist centre; (e). The seat of regional government; (f). The seat of international activities; (g). Any other symbolic value The power to grant a municipality status of a city is vested in the National Assembly.

12.2.35. Megacity

Settlement that has surpassed all requirements of being a city and a minimum population of 4,000,000, Tanzania has no megacity.

PART FOUR: TECHNICAL SERVICES COORDINATION SECTOR CHAPTER THIRTEEN

STATISTICAL BUSINESS REGISTER

The Statistical Business Register (SBR) is a comprehensive list of all formal and informal establishments operating in the country at a specified time. Among others, it is used as frame for establishment based surveys including Employment and Earnings Surveys, Foreign Capital Investment Survey, Sector Specific Survey, etc. It also used as an input to estimate GDP, PPI, and Other Industrial Indicators.

13.0 Establishments

It is an economic unit, which engages, under a single control, in one or predominantly one kind of economic activity at a single location i.e. an individual firm, factory, workshop or mine. Due to record keeping practices, it is not always possible to strictly follow the definition of an establishment. In some cases the restrictions, especially on location, are relaxed. When restrictions are relaxed they give rise to local, kind of activity and enterprise units.

OR

The establishment is defined as an enterprise or part of an enterprise that is situated in a single location and in which only a single (non-ancillary) productive activity is carried out or in which the principal productive activity accounts for most of the value added.

13.1 Establishment Name

This refers to the registered name of a Business or the name under which the unit does business. For small units, which do not have Business names, the name of the owner or one of the partners will be used.

13.2 Regional Code

Regional codes consist of two digits that is 01 - 26. Tanzania Mainland has 26 administrative regions.

13.3 District Code

The district codes consist of two digits confined within district.

13.4 Location

Refers to the smallest area where the establishment is located. In town, it consists of the street/road name, house number and the postcode. While in the village, the name of the village and the hamlet (part of a village) is given.

13.5 Area

Refers to the name of the locality in which the establishment is situated. For instance Kariakoo, Magomeni and Chang'ombe.

13.6 Industrial Activity

Refers to the economic activity of an establishment. It includes all activities as stipulated in the International Standard Industrial Classification (ISIC)-Revision 4. If an establishment is engaged in two economic activities, it should be separated into two activities as main activity and other activity.

13.6.1 Main Activity

Refers to activity of an establishment that contributes most to the value added for his / her business.

13.7 Registration of an Establishment

Refers to the process of registering or of being registered. Example A business name is simply a name or title under which a person or entity conducts a business.

13.8 Persons Engaged

These are persons who work in an establishment with or without payment (during the reference period). They include paid up employees, working proprietors and unpaid helpers or family workers. This category includes both contract and permanent workers.

13.8.1 Working Proprietors

These are active owners of the Unit, they usually take no regular salary or wages, but earn all the profit resulting from their activity (partners share in whatever ways they have agreed upon).

All working cooperative members should be regarded as employees.

13.8.2 Unpaid Helpers

These are persons like members of religious institutions, prisoners, national service, militia and the like who work for at least one third of the working time normal for the establishment. They work without regular pay or any agreed amount of money to be paid for work done.

13.8.3 Unpaid family Worker:

Is a member of a family of the owner/owners of an establishment, usually working for the establishment without payments.

13.9 Total Persons Engaged

This is the total labour force comprising of operatives, other employees, working proprietors and unpaid workers.

13.10 Capital Investment

Refers to money invested in a business with the understanding that the money will be used to purchase fixed assets, rather than used to cover the business' day-to-day operating expenses.

13.11 Annual Turnover

Refers to total amount of money earned by a business for a particular period of time

CHAPTER FOURTEEN

GEO-INFORMATION SYSTEM /SPATIAL DATA

14.0 Geographical Information System (GIS)

Geographical Information System (GIS) is a system of hardware, software and procedures designed to support the capture, management, manipulation, analysis and display of georeferenced maps and data.

The Geo-Information Section is already developing a digital geographic database, but a full GIS is a very expensive and complex technology that needs to be implemented only at a level appropriate to the skills and resources available.

14.1 Maps

Maps refer to a scientific and technical representation of physical and manmade features of the

earth's surfaces/land parcel onto a flat surface/sheet of paper with respect to specified scale.

A map is generally small enough to be handled easily, yet it can show a large area. It permits a person to view at a glance those features that he might find difficult to see physically due to limitations imposed by his/her size or his/her location.

There are many kinds of maps, each serving a specific purpose. There are maps that show the location of cities and rivers. There are soil and land use maps, geological and topographic maps, cadastral maps, navigation maps, weather maps, administrative maps,



road maps, transportation route maps, city maps and individual property maps. A map shows part or the Earth's entire surface. It shows the real world at a reduced scale; that is, the real world is compressed into a small area on the map. The extent of reduction influences the kind of features and amount of detail that can be shown.

14.1.1 Base Map

A Base Map is a map depicting background reference information such as landforms, roads, landmarks, and political boundaries, onto which other thematic information is placed. A base map is used for locational reference and often includes a geodetic control network as part of its structure. A base map provides a user with context for a map. You can add information to a base map by overlaying other information on top of it. Base maps contain reference

information that may provide different geospatial information based on what the cartographer is trying to communicate.

14.1.2 Physical Map

A physical map is one that shows the physical landscape features of a place. They generally show things like mountains, rivers and lakes and water is always shown with blue. Mountains and elevation changes are usually shown with different colors and shades to show relief.

14.1.3 Topographic Map

A topographic map is a detailed and accurate two-dimensional representation of natural and human-made features on the Earth's surface. The most distinctive characteristic of a topographic map is that the three-dimensional shape of the Earth's surface is modeled by the use of contour lines. Contours are imaginary lines that connect locations of similar elevation. Contours make it possible to represent the height of mountains and steepness of slopes on a two-dimensional map surface. A topographic map is similar to a physical map in that it shows different physical landscape features. They are different however because they use contour lines instead of colors to show changes in the landscape.

Topographic maps produced by the Tanzania Surveys and Mapping Division are generally available in two different scales: 1:50,000 and 1:25,000. Maps with a scale of 1:25,000 are relatively large-scale. At this scale, features as small as a single home can be shown. The smaller scale 1:50,000 topographic map is more of a general purpose reconnaissance-type map.

14.1.4 Thematic Map

A thematic map is a map that focuses on a particular theme or special topic. An example of a thematic map would be one showing the population change of Tanzania in specific locations from 1998 to 2012.

14.1.5 Census/Survey Maps

Census maps refer to the smallest geographic area from which census/survey data are collected. They are usually called Enumeration Areas (EAs). The process of creating and marking EA boundaries on the base map is called delineation. EA delineation team does this work. The same team also designates the Supervision Areas (SAs).

Base maps currently being used by the NBS for creating enumeration areas are produced by the Surveys and Mapping Division of the Ministry of Lands and Human Settlements Development. The country is covered by 1:50,000 topographic base maps (about 1265)

sheets). Other base maps include 1:2,500 maps used in cities and towns, 1:250,000 district maps.

14.1.6 Supervisor Area Maps

The maps refer to an area covered by one supervisor during censuses and surveys. A Supervisor Area (SA) map contains enumeration area (EA) boundaries delineated on it. It contains information on the number of enumeration areas under that supervisor. The map is used by the enumeration supervisor in planning his/her travel to observe the enumerators and review their work and verify boundaries so as to ensure that there is no omission and no duplication of area.

14.1.7 Statistical Maps

These refer to maps showing the spatial distribution of statistical data. The purpose is to present significant statistical results in terms of their geographic distribution. Thus interest in the current pattern of distribution and also in changes in the patterns that have occurred over time, particularly since the last census/similar survey is considered.

14.1.8 Point Symbol Maps

Point symbol maps refer to dots or graduated symbols used in representing a certain value on the statistical map.

14.1.9 Choropleth (Shaded) Maps

Choropleth maps refer to administrative areas colour shaded to present several classes of statistical data, such as densities, per capita, ratio of one characteristic to another, etc.

14.1.10. Isopleth Maps

These refer to maps representing statistical data by a series of lines each connecting points at which a given variable has a specific value.

14.2 Map Elements

14.2.1 Scale

Scale refers to the relationship between the distance on the map as compared to the distance on the ground. By using the scale, census or any other survey staff can determine distances required for field checking, for conducting enumeration, etc. The scale should always be shown on census/survey maps. A Scale may be expressed in three ways:

- (a) Word statement,
- (b) Numerical fraction, and

(c) Graphic scale. Graphic scale is commonly used in census/survey maps. A graphic or bar scale shows the relationship between distances on the map and on the ground by means of a bar or line, with markings to indicate distances on the ground.

14.2.2 Map Symbols

Map symbols refer to figures, lines, colours, or patterns used to indicate certain features on the ground such as administrative boundaries, buildings, rivers, roads, railroads, etc. Symbols are used to show three different types of information; (a) location (b) nature or quality of the features, and (c) Quantity. Maps normally show what features are and where they are as the primary function. Maps showing how much there is of various features are primarily statistical maps.

14.2.3 Other Map Elements

Refer to:

- (a) Grid coordinates: describe all points on the Earth.
- (b) Type of projection: indicates the amount and kind of distortion of the features.
- (c) North arrow: orients the map by compass directions
- (d) Date of the map: reveals how current it is.
- (e) Source of the original materials: give the idea of reliability and accuracy of the map.
- (f) Sheet number: helps in locating other maps for the same area.

14.3 Codes

Codes refer to uniquely identification by number of all administrative divisions of every order for which data are to be tabulated. This is made possible by the use of unique numbers assigned to them. Tanzania (Mainland and Zanzibar) has 26 regions, which are divided into districts and further subdivided into wards and villages.

14.3.1 Regional and District Codes

Regional and District Codes refer to a two-digit number identifying an administrative region and district; with each respective code having two digits.

14.3.2 Ward/Shehia Code

Ward/Shehia Code refers to an administrative ward or shehia. A ward/shehia code has three digits. The first two digits stand for a serial number of the ward within the district, the third digit classifies the ward/shehia into whether it is pure rural (1), pure urban (2) or mixed (3). For example, ward/shehia 031 means third ward/shehia in a district which is pure rural; 072 means seventh ward/shehia which is pure urban; and 113 means eleventh ward/shehia which is mixed, that is, part of it is rural while the rest of it is urban.

14.3.3 Village/Mtaa Code

Village/Mtaa Code refers to a two-digit number identifying an administrative village/mtaa.

14.3.4 EA Code

EA Code refers to a number identifying the smallest geographic area from which census/survey data are collected. EA code has twelve-digits which is a collection of all levels of administration including the number of and EA which has three digits. That is, an EA code comprises two-digit regional code, two-digit district code, three-digit ward/shehia code, two-digit village/mtaa code and a three-digit EA number.

14.4 Aerial Photography

It refers to a process of recording features on the earth using remote sensing instrument(s).

14.5 Satellite Imagery

Satellite imagery refers to the collection of information through satellites, that is, information collected from an altitude of 320 kilometers (200 miles) or more. Unmanned satellites, such as Land sat 1 and 2, pass over the entire inhabited Earth many times on a regular basis, providing almost complete coverage of the Earth's surface. The satellites use a particular sensors or scanners to sense or scan the amount of energy being reflected or radiated from a series of points into numerical values, and radio these values to receiving stations on the Earth. The values are then processed to make pictures for use in the usual interpretation.

14.6 Global Positioning System (GPS)

It refers to space-based navigation system that provides location and time information in allweather conditions anywhere or near the earth.

14.7 Automated Cartography

Automated cartography refers to the map production process using computers, automatic drafting equipment, and microfilm systems. The development of automated cartography increases the speed and accuracy while reduces the cost of map production. Automated cartography depends on the availability of computer readable coordinates associated with specific geographic unit. Each point on a map must be identified and recorded in machine-readable form, producing a computer file, and once the basic file is created, it can be easily updated.

CHAPTER FIFTEEN

SAMPLING

Sampling refers to drawing a sample or selecting a subset of elements from a population. The usual goal in sampling is to produce a representative sample. A sample is equivalent to the population on all characteristics, except that it includes fewer elements. A perfect representative sample would be a "mirror image "of the population from which it was selected, except it would include fewer elements. The selection of a sample can either be through probability or non-probability mechanism.

15.0 Population

Refers to the totality of the elements under study or entire group of units, which is the focus of the study. For example, population could consist of person or non – human units such as farms, houses or establishments such as industry, schools and hospitals.

15.1 Target population

The set of elements about which information is wanted and estimates are required. Practical considerations may dictate that some units are excluded (e.g. Institutionalized individuals, the homeless, or those who are not be possible to access Without incurring excessive cost).

15.2 A Sample

A set of elements taken from a population.

15.3 A Statistic

A numerical characteristic of a sample.

15.4 Parameter

A numerical characteristic of population.

15.5 Response rate

Percentage of sampled units who actually participate in the study.

15.6 Domain of the Study

Refers to a major segment of the population for which separate statistics are needed. A domain can be either a geographical area or a specified population category, such as a region or major ethnic groups. Domains are very important for the determination of a sample size and sampling distribution of statistics

15.7 Sampling Frame

Refers to a list of units from which a sample is to be selected. It must have characteristics to be studied.

15.8 Sampling Unit

It is a smallest unit or element, which is the subject of sample selection or a unit of analysis, such as a person, household or an establishment. Sampling unit may be Primary, secondary, e.t.c. depending on the stages of sampling.

15.9 Estimation

Refers to the process of estimating population characteristics based on the sample statistics. The characteristics may be any variable associated with a member of the population, such as age, income, employment status and the quantity may be a total, proportion, average and standard deviation.

15.10 Statistical Error

The difference between the true population parameters and the estimated statistics from a sample.

15.11 Sampling Error

Refers to an inaccuracy in the estimates of the population characteristics which arise due to the sample on which the estimates are made from.

15.12 Non – Sampling Error

Refers to inaccuracy which occurs when estimating population characteristics due to defective measurement techniques, mistakes during data collection, processing and interpreting, etc.

15.13 Sampling Procedure

Refers to the approach followed to select sampling units or elements from the population: It includes non – probability sampling or probability sampling.

(i) Non – Probability Sampling

Refers to the selection of sampling units without using probability mechanism. It covers a variety of procedures, including the use of volunteers and the purposive choice of elements for the sample on the grounds it is a "representative" of a population.

(ii) Probability sampling

Refers to the selection of sampling units by using probability mechanism. An essential requirement for any form of probability sampling is the existence of a sampling frame or population from which the sampled elements are selected from. Probability Techniques widely used are: Simple Random Sampling; Systematic

Sampling; Stratified Sampling; Cluster Sampling; Multistage Sampling and Probability Proportional to Size Sampling.

15.14 Simple Random Sampling

Refers to the selection of sampling units of size n from the population of size N. In Simple Random Sampling, each element has an equal chance of being selected

15.15 Stratified Random Sampling (or Stratified sampling)

Refers to the method of selecting a sample from a population of size N where the population is firstly sub – divided into k sub – populations called strata;

- First, stratify your sampling frame (e.g. divide it into the low, medium, high income households or males, females depending on your stratification variable).
- Second, take a random sample from each strata
 (i.e. take random samples from a low income households, medium income households, high income households, or males, females. The selected random samples will constitute the final sample. (Note: you could also take Systematic samples from respective strata).

15.16 Systematic Random Sampling (or Systematic Sampling)

In this sampling method the N units in the sampling frame are arranged in a particular order Suppose N = nk, where n is the sample size and k is an integer, a random number less than or equal to k is selected and thereafter every k^{th} element is selected.

15.17 Cluster Sampling

Refers to the process of firstly selecting a number of clusters from a sampling frame consisting of all clusters. A study is then carried out to all units in the entire selected clusters. For example, select geographical areas first and within the selected geographical areas, all households are interviewed

15.18 Multistage Sampling

Refers to the process where selection of the sample is carried out in stages. For example, select geographical areas first and within the selected geographical areas, select households to be interviewed.

15.19 Quota Sampling

Refers to a method of selecting a sample in which investigator collects information from individuals until the sample size (the quota) is attained.

15.20 Probability Proportional to Size Sampling

Refers to the selection of (both primary and secondary) sampling units based on the sizes of the sampling frames. The process of selecting sampling units follows the principal of Multistage Sampling.

15.21 Primary sampling unit (PSU)

Geographical area comprising one or more enumeration areas of the same type (and therefore not necessarily contiguous) that together have at least one hundred dwelling units.

15.22 Sampling Weight

Refers to the process of improving survey results by making adjustments for total non-response, to conform to the known population distribution in order to improve precision of sample estimates and analysis of data obtained from a complex sample surveys.

15.23 Adjustment for statistical purposes

A set of procedures employed to improve *coverage*, *classification*, timing or valuation of the data, conform to an accounting or recording basis, or address data quality differences in compiling specific datasets.

15.24 Administered item

Registry item for which administrative information is recorded in an administration record.

15.25 Administration record

Collection of administrative information for an administered item.

15.26 Administrative data

The set of units and data derived from an administrative source.

15.27 Administrative source

A data holding containing information collected and maintained for the purpose of implementing one or more administrative regulations.

15.28 Bias

An effect which deprives a statistical result of representativeness by systematically distorting it, as distinct from a random error which may distort on any one occasion but balances out on the average.

15.29 Code

A language-independent set of letters, numbers or symbols that represent a concept whose meaning is described in a natural language.

15.30 Coding

The process of converting verbal or textual information into codes representing classes within a classification scheme, to facilitate data processing, storage or dissemination.

15.31 Cold deck

The imputation technique used during data editing where missing or inconsistent values are calculated or derived from other information about the household or person. Synonym logical imputation. See hot deck.

15.32 Coverage

The definition of the population that statistics aim to cover.

15.33 Coverage error

Error caused by a failure to adequately cover all components of the population being studied, which results in differences between the target population and the sampling frame.

15.34 Data

A representation of facts, concepts, or instructions in a formal manner, suitable for communication, interpretation, or processing by humans or by automatic means.

15.35 Data confidentiality

A property of data, usually resulting from legislative measures, which prevents it from unauthorised disclosure.

15.36 Data editing

Activity aimed at detecting and correcting errors, logical inconsistencies and suspicious data.

15.37 Data imputation

The procedure of entering a value for a specific data item, where the response is missing or unusable.

15.38 Data processing

The operation performed on data in order to derive new information according to a given set of rules.

15.39 Hot deck

The imputation technique used in data editing where the source for imputed values is constantly updated from valid response combinations encountered during processing, thus reflecting the reality of the households and persons most recently processed. Synonym: dynamic imputation. See cold deck.

15.40 Item response rate

The ratio of the number of eligible units responding to an item to the number of responding units eligible to have responded to the item.

15.41 Macro data

Observation data gained by a purposeful aggregation of statistical micro data.

15.42 Matching

An operation whereby households and individuals enumerated during a census and a postenumeration survey are compared for similarities and differences.

15.43 Metadata

Data about data, that refers to the definitions, descriptions of procedures, system parameters, and operational results which characterise and summarise statistical programs.

15.44 Micro data

Observation data collected on an individual object or statistical unit.

15.45 Probing

The technique that is used to obtain a complete and relevant response by asking further questions.

15.46 Questionnaire

A group or sequence of questions designed to elicit information upon a subject, or a sequence of subjects, from an informant.

15.47 Random number

A number allocated to a statistical unit that is mainly used for sampling purposes.

15.48 Reference period

The period of time (day, week, month, or year) for which information is relevant

15.49 Refusal

Situation when a household or individual refuses to answer the questions or complete the questionnaire.

15.50 Respondent

The person or organisation that answers the questions or completes the questionnaire.

REFERENCES

- 1. Common Statistics Rules and Regulations for the Production of Foreign Trade Statistics in COMESA Member States; April, 1997.
- 2. Demographic Techniques, Third Edition; A.H.Pollard, F.Yusuf, G.N.Pollard
- 3. Essentials of Demographic Analysis for Africa; G. M. K. Kpedekpo.
- 4. Handbook on Poverty Statistics; Concepts, Methods and Police use; Special Project on Poverty Statistics, United Nations Statistics Division; December ,2005.
- 5. National Bureau of Statistics: National Accounts of Tanzania.
- 6. National Bureau of Statistics: Transport Statistics Publication.
- 7. National Bureau of Statistics: Foreign Trade Statistics Publication.
- 8. National Sample Census of Agriculture 2002/2003; Technical and Operation Report.
- 9. National Bureau of Statistics / President's Office, Planning and Privatization: Human Development Indices, 2001.
- 10. Poverty and Welfare; Monitoring and Indicators; December, 1999.
- 11. Population Reference Bureau: Population Handbook (4th International Edition).
- 12. Scandinavian Institute of African Studies, Uppsala: A Demographic Analysis of East Africa (A Sociological Interpretation; by Mette Monsted and Parveen Walji).
- 13. Statistics Division, Department of Social and Economic Affairs, United Nations, Secretariat; and Bureau of Statistics, International Labour Office: Collection of Economic Characteristics in Population Census.
- 14. Tanzania Investment Report; Report on study of Foreign Private Capital Flows in Mainland Tanzania; December, 2001.
- 15. Tanzania Tourism Sector Survey; The International Visitor Exit Survey Report; September, 2003.
- 16. Tanzania Revenue Authority, Tax Administration and Structure in Tanzania; April, 2003
- 17. United Nations Industrial Development Organization: International Recommendations for Industrial Statistics.
- 18. United Nations: Integrated Environmental and Economic Accounting An Operational Manual, 2000.
- 19. United Nations: System of National Accounts 1993.
- 20. World Tourism Organization (WTO).
- 21. National Accounts Statistics: Main Aggregates and Detailed Tables, 2014 Part V, United Nations New York, 2015.
- 22. United Nations: System of National Accounts 2008, New York, 2009.

