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## **FOREWORD**

The Kenya National Bureau of Statistics is a Semi - Autonomous Government Agency mandated by the Statistics Act 2006, to collect, analyze, disseminate and maintain a data bank of social economic data and information. The KNBS has the responsibility to supervise, establish standards and coordinate the National Statistical System (NSS) which comprises of several other organizations, institutions and government departments in addition to itself in the production of integrated, relevant and timely statistical information through the NSS in Kenya. The aim is to produce comprehensive and internally consistent information on which development planning and monitoring and evaluation of national policies, programmes and projects can reliably be based.

The production of this Compendium is an effort to provide common concepts and definitions in use in order to seal a gap that has been observed where concepts have been used differently by various data producers in the NSS. The use of standard concepts, definitions and methodologies increases data and information sharing and enhances comparability of information over time and internationally. Another function of the KNBS that will be served by this compendium is to harmonize and promote use of best practices and standards in the collection, compilation and dissemination of statistical information within the country. Given that generation of statistical information is achieved through the many organizations, institutions and departments that comprise the National Statistical System and through the censuses and surveys undertaken by KNBS itself, this document is a useful tool which when put to good use will ensure adherence to high standards in data production, dissemination and use.

This document provides a list of useful concepts, definitions and methodologies used in official statistics within the Kenya National Statistical System. The concepts, definitions and methods have been researched to ensure conformity with international best practices in order to accord data and information international comparability. The process of preparing the compendium involved consultation with the stakeholders to get their views and input and give the final product wider acceptability. The compendium is organized around the themes normally covered in official statistics. The resultant document puts together statistical concepts and definitions in chapters dealing with major economic themes.

In this first edition of the compendium, attempt has been made to compile quite a comprehensive document. However, it is acknowledged that the work is not exhaustive and we may have left out concepts that some stakeholders deem important. Such stakeholders are encouraged to bring the omission to our attention. The field of statistics is live and grows overtime as other important themes in society emerge. It is therefore hoped that future versions this compendium will incorporate emerging themes and concepts. We are grateful to all the stakeholders who have contributed to the completion of this compendium. We trust it will advance greater harmonization of concepts and comparability of information.

**A. K. M. Kilele, MBS**  
**DIRECTOR GENERAL**

## **1. GENERAL CONCEPTS AND DEFINITIONS**

This part of the Compendium outlines the general concepts and definitions used in the National Statistical System (NSS) in Kenya. It is not exhaustive but it gives some of the more common concepts that are generally applied in official statistics.

### **1.1 Population**

This term applies to the totality of all units of interest in a study or investigation at a given time in a given area.

#### **1.1.1 Population Size**

The total number of persons/units in a specified area at a specified point in time

#### **1.1.2 Population Distribution**

The arrangement of the population in space at a given time, that is geographically or among the various types of residential areas.

#### **1.1.3 Population Structure**

The distribution of the Population by sex and age groups

#### **1.1.4 Population Pyramid**

A diagram showing the comparison of a human population by sex and age at a given time, consisting of a pair of histograms, one for each sex, laid horizontally in ascending order of age groups with a common base. The diagram is intended to provide a quick overall comparison of the age and sex structure of the population.

#### **1.1.5 Population Change**

This refers to the increase or decrease of the total population or one of its structural units within a given time interval. The components of change in total population are births, deaths and migration.

### **1.2 Census**

The comprehensive total count of units of interest at a given time in a given area defined territory/country. Examples of censuses include Population and Housing Census, Agricultural Census, Livestock Census, Census of Business Establishments, etc.

### **1.2.1 Population Census**

This is the process of collecting and processing of basic social, demographic, and economic data for the entire population of the country. It normally takes place every 10 years. In Kenya it takes place every ten years on the night of 24/25 August. There are two types of Population Census:

### **1.2.2 De facto Population Census**

The collection of basic social, demographic and economic data for all people who will have spent a specified night in the area. It is like taking a snapshot of the people in the area on that census night.

Practically, the enumeration of people is done at household level or institution level (like a dormitory in a school, a ward in a hospital, a cell in a prison etc.) At this level a de facto census involves counting people who will have spent a specified night in a household or an institution.

Special categories of people like those who will have spent the night fishing or working as security personnel are assumed to have spent the specified night in their respective usual households.

Care is taken to cover people who neither live in households nor institutions like street children, vagrants, people in hotels, people in transit at airports and those who will have been traveling at night.

### **1.2.3 De jure Population Census**

The collection of basic social, demographic and economic data for all the people who normally reside in the country. It will exclude visitors from other countries and include residents who will be outside the country at the time of enumeration.

At household or institution level the de jure census includes only the usual members. The problem with the de jure census is to define the "**usual member**" of a household or an institution. A common definition of a "usual member" of a household as used in the Kenya National Sample Survey and Evaluation Programme and the 1999 Population and Housing Census is "a person who has continuously stayed in the household for 6 or more months, during the last 12 months".

### **1.2.4 Housing Census**

The collection of information on the housing conditions for the entire household population.

### **1.2.5 Census Night**

The night preceding the population census, usually the night of 24<sup>th</sup> /25<sup>th</sup> August in the census year in Kenya.

### **1.3 Sample**

The selected portion of a population drawn to provide information on the population as a whole or units of interest.

#### **1.3.1 Sample Size**

The number of sampling units which are to be included in the sample. In the case of a multi-stage sample this number refers to the number of units at the final stage in the sampling.

#### **1.3.2 Sampling Unit**

An element or group of elements of a population, which is convenient for selecting samples. A sampling unit can be a group of persons, households or administrative areas.

#### **1.3.3 Sample space**

The set of all units from which a sample can be drawn.

#### **1.3.4 Sampling**

The process of obtaining a representative sample from a given population.

### **1.4 Sample Survey**

The study of a selected part of the population from which inference can be made about the population.

The types of sample surveys include;

#### **1.4.1 Longitudinal (Panel) Survey**

A survey where data is collected on the variables of interest from the selected sample repeatedly over time in order to study the trend of behavior of such variable.

#### **1.4.2 Cross-Sectional Survey**

A survey that collects data on variables of interest at a particular period of time. e.g. National Household Surveys.

### **1.5 Questionnaire**

A group or sequence of questions designed to elicit information upon a subject, or sequence of subjects, from a respondent.

## **1.6 Survey**

A relatively extensive and comparatively widespread study that uses interviews or self-administered questionnaires as the methods of collecting the data and where sampling techniques are employed to select the respondents or units of interest.

## **1.7 Sampling Frame**

A comprehensive list of distinct and distinguishable units within a population from which a sample is selected.

## **1.8 Sampling Design**

The mechanism used to select a sample. The sampling designs are divided into two broad categories: the random and non random sampling design. The types of sampling designs include:

### **1.8.1 Simple Random Sampling (SRS)**

Under SRS, the desired elements are selected by a chance or probability process and each element in the population has an equal chance of being selected/ chosen.

### **1.8.2 Systematic Sampling**

The elements are consecutively numbered and the first unit ( $k$ ) in the sample is selected randomly. The sample is then selected by taking the  $k$ th,  $(k + s)$  th,  $(k + 2s)$ th, ....., etc., where  $k$  is not larger than the sampling interval ( $s$ ). The sampling interval is obtained by dividing the total population by the sample size ( $n$ ).

For example to select a sample of  $n$  units, we take a unit at random from the first  $k$  units and every  $k^{\text{th}}$  unit thereafter. If  $s$  is 15 and the first unit drawn is number 20, the subsequent units are numbered 35, 50, 65 etc.

### **1.8.3 Random Sampling without Replacement**

The number that has been drawn/ selected is removed from the population for all the subsequent draws.

### **1.8.4 Random Sampling with Replacement**

At any draw all the members of the population are given an equal chance of being drawn no matter how often they have already been drawn.

### **1.8.5 Cluster Sampling**

This is where the elements are not selected individually but rather in groups, often based on proximity. This allows overcoming the constraints of costs and time associated with a much dispersed population.

NB: All the elements in the selected group are included in the study.

### **1.8.6 Stratified Sampling**

In Stratified Sampling, the population is divided into homogeneous sets or strata with respect to the characteristics being studied and a random sample is selected from each stratum independently.

### **1.8.7 Strata**

In stratified sampling the population of  $N$  units is first divided into non overlapping sub populations of  $N_1, N_2, \dots, N_L$  units respectively. These subpopulations are referred to as strata.

### **1.8.8 Quota Samples**

A sample, usually of human beings, in which each investigator is instructed to collect information from an assigned number of individuals (the quota) but the individuals are left to his personal choice. In practice this choice is severely limited by “controls”, e.g. s/he is instructed to secure certain numbers in assigned age groups, equal numbers of the two sexes, certain numbers in particular social classes and so forth.

### **1.8.9 Multi-stage Sampling**

A method where selection of the sample is carried out in several stages, i.e. primary units are regarded as a population from which sub-samples of secondary units are selected.

## **1.9 Statistical Error**

The variance/difference between the true population parameters and the estimated parameters using a sample.

### **1.9.1 Systematic Error**

Error reported consistently over time and/or between responding units (generally undetectable by editing). A phenomenon caused either by the consistent misunderstanding of a question on the survey questionnaire during the collection of data or by consistent misinterpretation of certain answers in the course of coding.



### **1.9.2 Sampling Error**

An error that results from sampling. It arises because observations are made on the basis of a sample rather than on a whole population under study.

### **1.9.3 Non Sampling Error**

An error that arises because of misinterpretation of questionnaires or failure to record the correct answers by interviewers and giving wrong answers by respondents. It is not in any way connected to the selected sample.

### **1.10 Estimate**

The approximate value (from the sample) of the true population parameters.

### **1.11 Indicator**

A pointer used specifically to shed light on a variable of interest. This variable may be demographic, social, economic or political.

#### **1.11.1 Rate**

The estimate that indicates percentage change in the variables of interest over two different periods of time. It shows the growth or decline in such variables. For instance Gross Domestic Product (GDP) growth rates, rate of inflation, population growth rates etc. It may also mean the amount of one variable considered in relation to one unit of another variable. For example, the speed given as kilometers per hour, the exchange rate in shillings per one US Dollar, etc.

#### **1.11.2 Ratio**

A mathematical relationship indicating the relative size of two numbers. It shows the magnitude of one quantity relative to the magnitude of another.

#### **1.11.3 Proportion**

A number in a particular group relative to the total number. For example the proportion of children aged 0-14 in the total population of Kenya.

#### **1.11.4 Parameter**

Any numerical value describing a characteristic of the population. An example of a parameter is the mode. The mode is the value in the population that occurs most frequently. Other examples of parameters are a population's mean (or average) and its variance.

#### **1.11.5 Statistic**

Any numerical value describing a characteristic of the sample.

#### **1.11.6 Variable**

The characteristic of a unit being observed that may assume more than one of a set of values to which a numerical measure or a category from a classification can be assigned (e.g. income, age, weight, etc., and “occupation”, “industry”, “disease”, etc

#### **1.11.7 Independent Variable**

A variable that you believe might influence your outcome measure. This might be a variable that you control, like a treatment, or a variable not under your control, like an exposure. A variable whose values are independent of changes in the values of other variables

#### **1.11.8 Dependent Variable**

In a research study, the variable that you believe might be influenced or modified by some treatment or exposure. It may also represent the variable you are trying to predict.

### **1.12 Statistical units**

A statistical unit is an entity about which information is sought and for which statistics are ultimately compiled. It is the unit at the basis of statistical aggregates and to which tabulated data refer. These units can be divided into two categories.

- (a) *observation units* – identifiable legal/organizational or physical entities which are able, actually or potentially, to report data about their activities;
- (b) *analytical units* – entities created by statisticians (also referred to as *statistical constructs*), often by splitting or combining observation units in order to compile more detailed and more homogeneous statistics than it is possible by using data on observation units. Analytical units are not able to report data themselves about their activities, but there exist indirect methods of statistical estimation including imputation of such data. Examples of

analytical units are unit of homogeneous production and local unit of homogenous production.

For operational purposes, a distinction is made between statistical, collection and reporting units. A *collection unit* is the unit *from which* data are obtained and by which questionnaire survey forms are completed. In fact, it is more a contact address than a unit. Sometimes the questionnaire is filled in by a central administrative office or an accountancy firm who provides this service to its client. Such information providing entities are collection units.

A *reporting unit* is the unit *about which* data are reported. Reporting units are those entities for which information is collected by means of questionnaires or interviews. Reporting units will, in most cases, coincide with the units for which statistics are compiled, like in the case of single-establishment enterprises where the enterprise and the establishment are identical. The reporting unit may or may not be the establishment. In the case of multi-establishment enterprises, however, the enterprise may make a separate return for each establishment, or each establishment may make a return for itself.

### **1.13 Size**

A size measure of a statistical unit is an important stratification characteristic, essential for sample design and grossing up techniques. In general, the size classes of statistical units can be defined in terms of physical units like employment or in monetary units like, turnover or amount of net assets. Monetary criteria can be used separately or in conjunction with employment criterion.

### **1.14 Time Series**

A pattern of information on variables, which is collected over a certain period of time to give a trend of such variables. It may be monthly, yearly etc. For example Consumer Price Index (CPI), etc.

### **1.15 Sex Ratio**

The ratio of the number of males to the number of females usually expressed as a percentage.

### **1.16 Homestead**

It is an isolated compound with one or more structures, and usually inhabited by one or more households. In most cases homesteads will be surrounded by fences, hedges, walls etc. A homestead may contain, for example, a hut or a group of huts. A manyatta will thus be considered a homestead. However, a wall/fence or hedge need not necessarily surround a homestead. For instance, boys' quarters, garage, kitchen etc may be part of a homestead whether or not they are surrounded by a fence/wall, etc. During

enumeration, the enumerators visit homesteads and identify the structures, dwelling units and households in them.

### **1.17 Household**

A household is a person or group of persons who reside in the same homestead/compound but not necessarily in the same dwelling unit, have a common housekeeping/cooking arrangement, and are answerable to the same household head. In short the answers to the questions: reside in same house/compound/homestead? Share cooking arrangements? And, Answerable to same head?...Should ALL be “YES”

### **1.18 Head of Household**

This is the most responsible/respectable member of the household who makes key decisions of the household on a day to day basis, whose authority is respected by all members of the household. It could be the father, the mother or a child, depending on the status of the household.

#### **1.18.1 Child Headed Household**

A household whose main decision maker or source of livelihood is below the age of 18.

#### **1.18.2 Male Headed Household**

A household whose primary decision-maker or source of livelihood (income) is a man.

#### **1.18.3 Female Headed Household**

A household whose primary decision-maker or source of livelihood (income) is a woman.

- **De facto female headed:** - household where the husband is not present and the wife becomes the main decision maker in his absence.
- **De jure female headed:** - Is the household where the main decision maker is a female who has never been married or is divorced or widowed.

### **1.19 Household Member**

A person who normally lives in a household and is either present or temporarily away from the household for a period of less than six months at the time of enumeration. This excludes visitors.

### **1.20 Respondent**

A respondent is the person who provides answers to the interviewer or the person who records the answers in a self-administered questionnaire. This person should be mature and well informed about the unit of enumeration and its characteristics.

### **1.21 Response**

An answer provided by the respondent during an interview/inquiry or the answer recorded by the respondent in a self-administered questionnaire.

### **1.22 Enumeration Area (EA)**

The smallest ground area, mapped with definite boundaries within which a study or interview has to be carried out. It can be a local administrative unit, part, whole or a combination of villages. Census enumeration areas demarcated during the mapping exercise (cartography) are examples. An EA should conveniently be covered by one enumerator in a given time period. EAs should therefore not have just enough number of enumeration units.

### **1.23 Enumerator**

A person who collects the required information from the enumeration area through interviews or any other method of obtaining information.

### **1.24 Vulnerability**

Measure of the extent to which a community, individual, structure, service or geographic area is likely to be damaged/disrupted/impoverished on account of its nature or location, by the impact of a particular disaster/hazard.

### **1.25 Natural Disaster**

A sudden, calamitous event such as earthquake, floods, volcanic eruptions, cyclones or landslides, or an on-going misfortune such as drought or desertification.

### **1.26 Risk Assessment**

Quantitative and qualitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence of and exposure to particular disasters.

## **2. SOCIAL STATISTICS**

### **2.1 Population Concepts**

Population data are essential in the allocation of resources and planning for interventions in various sectors such as health, education and agriculture. Without reliable population figures, it is difficult to make policies for the country. Population data is disaggregated to the lowest administrative levels as well as by region (rural/urban), and level of education among other socio-economic categories. There are close linkages between population growth rate and other demographic and social indicators. Population growth is an important factor in the planning process since this shows the demand for services such as education, infrastructure and employment among others.

#### **2.1.1 Population Size**

The total number of people enumerated at a given point in time in the country.

#### **2.1.2 Population Growth Rate**

The average annual rate of change of population size during a specified period. This is the rate at which population increases or decreases in a given year due to natural causes (births and deaths) adjusted for net migration.

#### **2.1.3 Age**

The difference between date of birth and any other date of reference commonly expressed in completed years. For example, a person who is 22 years and 11 months is recorded as having an age of 22 and not 23.

#### **2.1.4 Sex**

The category in which persons are grouped in reference to their reproductive functions. However, care should be taken when determining the sex of a person from either the physical appearance or attire or both especially children.

#### **2.1.5 Marital Status**

The term describes whether an adult person is married or not. If not married, it describes whether the person was married before. Categories under marital status include single, married, divorced, separated and widowed.

### **2.1.5.1 Marriage**

A union or bond between a woman and a man, who become husband and wife under the laws governing marriage. In Kenya, these laws include: The Customary Marriage; The Marriage and Divorce of Muslims Act; The Marriage of Africans Act; and The Hindu Marriage and Divorce Act. However, where a man and a woman are co-habiting, they should be regarded as married if they regard themselves to be so.

### **2.1.5.2 Monogamous Marriage**

A situation where couples live together as husband and wife in a one to one ratio (i.e. one man one woman).

### **2.1.5.3 Polygamous Marriage**

A situation where a man is living together with two or more women whom he regards as wives.

### **2.1.5.4 Cohabiting**

A man and woman are not related but are living together

### **2.1.5.5 Consensual Union**

A situation where a man and a woman staying together illegally and do not regard themselves as married.

### **2.1.5.6 Single**

A man or woman who has never been married or never been in a consensual union.

### **2.1.5.7 Divorced**

A situation where legally married couples legally separate for life and each stays alone thereafter. However either of the two (man or woman) can re-marry.

### **2.1.5.8 Separated**

A situation where married couples separate from each other without legalizing the separation, and hence can re-unite after some time. However they are still regarded as married from the legal point of view.

### **2.1.5.9 Widowed**

A situation where one partner in a marriage is dead. It applies to both monogamous and polygamous marriages. In case of polygamous marriages where the man is dead, the women are referred to as widows. However, where a man loses one of his many wives, he cannot be referred to as a widower!

### **2.1.6 Child**

Legally, a child is a person below 18 years.

### **2.1.7 Infant**

A newborn baby who has not attained his/her first birthday as per the reference period.

### **2.1.8 Adolescent**

A person between puberty and below 18 years.

### **2.1.9 Orphan**

A person (child) below the age of 18 who has lost either one or both biological parents. Single orphans are those children who have lost one parent while double orphans are those who have lost both parents.

### **2.1.10 Youth**

Any person aged between 18 and 30 years (As per the National Youth Council Statute 1993)

### **2.1.11 Adult**

A person aged 18 years and above, as per the Constitution of the Republic of Kenya.

### **2.1.12 Older Person**

A person aged 60 years and above. Previously such people used to be referred to as “the Elderly”

## **2.2 Education Concepts**

### **2.2.1 Education System**

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

### **2.2.2 Formal Education**

The education attained in pre-primary, primary, secondary schools and tertiary institutions that follow a given approved curricula.



### **2.2.3 Educational Programme**

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

### **2.2.4 Course**

A planned series of learning experiences in a particular subject matter.

### **2.2.5 Educational Level**

The highest level of formal training attained by an individual. In Kenya there are three levels of formal education namely primary, secondary and tertiary.

#### **2.2.5.1 Pre Primary Education**

Programmes at the initial stage of organized instruction, which are designed mainly to introduce groups of very young children, usually from age three or so, to a school-type environment - i.e. - to provide a bridge between the home and the school. Such programmes are variously referred to as Infant Education, Nursery Education, Pre-school Education, or Early Childhood Education.

#### **2.2.5.2 Primary Education**

Refers to educational programmes that are normally designed on a unit or project basis to give pupils a sound basic education. The entry age for primary education usually varies between five and seven years. In Kenya this level covers eight years of full-time schooling.

#### **2.2.5.3 Secondary**

The level of education immediately after the primary school level, based on at least four years of instruction and providing general or specialized instruction or both.

#### **2.2.5.4 Tertiary**

Education at the third level such as universities, teachers' colleges and higher-level professional schools requiring as a minimum condition of admission, the successful completion of education at the second level or evidence of the attainment of an equivalent level of knowledge.

### **2.2.6 Universal Primary Education (UPE)**

The Government policy allowing all children in the Primary School-going age to attend a tuition fees.

### **2.2.7 Compulsory Education**

A situation where children and youths of school going age are legally obliged to attend school for a given number of years.

### **2.2.8 School-age Population**

The number of children in the officially defined primary school age-group, whether enrolled in school or not.

#### **2.2.8.1 Pupil**

A learner of school going age who is enrolled in an educational pre-primary and primary programme.

#### **2.2.8.2 Student**

A student is a person of either sex, not classified as usually economically active, who attends any regular educational institution, public or private, for systematic instruction at any level of education.

### **2.2.9 Pupil-year**

A non-monetary measure of educational inputs or resources. One pupil-year denotes the resources spent to maintain a pupil in school for one year.

### **2.2.10 Pupil Cohort**

A group of pupils who enter the first grade of a level of education in the same school year and subsequently experience promotion, repetition, drop-out or successful completion, each in his or her own way.

#### **2.2.10.1 Pupil-Teacher Ratio**

Total number of pupils enrolled in a given school divided by the total number of teachers in the same school.

#### **2.2.10.2 Pupil-stance Ratio**

The number of pupils in the school divided by the total number of latrine stances in the school

#### **2.2.10.3 Pupil-textbook Ratio**

The number of pupils using a single textbook.

#### **2.2.10.4 Pupil-classroom Ratio**

Average number of primary school pupils per primary school classrooms.

#### **2.2.11 Graduate**

A student who successfully completes first tertiary education irrespective of whether one was full or part-time provided he/she fulfilled the awarding requirements of that institution.

#### **2.2.12 Grade**

A stage of instruction attained in one school year for a particular education level usually covered in one school year. For example Standard 5 (STD5) in primary level or Form 3 in secondary level.

#### **2.2.13 Class**

A stage of instruction in primary or secondary, that is, STD 1 through STD 8 in Primary and Form 1 through Form 4 in secondary.

#### **2.2.14 Informal Education**

A non-curriculum education based on people's experiences. Non-formal education may take place both within and/or outside an educational institutions set of skills, usually offered by an educational or training institution or programme for one or more pupils.

#### **2.2.15 Basic Education**

A whole range of educational activities that take place in different settings that aim at meeting basic learning needs as defined in the 1990 "*World Declaration on Education for All*" (Jomtien, Thailand, 1990). It thus comprises both formal schooling as well as a wide variety of informal public and private educational activities offered to meet the defined basic learning needs of groups of people of all ages.

#### **2.2.16 Basic Learning Needs**

Comprise both essential learning tools (such as literacy, oral expression, numeracy, and problem solving), and basic learning content (such as the knowledge, skills, values, and attitudes) required by human beings to survive, develop their full capacities, live and work in dignity, participate fully in development, improve the quality of their lives, make informed decisions, and to continue learning.

### **2.2.17 Complementary Education**

Any organized systematic and quality education and training program outside the formal school system that is consciously aimed at meeting specific learning needs of children, youth and adults. The goal of Complementary Education is to provide quality education and related services to all who by choice or circumstance are outside the formal education system.

### **2.2.18 Literacy**

The ability to write meaningfully and read with understanding in any language. A person who cannot write meaningfully and read with understanding in any language is considered illiterate.

#### **2.2.18.1 Adult Literacy**

Persons above 18 years who can read and write meaningfully with understanding in any language

#### **2.2.18.2 Literacy rate**

The proportion of the population above 10 years who can write and read with understanding, expressed as a percentage of the total population above that age.

### **2.2.19 Coefficient of Efficiency**

A measure of the internal efficiency of an education system. It is a ratio of the ideal number of pupil-years required for a pupil cohort to complete a level or cycle of education (e.g. the primary level) to the estimated total number of pupil-years actually spent by the same pupil cohort. The reciprocal of the coefficient of efficiency is the input-output ratio. A coefficient of one indicates maximum internal efficiency.

### **2.2.20 Educational Institution**

Any institution whose sole or main purpose is the provision of education. Such institutions are normally accredited, or sanctioned, by some public authority.

#### **2.2.20.1 Public Educational Institutions**

These are institutions controlled, managed and operated by a public education authority or government agency or by a governing body (Council, Board, Committee) most of whose members are either appointed by a public authority or elected by public vote.

### **2.2.20.2 Private Educational Institutions**

These are educational institutions controlled and managed by a private body or have a governing Board most of whose members are not selected by a public agency or elected by public vote. They may be operated by a non-governmental organization or association, a religious body, a special interest group, a foundation, or a business enterprise, on either a profit or non-profit basis. They operate within generally acceptable regulations (they have to follow guidelines followed by public institutions).

### **2.2.21 Teachers**

Persons who, in their professional capacity, guide and direct learners in gaining knowledge, attitudes and skills that are stipulated by a defined curriculum programme.

### **2.2.22 Full-time Teacher**

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

### **2.2.23 Part-time Teacher**

A person whose working load and associated financial remuneration are less than that of a full-time teacher.

### **2.2.24 Enrolment**

Those pupils who were admitted/re-admitted and fully recorded in the school's Register at the beginning of the first term. It includes all those pupils whose names appear on the school register (including repeaters and those temporarily absent).

### **2.2.25 Gross Enrolment Ratio (GER)**

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

### **2.2.26 Net Enrolment Ratio (NER)**

The number of pupils in the official school-age group expressed as a percentage of the total population in that age group. In Kenya, this includes all children attending classes from standard 1 to 8 that have their ages ranging from 6 to 14 respectively.

### **2.2.27 Enrollment Ratio**

The proportion of the population (in a specified age group) attending primary school to the total population in that age group.

### **2.2.28 Crude Enrollment Ratio**

The percentage of the total enrollment at all levels to the total population. It is obtained by total enrollment at all levels (crude enrollment) divided by the total population. Where, enrollment includes those attending primary, secondary and tertiary institutions.

### **2.2.29 Grade Specific Enrollment Ratio**

The ratio of the enrollment in a specific class to the total enrollment at all levels.

### **2.2.30 Transition Rate**

The proportion of pupils who progress from the final grade of one level to the first grade of the next level, expressed as a percentage of those enrolled in the final grade of the preceding school year. For example from primary, Standard 8 to Secondary, Form 1.

### **2.2.31 Dropout Rate**

The percentage of pupils enrolled in a given grade or cycle or level of education in a given school year who have left school either voluntarily or otherwise.

### **2.2.32 Repetition Rate**

The percentage of pupils who are enrolled in the same grade in the current school year as in the previous school year.

### **2.2.33 Retention Rate**

The number of learners completed, divided by the number of learners who started the qualification, excluding transfers out. For programmes of study of two years or more, retention is calculated across the whole programme, i.e. from the start to the end of the qualification. The retention rate (completers only) will be lower than the retention rate (inc. continuers) when a significant amount of learners are recorded as "continuing or intending to continue the learning activities leading to the qualification aim" beyond their expected end date.

#### **2.2.34 Early Childhood Development (ECD)**

Programmes offering a structured and purposeful set of learning activities either in a formal institution (pre-school) or as part of a non-formal childcare programme.

#### **2.2.35 Special Needs Education**

Educational interventions and other support designed to address special learning needs. This term has come to replace the older term 'special education', which referred mainly to the education of children with disabilities, usually in special schools or institutions. Moreover, the concept of 'children with special educational needs' now extends beyond those who have physical or other disabilities to cover also pupils who are not performing well in school for a wide variety of other reasons.

### **2.3 Health Concepts**

#### **2.3.1 Anthropometry**

The use of the age, height and weight of children less than five years to determine their nutritional status. This helps in determining the level of stunting, wasting, and under weight in these children. "Stunting" is a situation where one's height is too low for his/her age, "Wasting" is a situation where one's weight is too low for his/her height, while "Underweight" is where a person is too light for his/her age.

#### **2.3.2 Vital Events**

Events that are essential to the existence or continuity to life. Internationally, "Vital Events" include live births, deaths, foetal deaths, marriages, divorces, adoptions, legitimizations, recognitions, annulments, and legal separations. These vital events account for continuity or destruction of a population.

#### **2.3.3 Vital Statistics Registration System**

According to the *United Nations Handbook of Vital Statistics Methods*, a vital Statistics System can be defined as a system that includes the legal registration, statistical recording and reporting of the occurrence of, and the collection, compilation, analysis, presentation, and distribution of statistics pertaining to 'vital events'. These include live births, deaths, foetal deaths, marriages, divorces, adoptions, legitimizations, recognitions, annulments and legal separations."

The end products of the system that are used by statisticians/ demographers are, of course, the vital statistics and not the legal issues of the documents. It should be noted that countries with a Vital Statistics

Registration System do not necessarily register all the above events. In the case of Kenya only live births and deaths are notified/ registered, although the system experiences serious under coverage of qualifying vital events occurring in several districts [should this be replaced with counties?] of the country.

#### **2.3.4 Civil Registration**

The words "Vital Registration" and "Civil Registration" are sometimes used interchangeably. The word "Civil" means a community of citizens, their government, or their interrelations that are not military or religious. Civil registration may include the registration of other events in addition to "Vital events". For example registration of new residents or visitors at LC 1.[what is LC 1? It needs to be written in full]

#### **2.3.5 Live Birth**

The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which after such separation, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Each product of such a birth is considered live-born.

#### **2.3.6 Still Birth**

Birth of a baby showing no signs of life. For inter-comparisons of pre-natal mortality rates only such still born infants with a birth weight of 1000g or more are included.

#### **2.3.7 Birth Rate**

The number of live births observed in a population to the size of the population during the reference period. The rate is usually stated per 1000 and the most usual period is one year.

#### **2.3.8 Crude Birth Rate**

The total number of live-births per 1000 mid-year population of a specific year.

#### **2.3.9 Age-Specific Fertility Rate**

The number of live births in a given year per 1000 women or per woman in each child bearing age group from 15-19 up to 45 – 49.

#### **2.3.10 Total Fertility Rate**

Average number of children born alive to a woman during her life time if she were to bear children at each age in accordance with the prevailing age-specific fertility rates. It is obtained by summing all age-specific fertility rates for each year of the childbearing span.



### **2.3.11 Contraceptive Prevalence Rate**

The number of men / women of reproductive age who are using contraception per 100 men / women of reproductive age.

### **2.3.12 Death**

The permanent disappearance of all evidence of life at any time after live birth has taken place (post-natal cessation of vital functions without capability of resuscitation).

### **2.3.13 Crude Death Rate**

The number of deaths in a year per 1000 mid-year population of a specific year. It is the ratio of annual number of deaths occurring to the number exposed to the risk of dying during the reference period. The population could be that of a country, region, district **county?** etc.

### **2.3.14 Age Specific Death Rate**

The number of deaths at a specified age or age group per 1000 of the population of that age or age group.

Age-specific death rate =

$$\frac{\text{Number of deaths among residents age 25- 34 in an area in a year} \times 100,000}{\text{Average (for mid year) population age 25 – 34 in the area in that year}}$$

### **2.3.15 Cause Specific Death Rate**

A mortality rate indicating the number of deaths attributable to a specific health problem/disease in a given time period (usually expressed per 100,000 population per year).

### **2.3.16 Infant and Child Mortality Measures**

The childhood mortality measures are categorized by age at death as follows;

#### **2.3.16.1 Neonatal Mortality Rate**

The probability of dying within the first month of life

#### **2.3.16.2 Post neonatal Mortality Rate**

The arithmetic difference between infant and neonatal mortality

### **2.3.17 Infant Mortality Rate**

The infant mortality rate is the probability of a child born in a specified year dying before reaching the age of one if subject to current age –specific mortality rates. It is expressed as rate per 1,000 live births.

### **2.3.18 Under five mortality**

The under five mortality rate is the probability ( expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of five if subject to current age-specific mortality rates.

### **2.3.17 Foetal Mortality**

Death of foetus prior to complete expulsion or extraction from its mother e.g. still-births.

### **2.3.18 Maternal Mortality Rate**

The number of female deaths that occurred during pregnancy, child-birth, or within 42 days of termination of pregnancy, due to any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes per 100,000 live births in that year.

### **2.3.19 Life Expectancy**

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 /her life. This can be derived for either male or female and is, in most populations, slightly higher for females. The commonly used life expectancy is that at birth. Life expectancy can be derived at any other age based on the current death rates.

### **2.3.20 Survivorship**

The number of children with or without parents. However for policy purposes, children without parents are normally considered.

### **2.3.21 Survival rate**

The proportion of persons in a specified group (age, sex, or health status) alive at the beginning of an interval (such as 5-year period) who survive to the end of the interval.

### **2.3.22 Morbidity**

The frequency of disease, illness, injuries, and disabilities in a population.

- **Morbidity Incidence rate:** Number of persons contracting a disease per 1,000 population at risk, for a given period of time.
- **Morbidity Prevalence Rate:** Number of persons having a particular disease at a given point in time per 1,000 population at risk.

### **2.3.23 Disability**

Loss or limitation of opportunities to take part in every day life on equal level with others due to impairment.

### **2.3.24 Impairment**

Any loss or abnormality of psychological or anatomical structure of a function

### **2.3.25 Handicap**

A disadvantage for a given individual, resulting from an impairment or a disability

### **2.3.26 Out-Patient Department Utilization Rate**

The total OPD attendance (i.e. new attendance and re-attendance) per Catchment Population for the year in question (or catchment population divided by four for the quarter) expressed as a percentage. This rate is used to measure whether or not the functionality of the Out Patient Department (OPD) is good and whether the OPD services are being sufficiently utilized.

### **2.3.27 Bed Occupancy Rate (BOR)**

BOR is defined as the number of patient bed days in a given period (e.g. quarter or year) divided by the product of number of beds in an institution and number of days in time period under review. It is usually expressed in percentage terms. It measures the extent to which inpatient facilities are being utilized.

**2.3.28 Patient Bed Days:** The product of total admissions and total duration of stay i.e. patient days are calculated by counting the total number of days that patients were admitted to a health facility. This information is obtained from the in-patient register under length of stay.

### **2.3.29 Malaria-Case Fatality Rate in Children under 5 years**

Expressed in percentage terms, it relates to the number of deaths in children less than 5 years due to malaria in health unit (s) divided by the number of cases of diagnosed malaria among children under 5 years admitted to health unit (s) during a specified time period. This measure is used to determine whether or not malaria cases are being handled properly by health unit in-patient departments.

### **2.3.30 Acute Respiratory Infection (ARI) - Pneumonia Case Fatality Rate**

The ratio of the number of deaths due to pneumonia in health units to the number of cases of diagnosed pneumonia admitted to health units during a specified time period. The result is expressed as a percentage. Measures the extent to which ARI- pneumonia cases are being handled by the health unit inpatient departments..

#### **2.3.30.1 Diarrhoea Death**

A death from diarrhea among patients admitted to the in patient department. Deaths that occur in the OPD or outside of health units are not counted in this indicator. Diarrhoea is defined as three or more loose or watery stools (take the shape of a container) in a 24-hour period (see details in standard case definitions handbook)

#### **2.3.30 Diarrhoea Case Fatality Rate**

The number of deaths due to diarrhea in health units divided by the number of cases of diagnosed diarrhea cases admitted to health units during a specified time period. The rate is expressed in percentage terms.

### **2.3.31 Reproductive Health**

A complete physical, mental and social well being in all matters relating to reproductive system and its functions and processes. WHO includes the term not limited to absence of disease at all stages of life.

#### **2.3.31.1 Antenatal Attendance Coverage**

The number of new clients at Antenatal clinic per the total number of estimated pregnancies in the service population. The resultant ratio is expressed in percentage terms. It is also used to determine the extent to which pregnant women are attending the Antenatal clinic.

#### **2.3.31.2 Tetanus Toxoid (TT) Coverage**

Number of TT1, TT2, TT3, TT4, and TT5 doses given to pregnant women expressed as a percentage of the number of expected pregnancies in the same period.

The coverage of pregnant women attending Antenatal clinic with TT vaccine is an indicator of quality of care. Ideally, it is important to know the percentage of women in the entire country whose pregnancies (and therefore new-born babies) are protected.

### **2.3.31.3 Delivery in Health Facility**

Delivery that takes place in a health facility. Health facility includes government and NGO health centres, clinics and hospitals. Generally the birth takes place in a maternity ward. A delivery that occurs before arriving at a facility but is then seen at the facility for follow-up care is not included in this indicator.

### **2.3.31.4 Birth Attended by Skilled Health Staff**

The percentage of deliveries attended by personnel trained to give the necessary supervision, care and advice to women during pregnancy, labour, and the post partum period, to conduct deliveries on their own, and to care for the newborns

## **2.3.32 Child Health and Immunizations**

### **2.3.32.1 Immunization Rate**

Measures (as a percentage of the age group) the full vaccination coverage of children under one year of age for two of the target diseases of the Expanded Programme of Immunization (EPI) – measles and DPT (diphtheria, pertussis and tetanus).

### **2.3.32.2 BCG Immunization Coverage**

The number of children under one year who have received BCG immunization expressed as a percentage of the number of children under one year or expected births in the absence of true census of children under one year.

### **2.3.32.3 Measles Immunization Coverage**

The number of children under one year who have received the 1<sup>st</sup> dose of measles vaccines divided by the number of children under one year or expected births in the absence of true census of children under one year. It measures children under one year who receive their complete immunization schedule for measles.

### **2.3.33 Pandemic**

An outbreak of an infectious disease that affects people or animals over an extensive geographical area. An epidemic over a wide geographical area and affecting a large proportion of the population.

### **2.3.34 Epidemic**

The occurrence in a community or region of cases of an illness specific health related behavior or other health related events clearly in excess of normal expectancy. The community or region and the period in

which the cases occur are specified precisely. The number of cases indicating the presence of an epidemic varies according to agent, size, and type of population exposed; previous experience or lack of exposure to the disease; and time and place of occurrence. Epidemicity is thus relative to usual frequency of the disease in the same area, among the specified population, at the same season of the year. A single case of a communicable disease long absent from a population, or first invasion by a disease not previously recognized in that area requires immediate reporting and full field investigation; two cases of such a disease associated in time and place may be sufficient evidence to be considered an epidemic.

### **2.3.35 Doctor-Patient Ratio**

The number of patients per registered doctor

### **2.3.36 Catchment/Service Area**

Region from which the clients of a particular health facility are drawn. Such a region may be well or ill defined.

### **2.3.37 Community Health Workers**

Workers who respond to national definition of health care providers and are neither physicians nor midwives, nurses, dentists or pharmacists.

## **2.4 Gender and Related Concepts**

### **2.4.1 Gender**

Gender is a social-cultural construct of society that determines the identity, roles or functions, responsibilities, constraints, opportunities, entitlements and access to resources of women and men in the society. It therefore defines the position of men and women in their society.

### **2.4.2 Gender Analysis**

The process of identifying and classifying the roles of women and men in a given economic activity, their relations, access to and control over resources and benefits. It also includes a systematic examination of the different impacts (potential and/or actual) of a development programme on women and men.

### **2.4.3 Gender Desegregated Data**

Information about socially defined roles and activities of women and men in any social or economic activity.

#### **2.4.4 Sex Desegregated Data**

Data that is classified by sex i.e. female or male.

#### **2.4.5 Practical Gender Needs**

The different needs of women and men that when met, enables them carry out their socially and culturally defined roles efficiently and effectively. For example, young female needs to be taught what to do during the onset of her menstrual period and the body changes that occur to her. On the other hand younger males may need to be taught how to deal with a partner say when she has just become pregnant and a lot of changes are taking place around her.

#### **2.4.6 Strategic Gender Needs**

The needs of women and men that when met, enables them carry out those roles that are not socially and culturally ascribed to their sex.

#### **2.4.7 Mainstreaming**

Effective integration of cross-cutting policy themes such as gender, rights, environment, HIV/AIDS etc in a manner that ensures that they are integral to all development **this sounds incomplete**

#### **2.4.8 Gender Relations**

The relations between men and women are socially constituted and not derived from biology. Gender relations distinguish social relations between men and women from those characteristics which can be derived from biological differences.

#### **2.4.9 Gender Issues**

Refers to opportunities and constraints that affect both men and women in the society. It must be noted gender issues are not synonymous with women's issues.

#### **2.4.10 Women's issues**

Women's roles in the society are characterized by separation of male and female activities which lead to lack of access to information in areas where decisions are made. Women's needs are therefore not addressed by relevant organs at all levels due to poor representation and this affects mostly women.

#### **2.4.11 Gender-Aware Planning**

The increasing awareness of gender issues has led governments and organizations granting development aid to set up sections or focal points responsible for integrating women's and men's issues into the administration's projects. Collection of relevant data on gender issues and baseline studies provide a systematic knowledge about gender mainly in the project area. Research projects and pre-appraisal missions with broad terms of reference are useful to ensure projects proposed are relevant to local society and culture. Training of staff is necessary to ensure genuine and appropriate integration of women and men in development projects.

#### **2.4.12 Women in Development (WID)**

Women in Development is an approach that focuses on issues affecting women and strategies put in place to benefit women only. This approach was emphasized during the first women's conference in Mexico in 1975. During next meeting that was held in Nairobi in 1985, the Nairobi Forward Looking Strategies (NFLS) were adopted and to be implemented by member countries with a different approach that took into consideration issues affecting both women and men.

#### **2.4.13 Gender and Development (GAD)**

This gives a clear and practical manner showing how to involve women and men more actively in development. Understanding different needs and priorities of men and women enables policy-makers, planners and administrators to improve the impact of programmes and projects on their welfare.

#### **2.4.14 Gender inequality**

Gender inequality means unequal access to resources by men and women and therefore holds back the growth of individuals, development of countries and evolution of societies.

#### **2.4.15 Gender Gaps**

Gender gaps refer to the measure of differences between women and men in relation to their participation in different socio-economic sectors. Gender gaps come about as a result of unequal power relations between women and men. A gender gap favoring the male sex is called a pro-male gender gap while the opposite is called a pro-female gender gap.

#### **2.4.16 Equity**

Fairness and justice in the distribution of benefits, rights and responsibilities in society.



#### **2.4.17 Equality**

Absence of discrimination in resource allocation, power, opportunity, benefits or access to services on the grounds of a person's status, including gender.

#### **2.4.18 Empowerment**

Process of giving voice to the disenfranchised and allowing the poor and vulnerable to access the tools and materials they need to forge their own destinies by allowing each and every household the possibility of becoming producers of their own welfare, rather than consumers of others' charity.

#### **2.4.19 Gender Bias**

The separation of gender in a way that prefers one sex over the other.

#### **2.4.20 Social Construct**

The ways in which individuals and groups create their perceived reality. As an approach, it involves looking at the ways social phenomena are created, institutionalized, and made into tradition by humans. Their focus is on the description of the institution, the action and so on, not on analyzing causes and effects.

#### **2.4.21 Human Rights**

Inherent claims to social arrangements that protect each and every person from abuses and deprivation that would prevent them from attaining their full potential.

#### **2.4.22 Safety Nets**

Measures to restore the worth of those who had lost their dignity and sense of self-esteem.

#### **2.4.23 Social Development**

Human progress that is equitable and empowers poor and vulnerable groups to participate effectively in development initiatives that affect their lives

#### **2.4.24 Social Development Concerns**

These include issues such as exclusion, inequity, inequality, vulnerability, unemployment and powerlessness of different groups.

#### **2.4.25 Social Protection**

The formal and informal initiatives that provide assistance to the extremely poor individuals and households; services to groups who need special attention or would otherwise be denied access to basic services. It is an insurance to protect against risks and consequences of livelihood shocks; and equity to protect people against risks such as discrimination and/or abuse.

#### **2.4.26 Relative Gaps**

Relative gap measures the extent to which interventions are required or how much effort is required to achieve equal representation between women and men. The higher the value the greater the gap, and hence the greater the disparity.

#### **2.4.27 Gender Parity Index in primary level enrolment**

Ratio of girls to boys in primary, secondary and tertiary education is the ratio of the number of female students enrolled at primary, secondary and tertiary levels of education to the number of male students in each level. To standardize the effects of the population structure of the appropriate age groups, the Gender Parity Index (GPI) of the Gross Enrolment Ratio (GER) for each level of education is used.

#### **2.4.28 Gender Parity Index in secondary level enrolment**

Ratio of girls to boys in primary, secondary and tertiary education is the ratio of the number of female students enrolled at primary, secondary and tertiary levels of education to the number of male students in each level. To standardize the effects of the population structure of the appropriate age groups, the Gender Parity Index (GPI) of the Gross Enrolment Ratio (GER) for each level of education is used.

#### **2.4.29 Gender Parity Index in tertiary level enrolment**

Ratio of girls to boys in primary, secondary and tertiary education is the ratio of the number of female students enrolled at primary, secondary and tertiary levels of education to the number of male students in each level. To standardize the effects of the population structure of the appropriate age groups, the Gender Parity Index (GPI) of the Gross Enrolment Ratio (GER ) for each level of education is used.

**It seems the definitions given for 2.4.27, 2.4.28 and 2.4.29 are similar.**

#### **2.4.30 Time-Use Statistics**

Time-use statistics is the “Quantitative Summary of how women/girls and men/boys spend or allocate their time over a day, a week, and across seasons over a year”. Time-use statistics give a quantitative picture in the reference population of who does what (and what else simultaneously) during the day, for

how long, how often, at what time, in what order, where, with whom and for whom. The two key building blocks of time-use data are “the activity” and “the time”. Time-Use Statistics give an international measure of unpaid work and household production. These components are not considered in calculation of GDP as they are regarded non-economical activities.

## **2.5 Housing Concepts and Characteristics**

### **2.5.1 Building**

Any independent, free-standing structure comprising one or more rooms or other spaces, covered by a roof and usually enclosed within external walls or dividing walls which extend from the foundations to the roof. A building may consist of a roof with supports only, that is, without constructed walls. In some cases, a roofless structure consisting of a space enclosed by walls may be considered a building. It may be used as living quarters or for industrial purposes exclusively, or it may be partially used for both purposes. Buildings used entirely or primarily for agricultural purposes such as warehouses, stores, stables, barns, office building, etc. are classified as non-residential buildings.

### **2.5.2 House**

A house is a structure/building designed for residential or non-residential purposes or both and may be occupied or not.

### **2.5.3 Housing Unit**

A separate and independent place of abode, intended for habitation by one household, or one not intended for habitation but occupied as living quarters by a household at the time of enumeration.

### **2.5.4 Dwelling Unit**

A constructed unit or building comprising one or more rooms or other spaces, covered by a roof and usually enclosed within external walls or dividing walls, which extend from the foundation to the roof.

### **2.5.5 Permanent Dwelling Units**

These are built with durable materials (wall, floor and roof) that can maintain their stability for at least 15 years.

### **2.5.6 Semi-permanent Dwelling Units**

These are dwelling units built with a combination of durable and non-durable materials and require regular maintenance.

### **2.5.7 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 limited time only.

### **2.5.8 Residential building**

A building for which the major part (more than 50% of its gross floor area) is built for dwelling purposes, i.e. for habitation of households.

### **2.5.9 Non Residential building**

A building where more than 50% of floor space area is not intended for dwelling but for other purposes such as commercial or industrial or for provision of services i.e. factories, office building, government buildings, garages, warehouses, barns etc. It also covers buildings for persons living in institutions, such as hospital building, prisons, military establishments and so forth.

### **2.5.10 Condominium**

A multi-family dwelling in which each unit is individually owned but the land and common areas and facilities are owned and maintained by all owners on a pro-rated share basis.

### **2.5.11 Tenement**

A low-rent apartment building located in a slum, often ageing and in sub-standard condition, poorly maintained, over-crowded and meeting minimum safety.

### **2.5.12 Shack**

A small, rough hut or shabby old house.

### **2.5.13 Room**

A space in a housing unit or other living quarters enclosed by walls reaching from the floor to the ceiling or roof covering, or at least to a height of 2 metres, of a size large enough to hold a bed for an adult, that is at least 4 square metres. Passage ways, verandahs, lobbies, bath-rooms, and toilet rooms are not expected to be counted as rooms, even if they meet the criteria.

### **2.5.14 Kitchen**

A room or space in a dwelling, set apart for storage of food and various operations involved in preparation and service of meals and cleaning of dishes and cooking utensils.

### **2.5.15 Toilet**

An installation for the disposal of human excreta. This category includes three sub-categories;

#### **2.5.15.1 Flush toilet**

An installation connected with piped water, arranged for humans to discharge their wastes and from which wastes are flushed by water.

#### **2.5.15.2 Ventilated Improved Latrine (VIP)**

A latrine with a pipe inserted to get rid of foul smell and flies.

**2.5.15.3 Pit Latrine** is a toilet made by digging a ground hole for deposit of excreta.

#### **2.5.16 Tenure**

The right, terms or mode of holding or occupying property, whether owner-occupied, rental or co-ownership.

#### **2.5.17 "Tenant" or "Renter"**

An occupant of land or building in subordination to owner's title and with the owner's assent, who holds real estate under lease, who pays rent in return for the right to occupy land or building, who holds or possesses land or building by title.

#### **2.5.18 Rent**

The charge for use of land, buildings or other real property, payable by a tenant to a landlord at regular intervals, usually monthly.

#### **2.5.19 Institutions**

Any set of premises in a structure designed to house groups (usually large) of persons who are bound by either a common public objective or a common personal interest. In this type of living quarters, persons of the same sex frequently share dormitories. Hospitals, barracks, boarding schools, convents, prisons etc. fall within this category.

#### **2.5.20 Camps**

A set of premises originally intended for accommodation of persons with common activities or interests, e.g. military camps, refugee camps and camps established for the housing of workers in mining, agriculture, public works or other types of enterprises.

### **2.5.21 Slum**

A predominantly residential area characterized by high population densities, deteriorated buildings, littered streets, unsanitary and hazardous conditions and economic distress.

## **2.6 Governance and Crime**

### **2.6.1 Absolute discharge**

The court takes no further action against an offender, but the offender's discharge will appear on his or her criminal record.

### **2.6.2 Accused**

The person charged. The person who has allegedly committed the offence

### **2.6.3 Acknowledgement of service**

Form of reply to, or confirmation of, service of process

### **2.6.4 Acquittal**

Discharge of defendant following verdict or direction of not guilty

### **2.6.5 Act**

Law, as an act of parliament

### **2.6.6 Adjourned generally**

Temporary suspension of the hearing of a case by order of the Court (maybe for a short period, eg to next day or without a date being given).

### **2.6.7 Adjudication**

Judgment or decision of a Court or tribunal

### **2.6.8 Advocate**

A barrister or solicitor representing a party in a hearing before a Court

### **2.6.9 Affirmation**

Declaration by a witness who has no religious belief, or has religious beliefs that prevent him/her taking the oath, that the evidence he/she is giving is the truth

### **2.6.10 Appeal**

Application to a higher Court or authority for review of a decision of a lower Court or authority

### **2.6.11 Appeal court**

The higher court to which cases are referred when either the defense or prosecution wish to challenge the decision from a Magistrates Court.

### **2.6.12 Appellant**

Person who appeals

### **2.6.13 Arrest**

Lawful detention by a police officer.

### **2.6.14 Assisted person (legally)**

A party to legal proceedings who is receiving legal aid

### **2.6.15 Attorney general**

Government Minister responsible for legal advice to the Government and under whose docket falls the Public Prosecution Service.

### **2.6.16 Policing**

The first contact an offender has with the criminal justice system is usually with the police (or *law enforcement*) who investigate and make the arrest. Police or law enforcement agencies and officers are empowered to use force and other forms of legal coercion and legal means to effect public and social order. The term is most commonly associated with police departments of a state that are authorized to exercise the police power of that state within a defined legal or territorial area of responsibility.

### **2.6.17 Courts**

The courts serve as the venue where disputes are settled and justice is administered. With regard to criminal justice, there are a number of critical people in any court setting. These include the judge, prosecutor, and the defence attorney. The judge, or magistrate, is a person who should be knowledgeable in the law, and whose function is to objectively administer the legal proceedings and offer a final decision to dispose of a case.



### **2.6.18 Prosecutor**

The prosecutor is the lawyer who brings charges against an individual or corporation. It is the prosecutor's duty to explain to the court what crime was committed and to detail what evidence has been found which incriminates the accused.

### **2.6.19 Probation**

These are also sanctions which seek to limit a person's mobility and their opportunities to commit crimes without actually placing them in a prison setting. Many jurisdictions may require some form of public service as a form of reparations for lesser offenses.

### **2.6.20 Prisons**

Offenders are then turned over to the correctional authorities, from the court system after the accused has been found guilty. Like all other aspects of criminal justice, the administration of punishment has taken many different forms. The most publicly visible form of punishment in the modern era is the prison. Prisons may serve as detention centers for prisoners after trial. Punishment (in the form of prison time) may serve a variety of purposes. First, and most obviously, the incarceration of criminals removes them from the general population and inhibits their ability to perpetrate further crimes.

### **2.6.21 Prison term**

Many societies also view prison terms as a form of revenge or retribution, and any harm or discomfort the prisoner suffers is "payback" for the harm they caused their victims. A new goal of prison punishments is to offer criminals a chance to be rehabilitated. Many modern prisons offer schooling or job training to prisoners as a chance to learn a vocation and thereby earn a legitimate living when they return to society. Religious institutions also have a presence in many prisons, with the goal of teaching ethics and instilling a sense of morality in the prisoners.

### **2.6.22 Other forms of Punishment**

There are numerous other forms of punishment which are commonly used in conjunction or in place of prison terms. Monetary fines are one of the oldest forms of punishment still used today. These fines may be paid to the state or to the victims as a form of reparation. Probation and house arrest are also sanctions which seek to limit a person's mobility and their opportunities to commit crimes without actually placing them in a prison setting. Many jurisdictions may require some form of public service as a form of reparations for lesser offenses.

### **2.6.23 Execution or capital punishment**

This is still used around the world. Its use is one of the most heavily debated aspects of the criminal justice system. Although executions are still forms of sentencing offenders in Kenya, they are normally not effected.

### **2.6.24 Aftercare**

The probationary period following a person's release from a prison's facility. During this time the youth's behavior will be followed by the juvenile court, and he or she may be required to meet specific probationary obligations.

## **2.7 Crime**

### **2.7.1 Homicide**

The killing of human beings by another human being. It is the act of a human being, taking away the life of another human being. A homicide may be lawful.

### **2.7.2 Murder**

The illegal and intentional killing of another person by unlawful act or omission, with malice aforethought.

### **2.7.3 Robber**

Any person who steals something, and, immediately before or immediately after the time of stealing it, uses or threatens to use actual violence on any person or property in order to obtain or retain the things stolen, or prevent or overcome resistance to its being stolen or retained, is guilty of an offence.

### **2.7.4 Aggravated Robbery**

A robbery where a deadly weapon is involved. Deadly weapons include any instrument made or adapted for shooting, stabbing or cutting and any instrument which, when used for offensive purposes, is likely to cause death.

### **2.7.5 Simple Robbery**

A robbery where a deadly weapon is not involved or used.

### **2.7.6 Rape**

The act 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.

### **2.7.7 Theft**

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

### **2.7.8 Burglary**

The act of breaking into or entering at night, in a building, tent or vessel used as a human dwelling, with intention to commit an offence.

### **2.7.9 House Breaking**

Similar to burglary except that the breaking and entering is done during the day.

### **2.7.10 Assault**

The intentional application of force to the person of another without consent, or the threat of using force by some act of gesture if the person threatening has, or causes the person threatened to believe that he has the present ability to carry out his purpose.

### **2.7.11 Common Assault**

Assault where force involved or applied is slight for example pushing or slapping.

### **2.7.12 Aggravated Assault**

An assault that is involving grievous harm. Grievous harm means any harm which amounts to a maim or dangerous harm, or seriously or permanently injures the health or which is likely to injure health, or which extends to permanent disfigurement. Normally, an expert doctor is used to **this statement is incomplete.**

### **2.7.13 Domestic violence**

This includes sexual abuse, assault, battery, marital rape, or any action that causes the alleged victim to fear physical injury. It is important that these charges be handled properly, since if the matter arises again in connection with divorce proceedings or criminal assault charges, the court's prior verdict will bear on the current proceedings.

#### **2.7.14 Indecent Assault/Conduct**

Any person who, intending to insult the modesty of any woman or girl, utters any word, makes any sound or gesture or exhibits any object, intending that such word or sound shall be heard, or that gesture or object shall be seen, by such woman or girl, or intrudes upon the privacy of such woman or girl.

#### **2.7.15 Embezzlement**

The act of stealing any chattel, money or valuable asset, received or taken into possession by that person for or on account of an employer, master, association, religious or other organization.

Normally, a person accused of embezzlement should have committed the offence by virtue of being:

- a) an employee, servant or officer of Government or public body;
- b) a director, officer or employee of a company or corporation;
- c) a clerk or servant employed by any person, association or a religious or other organizations ; or
- d) a member of an association, religious or other organization.

#### **2.7.16 Forgery**

The making of false document with intent to defraud or to deceive.

#### **2.7.17 Uttering**

The act of knowingly presenting a false document.

#### **2.7.18 Fraud**

Includes cases of forgery, uttering, issuing false cheques, counterfeiting, causing financial loss and abuse of office.

#### **2.7.19 Defilement**

The act of having sexual intercourse with a girl under the age of eighteen years. Defilement can also mean:

- An attempt to have sexual intercourse with a girl under the age of eighteen years.
- Having carnal knowledge knowingly with a girl known to be an idiot or imbecile, or attempt to have carnal knowledge of her under circumstances not amounting to rape, but which prove that the offender knew at the time of the commission of the offence that the woman or girl is an idiot or imbecile.

### **3. AGRICULTURAL STATISTICS**

#### **3.1 Agricultural Concepts**

##### **3.1.1 Total Land Owned**

All land owned legally, traditionally or conventionally by members of the household or enterprise singly or jointly.

##### **3.1.2 Cultivable Land**

Land that can be put to use for crop farming purposes. This excludes land under permanent pasture, wood or forest and all other non-agricultural land put under residential use or for other enterprise activities.

##### **3.1.3 Cultivated Land**

This relates to the total land under crops.

##### **3.1.4 Land under Fallow**

The portion of cultivable land owned that is left to rest to regain its fertility.

##### **3.1.5 Land for Cultivation Leased in**

Land obtained legally for cultivation from the rightful owner for a period either of 49 or 99 years.

##### **3.1.6 Land for Cultivation taken on Rent**

Land obtained for cultivation from the rightful owner by another subject to terms and conditions agreed upon by the two parties.

##### **3.1.7 Land for Cultivation Leased out or given on Rent**

The portion of cultivable land that is given to others on lease, or rent.

##### **3.1.8 Land Tenure**

A system of owning land and interests in land. Land ownership in Kenya falls under 3 types, namely, customary, freehold, and leasehold.

### **3.1.9 Freehold Tenure**

A form of tenure which involves the holding of registered land in perpetuity or for a period less than perpetuity which may be fixed by a condition or enables the holder to exercise subject to the law, full powers of ownership of land.

### **3.1.10 Leasehold Tenure**

A form of tenure created by contract or by operation of law. It involves the derivation of rights from a superior title for a period of time, certain or capable of being ascertained and the enjoyment of such rights in exchange for specific conditions, including but not limited to, the payment of rent.

### **3.1.11 Customary Land**

Land owned through prevailing customs, traditions or tribal laws of the community.

### **3.1.12 Public Land**

Government land:

- a) used by the Government itself
- b) occupied by private entities on the basis of an agreement from the concerned authority for a temporary period till the government decides to take it over for building public utilities.

### **3.1.13 Squatter**

A person/holder who operates land without ownership title and without paying rent, or without retaining legal rights of land use.

### **3.1.14 Bona fide Occupant**

A bona fide occupant may be one of the following:

Any person who has settled on registered land twelve years consecutively without permission of the registered owner and unchallenged by the registered owner or his agent.

Any person who was settled by government/local government or their agents on registered land.

### **3.1.15 Agricultural Holding**

An economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form, size or location.

Single management may be exercised by an individual or household, jointly by two or more individuals or households, by a clan or tribe or a co-operative or government parastatals. An economic unit is under the same management and shares the same means of production such as labour, farm buildings, farm implements and machinery or drought animals. The holding may consist of one or more parcels located in one or more separate areas provided the parcels belong to the same economic unit. The requirements of sharing the same production means should be fulfilled to a great degree to justify the consideration of various parcels as components of one economic unit.

In the case of a family which lives and shares meals, all plots cultivated by that family will constitute one holding. On the other hand, if an area of land is cultivated by relatives who live separately, even though they share work on the land, each of them will normally know which plots belong to whom. In this case the total area is not a holding but several holdings depending on the number of persons having claim to several plots.

Some of the areas of the holding may be cultivated, fallow, under forest trees belonging to the holder or may be wholly or partly used for grazing livestock.

The following additional points will assist in clarifying the concept of Holding:

- a) There are holdings that do not have a significant area e.g. poultry units or piggery, hatcheries, for which a bit of area of land is not absolutely necessary.
- b) There are holdings that may be operated by holders who have other occupation in addition to being a holder.
- c) There may be holdings that are operated jointly by two or more individuals. Communal grazing is not considered a holding or part of the holding.
- d) Land used by the holder for agricultural production including land owned, land rented in but excluding land rented out.

### **3.1.16 Holder**

A person who exercises management control over the holding operations and takes major decisions regarding resource use. The holder has technical and economic responsibility for the holding and may undertake all responsibility directly or delegate responsibilities related to the day to day work management.

### **3.1.17 Parcel**

Any piece of land entirely surrounded by other land, water, a road, forest, etc. not forming part of the main holding. This definition implies that a parcel is a part of a holding, which is physically separate from the main holding.

### **3.1.18 Plot**

A piece of land within the holding on which a specific agricultural enterprise is carried out. A parcel may be made up of one or more plots.

### **3.1.19 Size of Holding (Total Holding Area)**

The combined area of all the parcels in a holding within a given area.

Land owned by the holder but rented to others should not be included in the total holding area.

- ❖ The holding area includes farmland, and land occupied by farm buildings if the house is located within the holding.
- ❖ Land area of the holder's house is also included in the total holding area if the house is not located off the holding and is not used solely for residential purposes.
- ❖ The total area of the holding practicing shifting cultivation should include area under crops during the reference period and area prepared for cultivation but not sown or planted at the time of enumeration. It should exclude land abandoned prior to reference period.
- ❖ Holders having access to communal grazing land should not include their estimated share of such land in their total holding area. The total holding area should be equal to total land area under various uses.

### **3.1.20 Acre**

An imperial unit of measure of land area, and it approximately equals to half of a standard football pitch. The exact area is slightly less than 4980 square meters (approximately 100 meters x 50 meters).

### **3.1.21 Agricultural Year**

For the purpose of time reference during the census/survey, a calendar year from January to December is considered an agricultural year.

### **3.1.22 Season**

A growing cycle of a crop. The first crop season normally refers to the growing cycle of crops that are planted and harvested in the first half of the year, occasionally extending up to the end of June. The



second crop season is generally the period between July and December. It should be noted that seasons are directly related with rains and are indirectly related with the growing cycle of crops.

### **3.1.23 Farmland**

Land used for agricultural purposes. Farmland consists of cropland, pasture land and grazing land.

### **3.1.24 Gross Cultivable Area**

All land area under the respective land-use classes. In addition to cropped area and other cultivated areas, it also includes uncultivated patches, bunds, footpaths, ditches, headlands, shoulders and shelterbelts.

### **3.1.25 Net Cultivable Area**

The difference between gross cultivable area and uncultivated patches, bunds, footpaths, ditches, headlands, shoulders and shelterbelts.

### **3.1.26 Area Harvested**

The total area from which the crop is gathered. Some temporary crops are grown more than once on the same land in the same agricultural year (successive crops). In such cases, the land is counted as many times as the crop is harvested to obtain area harvested for that crop. In reporting area harvested, net area concept is used for temporary crops and gross area concept for permanent crops. As explained before, net area harvested refers to area actually harvested: gross area harvested includes uncultivated patches, bunds, footpaths, ditches, headlands, shoulders, shelterbelts, etc.

### **3.1.27 Crop Area**

Refers to a surface of land on which a crop is grown.

### **3.1.28 Primary Crops**

These are crops which come directly from the land and without having undergone any real processing, apart from cleaning. They maintain all the biological qualities they had when they were still on plants.

### **3.1.29 Mixed Cropping**

They refer to crops inter-planted with other temporary or permanent crops.

### **3.1.30 Temporary Crops**

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

### **3.1.31 Perennial Crops**

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

### **3.1.32 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.

### **3.1.33 Permanent Crops of Productive Age**

This includes permanent crops already bearing fruit or otherwise productive. Most tree crops and some other permanent crops become productive after a certain age.

- ❖ Crops at that stage should be enumerated as "of productive age" even if, due to meteorological conditions or other reasons they have not yielded a harvest during the reference year.
- ❖ Senile or other trees of productive age but no longer productive, should not be enumerated if it is possible to identify them. It is important to classify trees into productive and non-productive age groups.

### **3.1.34 Cash Crops**

Crops grown specifically for sale. Examples of traditional cash crops are: coffee, cotton and tea among others. 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 (roses, vegetables, pineapples).

### **3.1.35 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 including exportation markets, e.g. Maize, Simsim, Beans, Soya Beans, etc.

### **3.1.36 Successive Cropping**

The growing of a given crop or a different crop on a specific plot in successive seasons in an agricultural year.

### **3.1.37 Pure Stand**

Where a single crop is cultivated alone in a plot. A pure stand crop may be either temporary or permanent.

### **3.1.38 Mixed Crops**

Mixed crops are two or more different temporary crops or two or more different permanent crops grown simultaneously in the same plot. The number, kind and proportions of crops in the mixture will generally be according to prevailing practices or to other factors such as soil, rainfall and other meteorological conditions.

### **3.1.39 Associated Crops**

Where a temporary and a permanent crop are grown together in the same plot at the same time.

### **3.1.40 Inter-planted Crops**

Crops planted between rows of another crop (e.g. sorghum or groundnuts between cotton 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.

### **3.1.41 Planted and Harvested Area (Current Year Production)**

It is important to distinguish between the planted area and the harvested area particularly in respect of the long-duration crops like cassava, yam, plantain 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 production for the current year should be related only to the harvested areas (a) and (b). For 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.

#### **3.1.42 Compact Plantation**

This includes plants, trees and shrubs planted in a regular systematic manner. Plants, trees or shrubs forming an irregular pattern but dense enough to appear compact are also considered "compact plantation."

#### **3.1.43 Fertilizer**

Any substance added to the soil to increase the amount of plant nutrients available for crop growth. They are divided into organic and inorganic fertilizers.

#### **3.1.44 Organic Fertilizer**

Nutrient sources of organic origin either natural or processed, containing at least 5% of one or a combination of the three primary nutrients (N; P<sub>2</sub>O<sub>5</sub>; K<sub>2</sub>O). These include farm yard manure, compost, green manure and seaweed. Farmyard manure refers to farm feaces and urine mixed with litter mainly straw, to absorb the urine. Compost is manure derived from decomposed plant remains, usually fermented waste plant material, such as straw, grass mowing, etc., heaped in alternate layers with lime, nitrogen and water added. Green manure is a crop, such as sand hemp mustard, grown specifically to be ploughed back into the soil to provide humus. Green manure crops are often planted before the rains.

#### **3.1.45 Inorganic or Chemical Fertilizer**

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.

#### **3.1.46 Pesticides**

A generic name for plant protection products. It refers to any substance used in agriculture intended to control, destroy, repel, or attract a plant pest. Any living organism that causes damage or economic loss or transmits or produces disease may be the target pest. Pests can be animals (such as insects or mice), unwanted plants (weeds), or micro-organisms (such as plant diseases). Pesticides include many different kinds of chemicals (organic and inorganic), and micro-organisms. The active substance has the desired toxic effect, though other ancillary materials present in the product are not always benign. There are also some pesticides without a definable active substance, which work mechanically or by smell.

### **3.1.46.1 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.

### **3.1.46.2 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.

### **3.1.46.3 Fungicides**

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

### **3.1.47 Irrigation**

Purposively providing land with water other than rain, for improving crop production. Uncontrolled land flooding by overflowing of rivers or streams is not considered irrigation. When rain-water or uncontrolled overflow from rivers and streams is collected and later used on the land for crop production, it is considered irrigation.

### **3.1.48 Drainage**

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

### **3.1.49 Livestock**

Domestic animals and birds kept or reared on a farm mainly for home use or profit including cattle, sheep, goats, pigs, horses, poultry, bees, rabbits, donkeys, etc.

### **3.1.50 Livestock System**

The general characteristics of livestock keeping practices. Different systems are identified:

a) Nomadic or totally pastoral - a practice of livestock keeping which involves moving from place to place in search of food, water and grazing land for animals.

b) Semi-nomadic or semi-pastoral – where livestock is kept by households that establish permanent residence and might also cultivate crops as a supplementary food source, but move herds on transhumance to assure forage and water.

c) Agro-pastoral - Livestock keeping and crop cultivation are carried out by establishment of farms or households with permanent residence.

d) Commercial Livestock System - where Livestock are kept in fenced farms on a commercial scale.

### **3.1.51 Livestock Population or Numbers**

The numbers of animals and birds present on the holding on the day of enumeration regardless of ownership. Livestock population excludes livestock temporarily absent or in transit at enumeration time.

### **3.1.52 Overgrazing**

This is a situation that occurs when plants are exposed to intensive grazing for extended periods of time, or without sufficient recovery period. It occurs as a result of grazing by livestock or wildlife to the point where the grass cover is depleted, leaving bare and unprotected patches of soil. It is a consequence of over-stocking beyond the current carrying capacity of an area.

### **3.1.53 Paddock**

The process of making paddocks on a farm. Paddocks are subdivision of a pasture designed to provide short-duration grazing followed by an appropriate (related to species, soil type and weather conditions) rest period for re-growth and stand maintenance.

### **3.1.54 Agricultural Inputs**

All substances or materials used in the production or handling of organic agricultural products. They include consumable and expendable inputs in agricultural production for both crops and livestock, for example fertilizers, seeds, veterinary drugs, etc.

### **3.1.55 Machinery and Equipment**

All the tools and Implements used in agricultural production. This could include items like tractors, ploughs, hoes etc.

### **3.1.56 Agricultural Transport**

The means of carrying agricultural goods of the holding, members of the holder's households, or workers from one place to another for agricultural purpose. These can include oxen, donkeys, bicycles, etc.

### **3.1.57 Machinery and Equipment Source**

The way the holder has obtained the right machinery and equipment.

- a) "Owned solely by the holder" refers to agriculture machinery and equipment that the holder has exclusive and full right to use, primarily for agricultural work on his holding.
- b) "Owned jointly by the holder and others" refers to agricultural machinery and equipment, the right of use of which the holder shares with others primarily for agricultural work on his holdings.
- c) Machinery and equipment owned by co-operatives, of which the holder is a member, are not included in this class.
- d) Machinery and equipment provided by the landlord, other holders, private contractors, co-operatives or government agency and owned by holder, either individually or jointly with others, but are provided by landlord private contractor, co-operative or government agency, without a fee for use in agricultural work on the holding.
- e) "Machinery supplied by private contractors" refers to machinery and equipment provided on a contractual basis by private enterprises.

### **3.1.58 Land Utilization**

The way land is utilized at the holding. The recommended broad categories of land utilization are:

- a) Arable land
- b) Land under permanent crop
- c) Land under permanent pastures
- d) Wood or forest land
- e) All other land.

**Arable land** refers to all land that can be used for growing crops. It includes all land generally under rotation whether it is under temporary crops, left temporarily fallow or used as temporary pastures. Total arable land may be divided into the following four classes.

- a) Land under temporary crops
- b) Land under temporary pastures
- c) Land temporarily fallow
- d) All other arable land.

**Land under Temporary crops** - This includes all land used for crops with a growing cycle of under one year, sometimes only a few months, which needs to be newly sown or planted for further production after the harvest.

Crops remaining in the plot for more than one year should also be considered temporary crops if harvesting destroys the plant (e.g. cassava and yams). Crops grown in rotation and therefore destroyed when the land is ploughed (e.g. grasses) should be considered temporary crops. Pineapple, bananas and sugarcane, for example, are sometimes grown as permanent or perennial crops and sometimes as annual crops, the respective areas should therefore, be classified as under temporary or under permanent crops as the case may be. In Kenya these crops take more than a year to mature. They are classified as permanent crops. The specialized cultivation of flowers should also be included in this category.

**Land under temporary pastures** - This refers to land temporarily cultivated, with pastures. Because some practical difficulties may arise, differentiating temporary from permanent pastures, it is suggested that such crops cultivated for a period of less than two years be considered temporary.

**Land temporarily fallow** - This is land at rest for a period of time before it is cultivated again. If the land remains fallow for more than two years, it might acquire certain characteristics, which would determine its inclusion in other major land-uses groups, such as "Permanent Pastures" (if it could be used for grazing) or "wood or forest land" (if it has become overgrown with trees and could be used as timber, firewood, etc.) or "all other land" (when it becomes wasteland). A maximum period of idleness, probably less than two years, should be specified. On the other hand a piece of land should not be considered temporarily fallow unless it has been, or is intended to be kept at rest for at least one agricultural year. If the time reference for the data falls at a time when sowing has not been completed, the area lying fallow at that time, but which will be put under crops soon afterwards, should be classified by the crops to be sown or planted and not as fallow land. Fallow land that is temporarily used for grazing should be classified fallow if the land is normally used for the cultivation of temporary crops.



**All other arable land** - Refers to all rotation land not put to any of the uses mentioned above during the reference year. This includes arable land temporarily damaged by floods, land prepared for cultivation but not sown because of unforeseen circumstances and abandoned land.

**Land under Permanent Crops** - This is land which is cultivated with crops which occupy it for a year or longer and which do not have to be destroyed after harvest. Land under trees, is included under this broad category (except land under forest trees, which should be classified under, "wood or forest land") Permanent pastures are excluded.

**Land under Permanent Pastures** - Means land used permanently (i.e. five years or more), seeded and cared for or grows naturally (grazing land). Permanent pastures on which trees and shrubs are grown should be recorded under this heading only if the growing of grass (naturally growing grass) is the most important used of the area.

**Wood or Forest Land** - Includes wood lots or tracts of timber, natural or planted, which have or will have value as wood, timber, or other forest products. Nurseries of forest trees should also be classified under this category. Wood or forest land used only for recreation purposes should be classified under "land not elsewhere specified."

**All other land** - Includes all other land not elsewhere specified, whether potentially productive or not. Generally it refers to unused land and areas under buildings, roads, parks, swamps, rocky areas, etc.

### **3.1.59 Forest Trees**

Trees grown to produce wood for industry, fuel, forage protection of other purposes, but not included among trees grown as permanent crops. Forest trees include bamboo and other woody vegetation used for above listed purposes.

### **3.1.60 Natural Forest Trees**

Forest trees that are growing in their natural habitat.

### **3.1.61 Plantation Trees**

Trees that are planted by the holder on the holding e.g. Eucalyptus trees.

### **3.1.62 Savannah Wood Land**

Vegetation, which is predominantly composed of grass interspersed with short bushes and occasional tall trees.

### **3.1.63 Shifting Cultivation**

Land utilization method where a particular piece of land is cultivated for a given number of years ( $x$ ), and then abandoned for a period (greater than  $x$ ), sufficient for it to restore its fertility by natural vegetation growth, before it is re-cultivated. The distinguishing characteristic of the shifting cultivation is that neither fertilizers nor manure is used to replace soil fertility.

### **3.1.64 Agro-ecological Zone**

A geographical area, which is fairly homogeneous with respect to climate, soils and general ecology. It may change from time to time in terms of area coverage depending on the researchers' needs.

### **3.1.65 Terracing**

This is a method of shaping of hillsides to create flatter levels that shelve water and soil for farming.

### **3.1.66 Mulching**

Providing any loose covering for exposed soils such as grass, straw, bark or wood fiber to help control erosion and protect exposed soil.

### **3.1.67 Farming Systems**

Refers to the classification of populations of individual farm types that have similar resource bases, enterprise patterns, household livelihoods and constraints, and for which similar development strategies and interventions would be appropriate.

## **4. ENVIRONMENTAL STATISTICS CONCEPTS**

### **4.1 Environment**

The totality of all the external conditions (physical, biological and socio-economic) affecting the life, development and survival of an organism.

#### **4.1.1 Environmental Impact Assessment (EIA)**

A systematic examination conducted to determine whether or not a project, policy, program, etc, will have any adverse impacts on the environment. The EIA also provides plans for mitigation of the adverse effects.

#### **4.1.2 Sustainable Use**

The present use which does not compromise the right to use the same resource (e.g. land, forest, water etc) by future generations.

#### **4.1.3 Conservation**

Management of human use of organisms or eco-systems so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations.

#### **4.1.4 Environmental Protection**

Any activity to maintain or restore the quality of the environment, through preventing the degradation of air, land, and water resources.

#### **4.1.5 Air Pollution**

The presence of contaminants or pollutant substances in the air at levels that do not disperse properly and interfere with the human health or welfare and other organisms or can produce other harmful environmental effects.

#### **4.1.6 Land Degradation**

The physical, chemical or biological impairment of the attributes of land.

#### **4.1.7 Alkalinization**

Soil degradation caused by the accumulation of alkaline water-soluble salts.

#### **4.1.8 Eco-system**

The complex of plant and animal communities and their inter-relations with each other and with non-living environment.

#### **4.1.9 Bio-diversity**

The total variety of life on earth in all its forms, levels and combinations. It includes diversity within genetic differences, species differences and eco-system differences in a given area.

#### **4.1.10 Biological waste**

Waste containing mostly natural organic materials (remains of plants, animals excreta, biological sludge from waste water treatment plants, etc).

#### **4.1.11 Biomass**

Total living weight (generally dry weight) of all organisms in a particular area or habitat. It is sometimes expressed as weight per unit area of land or per unit volume of water.

#### **4.1.12 Land Reclamation**

It is the process of returning land to productive state that might have been damaged by either man made processes (such as oil extraction, industrial waste dumping), or natural earth movements. Originally land reclamation was limited to the process of creating new, dry land on the wetlands and seabeds.

#### **4.1.13 Wetland**

An area which is permanently or seasonally flooded by water, where characteristic plants and animals have become adapted.

#### **4.1.14 Water Catchment Area**

An area from which rainwater drains into river systems, lakes and seas.

#### **4.1.15 Watershed**

An area separating one or more water catchments.

#### **4.1.16 Weather**

The day-to-day or sometimes instantaneous changes of atmospheric conditions of a given place or area.

#### **4.1.17 Climate**

The conditions of the atmosphere at a particular location or region over a long period of time. It is the long-term summation of atmospheric elements such as solar radiation, temperature, humidity, precipitation, atmospheric pressure, wind variations etc.

#### **4.1.18 Climatic Change**

A term normally used in reference to global warming due to greenhouse gas emissions from human activity. A systematic change in the long-term statistics of climate elements sustained over several decades.

##### **4.1.18.1 Greenhouse Gases**

Gases that trap the infra-red (heat) radiation in the earth's atmosphere, producing the greenhouse effect. The two major greenhouse gases are water vapor and carbon dioxide.

##### **4.1.18.2 Greenhouse Effect**

The trapping of infra-red (heat) radiation from the earth's surface in the atmosphere by the greenhouse gases.

#### **4.1.19 Global Warming**

The increase in the average temperature of the earth's atmosphere and oceans that has been observed in the recent decades. It is believed to occur as a result of the build-up of carbon dioxide and other greenhouse gases due to anthropogenic emissions.

#### **4.1.20 Emission**

Discharge of pollutants such as gases, heat and sound into the atmosphere from sources such as smokestacks, vents, surface areas of commercial or industrial facilities etc.

#### **4.1.21 Afforestation**

An artificial establishment of a forest by planting or seeding in an area of non-forest land.

#### **4.1.22 Reforestration**

An artificial establishment of a forest by planting or seeding in an area which was originally a forest.

#### **4.1.23 Deforestation**

The process of replacement of forests by other land use or vegetation types.

#### **4.1.24 Fauna**

All animal life.

#### **4.1.25 Flora**

All plant life.

#### **4.1.26 Environmental Sanitation**

Improvement of conditions in households that affect human health by means of drainage and disposal of sewage, human excreta and refuse.

#### **4.1.27 Waste**

Any material (solid, liquid or gaseous) discharged into the environment without immediate use.

#### **4.1.28 Solid Waste**

Any useless and sometimes hazardous material with low liquid content. Solid wastes include municipal garbage, industrial and commercial waste, sewage sludge, wastes resulting from agricultural and animal husbandry operations and other connected activities, demolition wastes and mining residues.

#### **4.1.29 Biological Waste**

Waste containing natural organic materials (remains of plants, animal excreta, biological sludge from waste-water treatment, plants, etc) and capable of undergoing biological degradation.

#### **4.1.30 Agricultural Waste**

Any waste produced as a result of various agricultural operations. It includes manure and other wastes from farms, poultry houses and slaughter house, harvest waste, fertilizer run-offs from fields, pesticides that enter into water, air or soils, etc.

#### **4.1.31 Industrial Waste**

Liquid, solid and gaseous wastes originating from the manufacture of products.

#### **4.1.32 Species**

All the individuals and populations of a particular kind of organism maintained by biological mechanisms that result in their breeding only with their kind.

#### **4.1.33 Water Conservation**

The control and development of water resources, both surface and underground water, in a manner that promotes sustainable use.

#### **4.1.34 Water Pollution**

The presence in water of harmful and objectionable materials (obtained mainly from sewers, industrial wastes and rainwater run-offs) and in sufficient concentrations to make the water unfit for use.

## **4.2 Land Management and Mapping Concepts**

### **4.2.1 Registered Land**

Land that has been entered in the register of titles administered by the Commissioner of Land Registration. The owner of such land is called the “Registered owner”, but the land may also have “bona fide occupants” and/or “lawful occupants” or “tenants”.

### **4.2.2 Topographic Survey**

A survey leading to a map showing physical features of an area. Physical features include water bodies, landscapes, infrastructure, vegetation cover and other land uses in the area.

### **4.2.3 Map**

The representation of either the entire earth's surface or part of it in a reduced form showing physical and/or man-made features existing on it. It is a carefully designed instrument for recording, calculating, displaying, analyzing and understanding the interrelationships of mapped phenomena in their spatial context.

### **4.2.4 Cadastral Survey**

A survey leading to a map showing boundaries, marks tones and area of registerable land parcel/plot.

#### **4.2.5 Geographical Information System (GIS)**

A computer system capable of capturing, storing, editing, integrating, manipulating, analyzing and displaying data related to positions on the earth's surface. Typically, a GIS (or Spatial Information System) is used for handling maps. These may be represented as several layers where each layer holds data about a particular kind of feature. Each feature represented on the graphical image is referenced to the actual ground location.

#### **4.2.6 Global Positioning System (GPS)**

A satellite based navigation system used to determine the location of any point on the earth's surface with a high degree of accuracy. The level of accuracy depends on the type of receiver and its application.

#### **4.2.7 Cartography**

The art and science of the organization and communication of geographically related information in graphic form. It can involve all stages from data acquisition to presentation and use.

#### **4.2.8 Administrative Area**

Area or division of a country delineated by the government for purposes of administration. Administrative areas may be large, intermediate or small in size and are referred to as provinces, districts, divisions, locations, sub-locations and wards.

#### **4.2.9 Urbanization**

The process by which there is an increase in the proportion of people living in urban areas. The common indices used to describe urbanization are: population size, population density and level of administration.

#### **4.2.10 Rural Area**

An area that lacks most if not all the facilities/amenities found in urban areas. The population tends to be scattered.

#### **4.2.11 Peri-urban Area**

An area that somewhat mirrors the characteristics of an urban area but to a lesser extent. In this area, only some of the facilities found in urban areas exist; the population concentration is also moderate.



## **4.3 Water Supply**

### **4.3.1 Safe Drinking Water**

Clean water supplied from an improved water source, such as a borehole/shallow well fitted with a hand pump, or a protected spring or gravity flow scheme, or treated piped water, subject to maintenance of a safe drinking water chain. Bottled water packed by approved companies is also considered safe water.

### **4.3.2 Domestic Water**

Safe water for human consumption, washing and cooking by residents on the land where the source is. Water for not more than 30 livestock or water for irrigating subsistence gardens or for watering subsistence fishponds also falls under this category.

### **4.3.3 Access to Safe Water (also referred to as “water coverage”)**

The percentage of people within reasonable walking distance (1.5 km for rural and 0.2 km for urban) to an improved reliable water source. A reliable water source is one capable of supplying its beneficiaries, a minimum 20 litres per capita per day. Currently, rain water and bottled water do not constitute access rates.

### **4.3.4 Water Source Functionality Rate**

The percentage of improved water sources that are functional at the time of a spot check.

### **4.3.5 Water for Production**

Water for agricultural production (i.e. water for crops, livestock, fish farming) and water for rural industries.

### **4.3.6 Sanitation**

Encompasses the isolation/management of excreta from the environment, maintenance of personal, domestic and food hygiene, safe disposal of solid and liquid wastes, maintaining a safe drinking water chain and vector control.

## **5. ENERGY AND MINERAL RESOURCES CONCEPTS**

### **5.1 Electricity**

Electric power generated from water, mineral oil, coal, gas, solar energy, wind energy, atomic energy or any other means.

#### **5.1.1 Consumer**

Any person supplied or entitled to be supplied with electrical energy for personal, industrial and commercial use but does not include a person supplied with electrical energy for delivery to another person.

#### **5.1.2 Distribution**

The ownership, operation, management or control of distribution facilities for the movement or delivery of electricity to consumers.

#### **5.1.3 Installation**

The whole of any plant or equipment under one ownership designed for the supply or use of electrical energy.

#### **5.1.4 Public Lamp**

An electric lamp used for the lighting of a street or a public place.

#### **5.1.5 Transmission**

The ownership, operation, management or control of electricity transmission facilities for whatever purpose.

#### **5.1.6 Energy to GDP Ratio**

The total value of energy produced as a proportion of the national GDP.

#### **5.1.7 Electricity/Energy Loss**

The amount of electricity generated but not accounted for.

#### **5.1.8 Energy/ Electricity Use per Capita**

The average amount of energy/electricity used per person per year.

### **5.1.9 Electricity Tariff**

The price of a unit of electricity consumed.

### **5.1.10 National Grid Electrification Rate**

The rate (in percentages) at which electricity customers are connected to the National Grid.

## **5.2 Petroleum Exploration Concepts**

### **5.2.1 Appraisal Well**

A well being drilled to define the extent of an already discovered oil or gas accumulation.

### **5.2.2 Exploration (or Exploratory) Well**

A well being drilled with the object of discovering a new oil or gas accumulation or for the purposes of obtaining stratigraphical information which may assist in the discovery of a new oil or gas accumulation.

### **5.2.3 Fixed Platform**

A structure fixed to the lake bed from which petroleum exploration operations or operations for the recovery of petroleum are, or are to be carried out. Such a structure is immovable, or is not to be capable of being moved, from one position to another.

### **5.2.4 Formation Test**

A temporary completion of a well by means of special testing equipment for the purpose of evaluating the potential productivity of a reservoir and obtaining a sample of the reservoir fluids.

### **5.2.5 Mobile Drilling Unit**

A vessel or floating structure including a structure, any part of which may be lowered to the lake bed for the purpose of supporting the structure, that carries or includes equipment for drilling a well from the vessel or structure, or carrying out operations on it. It does not include a fixed platform.

**Mobile Platform** means a non-fixed construction platform or a mobile drilling unit.

### **5.2.6 Mud**

A drilling fluid consisting of any suitable mixture of water, oil, clay, or other material (or any mixture of any or all of those materials) commonly used in the petroleum industry, which will remove the drill

cuttings from the hole and will also control rock and reservoir pressures, stabilize disturbed formation conditions and seal formation into which fluid from the hole is escaping.

### **5.2.7 API Gravity**

A scale reflecting the density of a fluid such as crude oil, water or natural gas.

### **5.2.8 Barrel**

A common measure of crude oil containing 42 US.gal or 0.15899m<sup>3</sup>.

### **5.2.9 Basin**

A general term for any large area of tectonic origin with a thick accumulation of sedimentary rocks.

### **5.2.10 Production Well/Producer**

A development well specifically for the extracting of reservoir fluids.

### **5.2.11 Suspended Well**

A well in which all operations have been suspended before completion or abandonment for a considerable period of time, with the intention of resuming operations at a later date.

## **5.3 Mineral Sector Concepts**

### **5.3.1 Building Mineral**

Any rock, clay, gravel, laterite, murrum, sand, sandstone and slate, which is mined by a person from land owned or lawfully occupied by him or her for his or her own domestic use in Kenya for building, or mined by a person for his or her own use for road making.

### **5.3.2 Exploration Area**

The land covered by or acquired under an exploration license.

### **5.3.3 Holder**

A person to whom a license is granted under the mining laws, and includes every person to whom that license is lawfully transferred or assigned.

#### **5.3.4 Industrial Minerals**

Minerals that are commercially mined by a person for use in or industrially processed into finished or semi-finished products, and includes such other minerals as the Government may from time to time declare by notice published in the Gazette, to be industrial minerals. Examples of such minerals are barite, rock, clay, dolomite, feldspar, granite, gravel, gypsum, laterite, limestone, mica, magnesite, marble, phosphate rock, sand, sandstone, slate and talc.

#### **5.3.5 Location License / Small Scale Operations**

A license for prospecting and mining operations which do not involve substantial expenditure and use of specialized technology. Currently “substantial expenditure” means expenditure in excess of ten million Kenya Shillings necessary to bring a mine to production.

#### **5.3.6 Mine**

Any place, excavation or working where any operation connected with mining is carried on, together with buildings, premises, erections and appliances used for or in connection with such operation, and include a quarry where building minerals and industrial minerals are mined.

#### **5.3.7 Mineral**

Any substance, whether in solid, liquid or gaseous form occurring naturally in or on the earth, formed by or subject to, a geological process, but does not include petroleum, as defined in the Petroleum Exploration and Production Act, 1985, water and building mineral.

#### **5.3.8 Mineral Agreement**

An agreement entered into by the Government relating to matters and activities under exploration or a mining lease.

#### **5.3.9 Mineral Deposit**

A mass of naturally occurring mineral material of economic value.

#### **5.3.10 Mineral Right**

A prospecting license, an exploration license, a retention license, a mining lease or a location license.

### **5.3.11 Mineral Processing**

Procedures, such as dry and wet crushing and grinding of ores or other products containing minerals, to raise concentration of the substance mined.

### **5.3.12 Mineral Product**

A substance derived from an ore by mining or processing.

### **5.3.13 Mining Area**

Land subject to a mining lease.

### **5.3.14 Precious Minerals**

These include- precious stones, namely, agate, amber, amethyst, cat's eye, chrysolite, diamond, emerald, garnet, opal, sapphire, turquoise and all other substances of a similar nature to any of them. Precious metal, namely gold, silver, platinum, iridium, osmium, palladium, ruthenium, rhodium, or any other rare earth elements are also considered precious metal.

### **5.3.15 Prospect**

Intentionally to search for minerals and mineral deposits and includes any operations to test the mineral bearing qualities of any land or mining area.

### **5.3.16 Retention Area**

Land subject to a retention license.

### **5.3.17 Retention License**

A license applied for by a holder of an exploration license on grounds that identification of a mineral deposit within the exploration area is potentially of commercial significance and such mineral deposit cannot be developed immediately by reason of adverse market conditions, economic factors and other factors beyond their reasonable control, which are of temporary nature.

### **5.3.18 Mineral Dealer's License**

A license authorizing buying and selling of minerals.

### **5.3.19 Goldsmith's License**

A license authorizing manufacturing of any article from any precious mineral or from substance containing any precious mineral.

### **5.3.20 Mineral Rent**

A rent payable by an applicant for grant of a mining lease, location license, retention license or exploration license per unit area and thereafter annually on the anniversary of the grant until termination of the mineral right concerned.

### **5.3.21 Royalty**

An amount payable on the gross value of the minerals based on the prevailing market price of the minerals at such rates as prescribed in the Mining Regulations, 2004. Royalty is payable on minerals obtained in the course of prospecting, exploration, mining or mineral beneficiation operations.

### **5.3.22 Beacon**

A post with a notice board fixed on it erected for demarcating an area subject to mineral right.

## 6. ECONOMIC STATISTICS

### 6.1 Employment

#### 6.1.1 Economic activity

Economic activity as defined by United Nations Systems of National Accounts (SNA) means 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.

#### 6.1.2 Economically Active Population

Persons of working age (15-64 years) who contribute or are available to contribute to the production of goods and services.

#### 6.1.3 Labour Force

The current economically active population. It comprises all persons aged 15 to 64 years who, during the last 7 days were either employed or unemployed.

#### 6.1.4 Working Age population

The number of persons aged 15-64 years who are either employed, unemployed or outside the labour force. **The difference btw 6.1.3 and 6.1.4 is not coming out clearly**

#### 6.1.5 Working population

Number of persons aged 15-64 years who are employed.

#### 6.1.6 Labour Force Participation Rate

The number of persons aged 15-64 years in the labour force expressed as a percentage of the working age population.

#### 6.1.7 Work

The concept of work covers all persons undertaking economic activities either for pay, profit or family gain. As described in the System of National Accounts (SNA), the concept of economic activity includes all market production and certain types of non-market production.



## **6.1.8 Employment**

The term employment refers to performance of work as defined above. This term is used to measure the number of persons employed, including persons at work during a short reference period, and also persons temporarily absent from work but holding a job. There are different types of employment based on what is referred to as *Status in Employment*

## **6.1.9 Status in Employment**

The status in employment refers to status of an economically active person with respect to his/her employment during a specific time-reference period. Two mutually exclusive employment statuses are paid employment and self-employment. Self-employment includes working employers, own-account workers and unpaid family workers.

### ***6.1.9.1 Paid Employees***

They are persons working for a public or private employer and receive remuneration in wages, salary, commission, tips, piece-rates or pay in kind.

### ***6.1.9.2 Working Employers***

Are those persons who operate their own businesses, agricultural farms, engage in pastoralist activities or engage independently in a profession or trade, and hire one or more employees. They may operate as sole entrepreneurs or with partner(s) who may or may not be members of the same family or household.

### **6.1.9.3 Own account workers**

These are people who operate their own businesses, agricultural farms, engage in pastoralist activities, or engage independently in a profession or trade and hire no employees. They may operate as sole entrepreneurs or with partner(s) who may or may not be members of the same family or household. This category covers a large proportion of self-employed persons

### **6.1.9.4 Unpaid family worker (contributing family workers)**

Persons who work without pay in an economic enterprise operated by a related person.

### **6.1.9.5 Apprentice**

These are particular types of trainees. They may be directly engaged in producing goods and services or may simply be learning by observation without actually performing any significant productive tasks.

They may be paid a wage or salary under written or oral contract. Others may be given meals or living quarters or special tuition, in compensation for the work done or as an allowance unrelated to the work performed. Still others may not be paid at all and, in some cases, may actually be paying a fee in return for the acquired skill or knowledge.

#### **6.1.10 Unemployed**

Unemployed persons generally include those who, during the reference period, *were without work but currently available for work and actively seeking work*. However, if available for work, persons without work who had made arrangements to take up paid employment or to undertake self-employment activity at a date subsequent to the reference period were considered as unemployed. Persons who did not work in the reference period either because they were temporarily laid off or were out of season were also included in the number of the unemployed.

#### **6.1.11 Seeking Work**

The seeking work criteria was formulated in terms of active search for work (to seek paid or self-employment). A person must have taken specific steps in a specified recent period to obtain work in order to be considered as seeking work. A general declaration of being in search of work was not considered sufficient.

#### **6.1.12 Full-time Student**

This refers to one who is in regular educational institution and hence not available for work. They do not work at all but may help in household chores. Children who reported as having engaged in business to make a living for example selling sweets, groundnuts etc then this child is not a full-time student but employed.

#### **6.1.13 Retired**

Persons not engaged in any economic activity either due to age, medical reasons or voluntarily out of work. However, if a retired person runs a business then he was considered in other employment categories.

#### **6.1.14 Incapacitated**

This refers to one who is invalid and cannot work or do any activity. However a person who was handicapped was not necessarily included here if the handicap did not affect their economic way of life.

### **6.1.15 Homemaker**

These are those that reported that they were mainly involved in household chores such as cooking, laundry mainly but may have undertaken farm activities.

### **6.1.16 Job**

A job is defined as *set of tasks and duties*, which are carried out by, or can be assigned to, one person. Two jobs are similar if they require the performance of similar sets of tasks, that is, if they involve the same type of work. It is related to the term work, e.g. job seekers are persons looking for work, or have applied for a job. It is also related to occupation, e.g. applicants for a driver's job.

### **6.1.17 Occupation**

The term occupation refers to *the job held or the kind of work performed during the reference period* (or kind of work done previously if unemployed). Information on occupation provides a description of a person's job. Persons with two or more jobs are classified in the job at which they worked the greatest number of hours during the reference period.

### **6.1.18 Economic Sector**

For the purposes of classifying employment data into exhaustive categories, the Kenyan economy may be split into three sectors, namely, the modern sector, the informal sector, and the small-scale agriculture and pastoralists sector. These concepts are explained as follows:

#### **6.1.18.1 Modern sector**

Defined to include the entire public sector and private enterprises and institutions that are formal in terms of registration, taxation, and official recording (incorporated enterprises).

#### **6.1.18.2 Informal sector**

Also referred to as *Jua Kali*, covers all small-scale activities that are normally semi-organised and unregulated, and use low and simple technology. Self-employed persons or employers of a few workers largely undertake the informal sector activities. The persons that engage in such activities are mostly artisans, traders and other operators. Such businesses are normally carried out in a variety of work sites such as market stalls, residential houses, open yards, undeveloped plots, semi-permanent structures, and street pavements. Though their business names or businesses are not registered with the Registrar of

Companies, they may or may not have operating licenses from local authorities. The sector excludes agricultural farm activities.

### **6.1.18.3 Small-scale farming and pastoralist activities**

These are farm related economic activities that are mainly located in rural areas. Owing to their non-registration nature, they are neither in the modern sector nor are they in the informal sector.

Further, data pertaining to these sectors of the economy are categorized into public and the private sector activities, where:

#### **6.1.19 The Public Sector**

This covers all activities and establishments of the Central Government; its statutory corporations (wholly owned corporations or parastatals), registered companies in which the Government is a majority shareholder, and all Local Government authorities. Public sector activities are entirely in the modern sector of the economy,

#### **6.1.20 The Private Sector**

Consists of companies and businesses in the modern sector in which the Government does not own majority shares, the entire informal sector, co-operatives, non-profit making institutions and private households employing domestic servants and small-scale/subsistence farming and pastoralist activities.

#### **6.1.21 Compensation of employees**

Compensation of employees is defined as the total remuneration, in cash or in kind, payable by the establishment to an employee in return for work done by the latter during the reference period. It should be recorded on an accrual basis; i.e., it is measured by the value of the remuneration in cash or in kind which an employee becomes entitled to receive from an employer in respect of work done during the

#### **6.1.22 Working Patterns**

Depending on their daily or weekly working hours, persons work either on full-time or part-time basis. Further, both full-time and part-time employees work either on regular basis or intermittently. Those who work intermittently include seasonal workers and casual daily labourers. These working patterns are defined below.

##### **6.1.22.1 Full-time workers**

Persons who work for all the hours of work and for all the working days, as defined by the employer, except when on leave or otherwise officially away.

#### **6.1.22.2 Part-time workers**

Employees who voluntarily work fewer hours than is normal for the establishment, or division within it. The term includes only those part-time employees who are permanent employees; thus a person hired for three months part time is separately counted as a casual worker.

#### **6.1.22.3 Regular workers**

There are regular workers for both paid employees and self-employed persons. For paid employees, regular workers are those with stable contracts for whom the employing organisation is responsible for payment of relevant taxes and social security contributions and/or where the contractual relationship is subject to prevailing labour regulations. For self-employed persons, regular workers are those who work in their own enterprises or farms on a continuous basis.

#### **6.1.22.4 Seasonal workers**

They are persons engaged in activities only for specific periods of the year, i.e. engaged in seasonal activities such as coffee picking, planting, tourism, etc.

#### **6.1.22.5 Casual workers**

These are persons whose terms of engagement provide for payment at the end of each day and who are not engaged for a period longer than 90 days. They have no formal employment contract with the employer and their services may be done away without notice. Casual employees are generally engaged for manual work.

### **6.1.23 Type of Worker**

Workers are categorised into three types:

#### **6.1.23.1 Skilled, Qualified Workers**

Those who have served an apprenticeship, practice the trade learned or similar activity, and by reason of their knowledge and vocational capacity are given tasks which are particularly difficult, involving varied responsibilities or fields.

#### **6.1.23.2 Semi-skilled, Semi-qualified Workers**

Workers who can only perform their job after a period of instructions of several months in general and are given tasks - mostly specific to the industry - which are repetitive, are less difficult, and involve less responsibility.

#### **6.1.23.3 Unskilled, Unqualified Workers**

Workers who require no specific vocational training or only brief initiation and work on auxiliary tasks

#### **6.1.23.4 Working children and Child Labour**

Working children were defined as persons aged 5 – 17 years who were engaged in non-schooling activities either for pay, profit or family gain

#### **6.1.24 Hours of Work**

Hours of work were categorised in this survey into two types (a) usual/normal hours of work and (b) actual hours worked. The former refers to hours of work fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards.

#### **6.1.25 Wages and Salaries**

The concept includes gross wages and salaries relating to a given period include remuneration for time worked including overtime, piece-work, bonuses, remuneration according to the law for hours not worked (particularly holidays, sick leave and maternity), and extra payments for dirty, dangerous or unpleasant work and supplements for night work. Wages and salaries also include authors' royalties and payments to workers giving apprenticeship courses or themselves receiving training. On the other hand, wages and salaries do not include exceptional bonuses, travel expenses, the cost of special clothing or footwear, and social insurance payments.

relevant period, whether paid in advance, simultaneously or in arrears of the work itself. Compensation of employees does not include any taxes payable by the employer on the wage and salary bill i.e. payroll tax. Compensation of employees has two main components: (a) wages and salaries payable in cash or in kind ; and (b) social insurance contributions payable by employers

## **6.2 Income and Expenditure**

### **6.2.1 Income**

All receipts (in cash and in kind) in exchange for employment or in return for capital investment or transfer earnings.

### **6.2.2 Per Capita Income**

Also sometimes referred to as Per Capita GDP, it is the ratio of GDP to the total population. This is the average income per person in a given time period usually one year.

### **6.2.3 Household Income**

Household income covers all receipts that accrued to the household or its individual members. It is the sum of primary income (consisting of income from paid and self employment), property income (consisting of imputed rents of owner-occupied dwellings, interest received and paid, dividends received, and net rents and royalties received for the use of buildings, land, copyrights and patents), current transfers (consisting of social security benefits, pensions and life insurance annuity benefits, alimonies etc.), and other benefits received by all the members of the household.

### **6.2.4 Income from Paid Employment**

The term includes wages and salaries and other earnings received in cash and in kind on a regular basis. Earnings cover all payments that employees receive in respect of their work, whether in cash or in kind, remuneration for time not worked paid by the employer (excluding severance and termination pay) and other benefits and allowances. Other benefits and allowances include bonuses and gratuities, and housing and family allowances paid by the employer directly to his employee.

### **6.2.5 Gross Income**

It is income before taxes and other compulsory deduction such as social security contributions. Gross income from paid employment is value of wages or salaries plus all associated allowances and benefits before regular deductions are made. Gross income from farm or business enterprise consists of total revenue before taxation and depreciation allowance.

### **6.2.6 Household Consumption Expenditure**

The concept includes goods and services that are acquired or purchased for household use. It includes value of goods and services produced by the household and consumed by the household during the reference period i.e. consumption from own business stocks or from own agricultural production, imputed rent value of owner-occupied housing and gross rental value of free employer-provided housing occupied

by the household. The concept, however, excludes goods and services acquired for business purposes or for accumulation of wealth.

### **6.2.7 Business Expenses**

These include operating costs such as payments to hired labour in cash and or in kind, and other current expenses incurred by the economic activity, such as the purchase of raw materials, fuel, tools and equipment, rent and interest payments, transport costs, and marketing expenses.

### **6.2.8 Income from Self-employment**

This refers to net entrepreneurial income, i.e. return to the labour input of the self-employed. This is obtained by subtracting operating expenses from gross output. Gross output may be defined as value of all goods and services produced, including any part which has been retained for own consumption or given free of charge or at reduced prices to hired labour. For example, gross output of a farm would be the total value of the produce (i.e. value of produce sold plus value of stocks retained for own consumption and value of any produce given as part of wages to hired labour).

## **6.3. Consumer Price Index**

### **6.3.1 Acquisitions Approach**

An approach to CPIs in which consumption is identified with the consumption goods and services acquired by a household in some period (as distinct from those wholly or partially used up for purposes of consumption). Depending on the intended scope of the CPI, acquisitions may include not only goods and services purchased, but also those acquired by own-account production or as social transfers in kind from government or non-profit institutions.

### **6.3.2 Aggregate**

A set of transactions relating to a specified flow of goods and services, such as the total purchases made by resident households on consumer goods and services in some period. The term “aggregate” is also used to mean the value of the designated set of transactions.

### **6..3.3 Aggregation**



The process of combining or adding, different sets of transactions to obtain larger sets of transactions. The larger set is described as having a higher level of aggregation than the sets of which it is composed. The term “aggregation” is also used to mean the process of adding the values of the lower-level aggregates to obtain higher-level aggregates. In the case of price indices, it means the process by which price indices for lower-level aggregates are averaged, or otherwise combined, to obtain price indices for higher-level aggregates.

#### **6.3.4 Axiomatic, or Test Approach**

The approach to index number theory that determines the choice of index number formula on the basis of its mathematical properties. A list of tests is drawn up, each test requiring an index to possess a certain property or satisfy a certain axiom. An index number may then be chosen on the basis of the number of tests satisfied. Not all tests may be considered to be equally important and the failure to satisfy one or two key tests may be considered sufficient grounds for rejecting an index.

#### **6.3.5 Base Period**

The base period is usually understood to mean the period with which all the other periods are compared. The term may, however, have different meanings in different contexts. Three types of base period may be distinguished:

##### **6.3.5.1 Price Reference Period**

The period that provides the prices to which the prices in other periods are compared. The prices of the price reference period appear in the denominators of the price relatives, or price ratios, used to calculate the index. The price reference period is typically designated as period 0;

##### **6.3.5.2 Weight Reference Period**

**The** period, usually one or more years, of which the expenditures serve as weights for the index. When the expenditures are hybrid (i.e., the quantities of one period are valued at the prices of some other period), the weight reference period is the period to which the quantities refer.

##### **6.3.5.3 Index Reference Period**

The period for which the value of the index is set equal to 100. It should be noted that, in practice, the duration of the weight reference period for a CPI is typically a year, or even two or more years, whereas the CPI is calculated monthly or quarterly, the duration of the price reference period being a month or

quarter. Thus, the weight and price reference periods seldom coincide in practice, at least when a CPI is first calculated, although the price and index reference periods frequently coincide.

### **6.3.6 Basket**

A specified set of quantities of goods and services. In a CPI context, the set may comprise the actual quantities of consumption goods or services acquired or used by households in some period, or may be made up of hypothetical quantities.

### **6.3.7 Carli Price Index**

An elementary price index defined as a simple, or unweighted, arithmetic average of the sample price relatives.

### **6.3.8 Carry Forward**

A situation in which a missing price in some period is imputed as being equal to the last price observed for that item.

### **6.3.9 Chain Indexes**

An index number series for a long sequence of periods obtained by linking together index numbers spanning shorter sequences of periods.

### **6.3.10 Consistency in Aggregation**

An index is said to be consistent in aggregation when the index for some aggregate has the same value whether it is calculated directly in a single operation, without distinguishing its components, or whether it is calculated in two or more steps by first calculating separate indices, or sub-indices, for its components, or sub-components, and then aggregating them, the same formula being used at each step.

### **6.3.11 Consumer Price Index (CPI)**

A monthly or quarterly price index compiled and published by an official statistical agency that measures changes in the prices of consumption goods and services acquired or used by households. Its exact definition may vary from country to country.

### **6.3.12 Cost of Living Index (COLI)**

An index that measures the change between two periods in the minimum expenditures that would be incurred by a utility-maximizing consumer, whose preferences or tastes remain unchanged, in order to maintain a given level of utility (or standard of living or welfare). As consumers may be expected to change the quantities they consume in response to changes in relative prices, the COLI is not a basket index. The expenditures in one or other, or possibly both, periods cannot usually be observed. COLIs cannot be directly calculated but may be approximated by superlative indices.

### **6.3.13 Deflation**

The division of the current value of some aggregate by a price index (described as a deflator) in order to revalue its quantities at the prices of the price reference period.

### **6.3.14 Dutot Index**

An elementary price index defined as the ratio of the unweighted arithmetic averages of the prices in the two periods compared.

### **6.3.15 Elementary Aggregate**

The smallest aggregate for which expenditure data are available and used for CPI purposes. The values of the elementary aggregates are used to weight the price indices for elementary aggregates to obtain higher-level indices. The range of goods and services covered by an elementary aggregate should be relatively narrow, and may be further narrowed by confining the goods and services to those sold in particular types of outlet or in particular locations. Elementary aggregates also serve as strata for the sampling of prices.

### **6.3.16 Elementary Price Index**

An elementary index is a price index for an elementary aggregate. Expenditure weights cannot usually be assigned to the price relatives for the sampled products within an elementary aggregate, although other kinds of weighting may be explicitly or implicitly introduced into the calculation of elementary indices. Three examples of elementary index number formulae are the Carli, the Dutot and the Jevons.

### **6.3.17 Fisher Price Index**

The geometric average of the Laspeyres price index and the Paasche price index. It is a symmetric index and a superlative index.

### **6.3.18 Fixed Basket Indices**

A time series of basket indices that all use the same basket In a CPI context, the fixed basket usually consists of the total quantities consumed by the designated set of households over a period of a year or more.

#### **6.3.19 Fixed Weight Indices**

An abbreviated description for a series of weighted arithmetic averages of price relatives that all use the same weights. The weights are usually either actual or hybrid expenditure shares.

#### **6.3.20 Geometric Laspeyres Index**

A weighted geometric average of the price relatives using the expenditure shares of the price reference period as weights.

#### **8.3.21 Goods**

Physical objects for which a demand exists, over which ownership rights can be established and for which ownership can be transferred between units by engaging in transactions on the market.

#### **6.3.22 Hedonic Method**

A regression model in which the market prices of different products are expressed as a function of their characteristics. Non-numerical characteristics are represented by dummy variables. Each regression coefficient is treated as an estimate of the marginal contribution of that characteristic to the total price. The estimates may be used to predict the price of a new product for which the mix of characteristics is different from that of any product already on the market. The hedonic method can therefore be used to estimate the effects of quality changes on prices.

#### **6.3.23 Higher-Level Index**

An aggregate index as distinct from an elementary index.

#### **6.3.24 Household Budget Surveys (HBSs)**

Sample surveys of households in which the households are asked to provide data on, or estimates of, the amounts they spend on consumption goods and services, and for other purposes over a given period of time.

#### **6.3.25 Indexation**

The periodic adjustment of the money values of some regular scheduled payments based on the movement of the CPI or some other price index. The payments may be wages or salaries, social security or other pensions, other social security benefits, rents, interest payments, etc.

#### **6.3.26 Index Reference Period**

The period for which the value of the index is set at 100.

#### **6.3.27 Item**

An individual good or service in the sample of products selected for pricing.

#### **6.3.28 Jevons Price Index**

An elementary price index defined as the unweighted geometric average of the sample price relatives.

#### **6.3.29 Laspeyres Price Index**

A basket index in which the basket is composed of the actual quantities of goods and services in the earlier of the two periods compared, the price reference period. It can also be expressed as a weighted arithmetic average of the price relatives that uses the expenditure shares in the earlier period as weights. The earlier period serves as both the weight reference period and the price reference period.

#### **6.3.30 Linking**

Splicing together two consecutive sequences of price observations, or price indices, that overlap in one or more periods. When the two sequences overlap by a single period, the usual procedure is simply to rescale one or other sequence so that the value in the overlap period is the same in both sequences and the spliced sequences form one continuous series.

#### **6.3.31 Matched Products or Models**

The practice of pricing exactly the same product in two or more consecutive periods. It is designed to ensure that the observed price changes are not affected by quality change. The change in price between two perfectly matched products is described as a pure price change.

#### **6.3.32 Paasche Price Index**

A basket index in which the basket is composed of the actual quantities of goods and services in the later of the two periods compared. The later period serves as the weight reference period and the earlier period

as the price reference period. The Paasche index can also be expressed as a weighted harmonic average of the price relatives that uses the actual expenditure shares in the later period as weights.

### **6.3.33 Price Reference Period**

The period of which the prices appear in the denominators of the price relatives. See also Base period.

### **6.3.34 Price Relative**

The ratio of the price of an individual product in one period to the price of that same product in some other period.

### **6.3.35 Price Updating**

A procedure whereby the quantities in an earlier period are revalued at the prices of a later period. The resulting expenditures are hybrid. In practice, the price-updated expenditures may be obtained by multiplying the original expenditures by price relatives or price indices.

### **6.3.36 Probability Proportional to Size Sampling (PPS)**

A sampling procedure whereby each unit in the universe has a probability of selection proportional to the size of some known variable, such as the value of the sales of an outlet.

### **6.3.37 Probability Sampling**

The random selection of a sample of units, such as outlets or products, in such a way that each unit in the universe has a known non-zero probability of selection.

### **6.3.38 Quality Adjustment**

An adjustment to the change in the price of a product of which the characteristics change over time that is designed to remove the contribution of the change in the characteristics to the observed price change. In a CPI context, the adjustment is needed when the price of a replacement product has to be compared with the price of the product it replaces. In practice, the required adjustment can only be estimated. Different methods of estimation, including hedonic methods, may be used in different circumstances.

### **6.3.39 Quantity Relative**

The ratio of the quantity of a product in one period to the quantity of that same product in some other period.

#### **6.3.40 Rebasing**

Rebasing may have different meanings in different contexts. It may mean:

- changing the weights used for a series of indices; or
- changing the price reference period used for a series of indices; or
- Changing the index reference period for a series of indices.

The weights, price reference period and index reference period may be changed separately or at the same time.

#### **6.3.41 Rental Equivalence**

The estimation of the imputed rents payable by owner-occupiers on the basis of the rents payable on the market for accommodation of the same type.

#### **6.3.42 Replacement Product**

A product chosen to replace a product for which prices have been collected previously, either because the previous product has disappeared altogether or because it accounts for a diminishing share of the sales of the outlet, or the expenditures within the elementary aggregate.

#### **6.3.43 Re-Weighting**

Replacing the weights used in an index by a new set of weights.

#### **6.3.44 Sampling Frame**

A list of the units in the universe from which a sample of units can be selected. The list may contain information about the units, which may be used for PPS sampling. Examples of lists that may be used for retail outlets are business registers, telephone directories (“yellow pages”), local authority records, trade directories, etc. Such lists may not cover all the units in the designated universe and may also include units that do not form part of that universe.

#### **6.3.45 Scanner Data**

Detailed data on sales of consumer goods obtained by scanning the bar codes for individual products at electronic points of sale in retail outlets. The data can provide detailed information about quantities, characteristics and values of goods sold, as well as their prices. Scanner data constitute a rapidly expanding source of data with considerable potential for CPI purposes. They are increasingly used for purposes of hedonic analysis.

#### **6.3.46 Seasonal Products**

Seasonal products are products that either are not available on the market during certain seasons or periods of the year, or are available throughout the year but with regular fluctuations in their quantities and prices that are linked to the season or time of the year.

#### **6.3.47 Substitution**

The replacement of products by substitutes, typically in response to changes in relative prices. Rational utility-maximizing consumers, as price takers, typically react to changes in relative prices by reducing, at least marginally, their consumption of goods and services that have become relatively dearer and increasing their consumption of substitutes that have become relatively cheaper. Substitution results in a negative correlation between the quantity and price relatives.

**6.3.48 Substitution Bias** This is generally understood to be the bias that results when a basket index is used to estimate a cost of living index, because a basket index cannot take account of the effects on the cost of living of the substitutions made by consumers in response to changes in relative prices. In general, the earlier the period of which the basket is used, the greater the upward bias in the index; see also Representativity bias.

#### **6.3.49 Superlative Index**

A type of index formula that can be expected to approximate to the cost of living index. An index is said to be exact when it equals the true cost of living index for consumers whose preferences can be represented by a particular functional form. A superlative index is then defined as an index that is exact for a flexible functional form that can provide a second-order approximation to other twice-differentiable functions around the same point. The Fisher, the Tornqvist and the Walsh price indices are examples of superlative indices. Superlative indices are generally symmetric indices.

#### **6.3.50 System of National Accounts (SNA)**

A coherent, consistent and integrated set of macroeconomic accounts, balance sheets and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules. Household income and consumption expenditure accounts form part of the SNA. The expenditure data are one of the sources that are used to estimate expenditure weights for CPI purposes.



**6.3.51 Tornqvist Price Index:** A symmetric index defined as the weighted geometric average of the price relatives in which the weights are simple arithmetic averages of the expenditure shares in the two periods. It is a superlative index.

#### **6.3.52 Uses Approach**

An approach to CPIs in which the consumption in some period is identified with the consumption goods and services actually used up by a household to satisfy their needs and wants (as distinct from the consumption goods and services acquired). In this approach, the consumption of consumer durables in a given period is measured by the values of the flows of services provided by the stocks of durables owned by households. These values may be estimated by the user costs.

#### **6.3.53 Walsh Price Index**

A basket index in which the quantities are geometric averages of the quantities in the two periods. It is a symmetric index and a superlative index.

#### **6.3.54 Weight Reference Period**

The period of which the expenditure shares serve as the weights for a Young index, or of which the quantities make up the basket for a Lowe index. There may be no weight reference period when the expenditure shares for the two periods are averaged, as in the Tornqvist index, or when the quantities are averaged, as in the Walsh index. See also Base period.

#### **6.3.55 Weights**

A set of numbers summing to unity that are used to calculate averages. In a CPI context, the weights are generally actual or hybrid expenditure shares that sum to unity by definition. They are used to average price relatives, or elementary price indices; see the Appendix. Quantities of different kinds of products are not commensurate and not additive. They cannot serve as weights. The quantities that make up a basket should therefore not be described as quantity weights.

### **6.4 Poverty**

#### **6.4.1 Poverty**

The pronounced deprivation of well-being or welfare. Poverty has many different dimensions, ranging from material well-being (basic needs of life like nutrition, good health, shelter, education, etc) to lack of human rights, citizenship or social networks. In addition cultural values, beliefs or attitudes may place

some people in a disadvantaged position while a lack of political voice or physical insecurity can impoverish others. Economic factors such as low income, lack of assets, access to markets or public services can lead into poverty.

#### **6.4.2 Poverty Profile**

A description of how the extent of poverty varies across sub groups of a given population, characterized by, for example, their gender, geographical location, type of economic activity, source of income, etc.

#### **6.4.3 Priority Poverty Indicators**

Specific indicators that taken together provide an overview of the state of poverty in a given area. They may include head-counts and indicators of both income and social aspects of poverty. The priority income indicators include unskilled wage rates (urban and rural) and rural terms of trade. The priority social indicators include net primary school enrolment, under-five mortality rate, immunization coverage, child malnutrition (to be modified to become measurable), percentage of total public expenditures on basic social services, etc. Other social indicators include demographic indicators, life expectancy, total fertility rate maternal mortality rate, etc.

#### **6.4.4 Poverty Line**

A monetary measure determined at a given point of time in a given area meeting a minimum selection of basic requirements. Households/individuals whose incomes fall below a given level of poverty line or whose consumption level is valued at less than the value of a determined poverty line are classified as poor.

#### **6.4.5 Poverty Gap**

The difference between the poverty line and the mean income of the poor expressed as a ratio of the poverty line. When multiplied by the headcount index, it gives the poverty gap index.

#### **6.4.6 The Poverty Gap Index ( $P_1$ )**

A measure of the depth of poverty. It is the proportion by which an individual or a household is below the poverty line.

#### **6.4.7 Relative Poverty**

The position of an individual or household income compared with the average income in a given area.

#### **6.4.8 The Head-Count Ratio (HCR or $P_0$ )**

The percentage or proportion of persons taken to be poor, in relation to the total population in a given area. In other words, it is the proportion of the population whose standard of living is lower than the area-specific poverty line (usually measured in terms of income or consumption)

#### **6.4.9 The Gini Index**

Shows how close a given distribution of income is to absolute equality or inequality. The Gini coefficient is the ratio of the area between the 45-degree line and the Lorenz curve and the area of the entire triangle. As the coefficient approaches zero, the distribution of income or consumption approaches absolute equality and absolute inequality if it approaches 1.

#### **6.4.10 Absolute Poverty**

A condition of extreme deprivation of human needs, characterized by the inability of individuals/households to meet or access the minimum requirements for decent human well-being such as nutrition, health, literacy and shelter.

#### **6.4.11 Chronic Poverty**

A state of perpetual need due to lack of the basic necessities and means of production, social support and feelings of frustration and powerlessness. The major categories of the chronically poor include the disabled, widows, street kids, orphans, the elderly, landless, casual laborers, refugees and the internally displaced persons. Factors that maintain the poor in poverty include the lack of productive assets, exploitation, discrimination, lack of opportunities, low education, lack of skills, ignorance, weather, disempowerment, etc.

#### **6.4.12 Absolute Poverty Line**

The level of the standard of living measure that enables a household to meet its basic needs. It reflects the monetary cost of meeting basic food and non-food requirements of life.

#### **6.4.13 Relative Poverty Line**

A relative poverty line is a variation in average of total population consumption. It involves drawing an arbitrary relative line by identifying the proportions (like mean, median, or even a fraction of the mean) from expenditure or income data.

#### **6.4.14 The Standard of Living of a Individual/Household**

The ability for an individual/household to access his/her/its needs in accordance with their preferences i.e. basic needs such as minimum accommodation, food, medical care, education and sanitation.

#### **6.4.15 Expenditure Gap Ratio (EGR)**

The degree of poverty and the extent to which expenditure of the poor lies below the poverty line.

#### **6.4.16 Decomposable Poverty Index (DPI or P<sub>2</sub>)**

Measures the degree of inequality among the poor, the DPI was developed by Forster Greer & Thorbecke (1984) and used by World Bank (1993 and 1995). The DPI is considered conventional and measures the incidence of poverty and the degree of inequality among the poor using an aversion parameter and determines the proportionate decrease from the poverty line. It also shows the living standards and relates them to the population at large

### **6.5 Industrial Statistics**

#### **6.5.1 Economic activity**

Further to 6.1.1, industrial statistics characterises it as a combination of actions carried out by a certain entity that uses labour, capital, goods and services to produce specific goods or services. An activity is characterized by (i) an input of resources; (ii) a production process; and (iii) an output of products. By convention, one single activity is understood as a process resulting in a homogeneous type of products.

#### **6.5.2 Scope and structure of industrial sector**

Industrial statistics are statistics reflecting characteristics and economic activities of the units engaged in a class of industrial activities that are defined in terms of the International Standard Industrial Classification of All Economic Activities (ISIC Rev 4). The economic activities undertaken are primarily in the following areas:

- (1) Mining and quarrying (section B)
- (2) Manufacturing (section C),
- (3) Electricity, gas, steam and air conditioning supply (section D); and
- (4) Water supply; sewerage, waste management and remediation activities (section E).

#### **6.5.3 Mining and quarrying (Section B)**

This includes the activities relating to extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas).

#### **6.5.4 Manufacturing (Section C)**

This includes the physical or chemical transformation of materials, substances, or components into new products, although this cannot be used as the single universal criterion for defining manufacturing. As a general rule, the activities in the manufacturing section involve the transformation of materials into new products. Their output is a new product.

#### **6.5.5 Electricity, gas, steam and air conditioning supply (Section D)**

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.

#### **6.5.6 Water collection, treatment and supply (Section E)**

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 sewage.

#### **6.5.7 Enterprise**

An institutional unit in its capacity as a producer of goods and services is known as an enterprise. An enterprise is an economic transactor with autonomy in respect of financial and investment decision-making, as well as authority and responsibility for allocating resources for the production of goods and services. It may be engaged in one or more economic activities at one or more locations. An enterprise may be a sole legal unit.

#### **6.5.8 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

#### **6.5.9 Industry**

Industry refers to the economic activity of the establishment in which an employed person worked during the survey reference period, or last worked if unemployed. This activity is defined in terms of the kinds of goods produced, or services offered by the economic unit or establishment in which the person works.

### **6.5.10 Manufacturing**

The physical or chemical transformation of materials 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 workers home, and whether the products are sold at wholesale or retail.

### **6.5.11 Production Quantity**

The quantity produced of a homogeneous commodity from an establishment given in standard units of measurement in a given period of time.

### **6.5.12 Production Value**

The value of the quantities produced by an establishment in a given period of time. The value of production of each commodity should be the actual manufacturing cost of that item.

### **6.5.13 Unit of Measurement**

The units of measurement must be in S1 format e.g. Kg, Litres etc except in cases where such units may not be applicable e.g. in production of furniture the units may be given in numbers etc. The same unit of measurement should be adhered to strictly in respect of the quantity of each commodity.

### **6.5.14 Exports & Imports in Manufacturing**

Commodities crossing borders out and into the country

### **6.5.15 Manufacturing to GDP Ratio**

Ratio of manufacturing contribution to GDP

### **6.5.16 Producer Price Index (PPI)-Manufacturing**

PPI measures changes in prices of domestic producer goods and services. PPIs can broadly represent either Outputs or Inputs to the production process.

### **6.5.17 Production in Manufacturing Sector**

Quantity/Volume and Value of manufactured goods

### **6.5.18 Utilized Capacity**

Maximum production a factory/plant is producing at specified time

#### **6.5.19 Installed Capacity**

Maximum production as specified by the manufacturer

#### **6.5.20 Number of Manufacturing Businesses**

Number of firms engaged in manufacturing

#### **6.5.21 CO2 Emissions**

Quantity of CO2 emissions to the atmosphere

#### **6.5.22 Consumption of Ozone Depleting Substances (ODS)**

Amount of ODS used by industries in their manufacturing

#### **6.5.23 Compensation of employees**

Compensation of employees is calculated on the basis of the annual Labour Enumeration Survey and includes wages and salaries in cash, wages and salaries in kind and employers' social contributions.

#### **6.5.24 Intermediate Consumption**

Consists of the value of goods and services that are used as input in the production processes. It excludes the use of fixed assets and is valued at purchasers' prices i.e. the price that is payable by the purchaser.

#### **6.5.25 Output**

Output is sum of the total values of goods and service sold, bartered, used for payments in kind, including compensation of employees in kind, goods and services supplied by one establishment to another belonging to the same enterprise and changes in inventories of finished goods and work-in-progress.

#### **6.5.26 Value Added**

Value added at basic prices is the difference between output and intermediate consumption. The outcome when factors of production combine to produce goods and services. Technically Value Added is the difference between the value of production and the value of intermediate inputs use.

### **6.5.27 Activity code**

A 4-digit unique international number allocated to each kind of activity as explained in the United Nations International Standard Industrial Classification (ISIC).

### **6.5.28 Manufacturing Quantum Index**

A single number which gives the average value of a set of related manufacturing items expressed as a percentage of their average value at some point commonly known as base period. It is used to measure the change in some quantity/price, which we cannot observe directly. An index number is, therefore, limited to the measurement of changes in the magnitude from one situation to another

### **6.5.29 Base Period**

A reference period to which a series of index numbers relate usually expressed as a percentage

## **6.6 Trade Concepts**

### **6.6.1 Exports**

Outward flows comprising of goods and services leaving the customs territory of a country to the rest of the world.

### **6.6.2 Re-Exports**

Goods imported into the country and then exported in the same form or after minor operations like blending, packaging, drying and repairing.

### **6.6.3 Traditional Export Crops**

Primary export crops introduced to Kenya by the colonial white farmers for the production of raw materials for export to their home countries and include tea, coffee, pyrethrum and sisal. . Non-Traditional Exports are goods that have just recently featured in export trade such as textile and clothing, manufactured and horticultural exports.

### **6.6.4 Imports**

Inward flows comprising of goods and services entering the customs territory of a country from the rest of the world.

### **6.6.5 Customs Territory**

The territory in which the customs law of a state applies in full” (The Kyoto Convention).



#### **6.6.6 Domestic Exports**

Goods or services for export that are wholly or mainly of domestic origin.

#### **6.6.7 Export Tariff**

A levy on goods or commodities at the time they leave the customs territory of a given country.

#### **6.6.8 Harmonized Commodity Description and Coding System (HSCODE)**

The primary commodity classification based on the nature of commodities.

#### **6.6.9 Standard International Trade Classification (SITC)**

A classification of commodities according to their level of processing and their end use.

#### **6.6.10 Broad Economic Category (BEC)**

Defined in terms of SITC, it groups large economic classes of goods with reference to their end use.

#### **6.6.11 Trade Balance**

The difference between value of exports and imports for a given period of time.

#### **6.6.12 Bilateral Trade Agreement**

An agreement between two countries setting out the conditions under which trade between them will be conducted.

#### **6.6.13 Applied Tariff Rate**

The tariff rates imposed by customs when a good crosses the border and are usually lower than bound rates

#### **6.6.14 Barter Trade**

An exchange of actual goods or services for other goods or services estimated to have the same value.

#### **6.6.15 Common External Tariff (CET)**

The uniform tariff rates applied by member states of a customs union against non-member states

## **MACRO-ECONOMIC STATISTICS**

### **7.1 National Accounts**

#### **7.1.1 Gross Domestic Product (GDP)**

The total value of goods and services produced by resident producer units of a country for a specified period of time, usually one year. It is the sum of gross value added of all resident producer units (institutional sectors or industries).

#### **7.1.2 GDP at Market Prices**

The sum total of the gross values added of all resident producers at producers' prices, less subsidies on imports, plus all non-deductible Value Added Taxes (VAT) (or similar taxes).

#### **7.1.3 GDP at Current Prices**

The total value of goods and services valued at prices of the particular year of reporting. This is also referred to as nominal **GDP**.

#### **7.1.4 GDP at Constant Prices**

The total value of goods and services of the current year using prices of a determined base year.

#### **7.1.5 Per Capita GDP**

The average production per person of goods and services for a specified period i.e. one year. It is used to compare the relative welfare or standard of living in different countries in a particular period.

#### **7.1.6 Intermediate Consumption**

The value of all goods and services purchased for use in a given business and the cost of materials used.

#### **7.1.7 Gross Output**

The total value of goods and services of a producer which includes own goods, and/or services, income from rent or gifts received adjusted for stock changes.

### **07.1.8 Value Added**

The outcome when factors of production combine to produce goods and services. Technically Value Added is the difference between the value of production and the value of intermediate inputs use (i.e. Gross Output *minus* Intermediate Consumption).

### **7.1.9 Base Period**

A reference period to which a series of index numbers relate usually expressed as a percentage.

### **7.1.10 Gross Value Added at Basic Prices**

Output valued at basic prices, less intermediate consumption valued at purchasers' prices.

### **7.1.11 Gross Fixed Capital Formation**

Gross fixed capital formation is measured as the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets realised by the productive activity of institutional units. Expenditure on mineral exploration and military ware not used purely for war purposes are included in GFCF. However, intangible assets, such as copyrights, computer software etc, are not included due to unavailability of reliable data.

### **7.1.12 Fixed Assets**

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.

### **7.1.13 Consumption of Fixed Capital**

Consumption of fixed capital constitutes the decline in the value of the fixed assets owned by an enterprise, as a result of their physical deterioration and normal rates of obsolescence and accidental damage. In other words it is the wear and tear of an asset during the accounting period.

### **7.1.14 Private Consumption**

It constitutes a wide range of goods and services e.g., food, health and education services consumed by households. In addition, expenditures of non-profit institutions serving households are also included. The Classification of Individual Consumption by Purpose has been used to give a breakdown by purpose.

### **7.1.15 Per Capita Income**

The average income per person in a given time period usually one year. Sometimes referred to as Per Capita GDP, it is the ratio of GDP to the total population.

### **7.1.16 Expenditure**

Consumption, which includes all cash expenditure on goods and services, incurred by the household and establishment for consumption purposes. It also includes imputed value for own produced items consumed by the household

### **7.1.17 Capital Expenditure**

Expenditure incurred by a company which cannot be treated as a cost in calculating its profits. It is either paid for out of post-tax income or by raising external finance. It also includes purchasing of existing businesses and of patents and trademarks.

## **7.2 Government Finance Statistics**

### **7.2.1 Classification of the Functions of Government (COFOG)**

Classification of the government outlays by functions, or socio-economic objectives, that general government units aim to achieve through the outlays.

### **7.2.2 Economic classification**

The classification of government outlays used to identify the types of expense incurred when a government supplies goods and services to the community or redistributes income and wealth.

### **7.2.3 Expense**

Expense is a transaction involving exchange and transfer that reduces net worth of the government.

### **7.2.4 Revenue**

Revenue is a set of exchange and transfer transactions that increase net worth of the government.

### **7.2.5 Compensation of employees**

The expense involving total remuneration, in cash or in kind, payable to a government employee in return for work done during the accounting period, except for work connected to own-account capital formation

### **7.2.6 Use of Goods and Service**

An expense that involves purchase of goods and services for production of market and nonmarket goods and services *Plus* goods purchased for resale *Minus* the change in inventories of materials, work-in-progress, finished goods, and goods held for resale. The value is recorded when goods or services are actually used rather than when they were acquired

### **7.2.7 Interest**

Interest is the expense that a government unit (debtor) incurs for use of the principal outstanding, which is the economic value that has been provided by the creditor. Interest accrues continuously over period that the liability exists

### **7.2.8 Subsidies**

Subsidies are current transfers that government units pay to enterprises either on the basis of the levels of their production activities or on the basis of the quantities or values of the goods or services that they produce, sell, or import.

### **7.2.9 Current transfers**

Current transfers are voluntary transfers from the central government to other levels of government for the purpose their current expenditure

### **7.2.10 Capital Transfers**

Capital transfers are voluntary transfers from the central government to other levels of government for the purpose of their capital expenditure

### **7.2.11 Acquisition of Nonfinancial asset**

Transactions involving a monetary exchange for produced and non-produced fixed assets, inventories, valuables; most nonfinancial assets provide benefits either through their use in the production of goods and services or in the form of property income.

### **7.2.12 Acquisition of Financial assets**

These are transactions that entitles the government to a financial claim from a second unit; the financial assets includes participation of equity, monetary gold, and Special Drawing Rights (SDRs) allocated by the IMF.

### **7.2.13 Public debt redemption**

Total outlays during an accounting period towards principal repayment thus reducing the liabilities for the government

#### **7.2.14 Tax revenue**

Taxes are compulsory unrequited transfers to general government sector from resident households and enterprises.

#### **7.2.15 Value Added Tax (VAT)**

VAT refers to a consumption tax levied at each stage of production of goods and services based on the value added to the product at that stage.

#### **7.2.16 Excise Duty**

Tax levied on specific goods and commodities produced or sold within the country. The level of duty is dependent upon the Government policy to raise revenue, protect industries or discourage consumption.

#### **7.2.17 Import Duty**

A levy imposed on imported goods.

#### **7.2.18 Non tax revenue**

Includes certain compulsory transfers, such as fines, penalties, and most social security contributions

#### **7.2.19 Grants**

Voluntary unrequited transfers received/paid by government units from/to other government units or international organizations

#### **7.2.20 Stock of Domestic Debt**

The total stock of liabilities that the Government owes to residents

#### **7.2.21 Stock of External Debt**

The total stock of liabilities that the Government owes to non-residents

### **7.3 Banking and Currency**

#### **7.3.1 Banking**

A function where a licensed institution provides services of storing deposits (savings or current/checking deposits) on behalf of its customers, extending credit facilities to individuals, firms or government.

#### **7.3.2 Money**

Anything that members of a community are willing to accept in payment for goods or services. It is also a marketable good used as a store of value, medium of exchange and unit of account.

### **7.3.3 Currency**

Another term for money. It is a unit of exchange used to facilitate exchange of goods and services. Currency comprises notes and coins issued by the Central Bank or Government.

### **7.3.4 Loan**

The amount of money or securities supplied by one party (the lender) to a second party (the borrower) in a transaction in return for a promised future payment by the other. Such transactions normally include the payment of interest due to the lender as per agreed repayment schedules between the two parties.

### **7.3.5 Overdraft**

A short-term bank loan given to an account holder in a bank to withdraw more than the balance on the account. Generally, there is a charge fee for the provision of the overdraft facility.

### **7.3.6 Securities**

Securities include government debt, both long and short term, company shares, and company debt. Securities may be registered, where legal ownership depends on the entry in a register, normally run by a bank and the paper is merely evidence of ownership, or in bearer form, where the ownership is conferred by possession of the document.

### **7.3.7 A Promissory Note**

An unconditional promise in writing made by one person to another signed by the issuer of the note promising to pay on demand or at a fixed determinable future date a certain sum of money to a specified person or to his/her order or to bearer.

### **7.3.8 Bond**

A security with a redemption date over a year later than its date of issue. Firms, financial institutions or governments may issue bonds. They may have a fixed redemption date, an option for the borrower to repay at any date over a period.

### **7.3.9 Treasury Bill**

Short-term securities with maturities of 91 days, 182 days, 273 days, or 364 days.

### **7.3.10 Interest Rate**

The cost or price of borrowing, or the gain from lending, normally expressed as an annual percentage amount.

### **7.3.11 Dividend**

A payment of income by a company to its shareholders. Dividends are a form of property income received by owners of shares to which they become entitled as a result of placing funds at the disposal of firms/companies. Dividends are so called since a company is legally required to divide any sum available for distribution between its shareholders in proportion to the number of shares held.

### **7.3.12 Retained Reserves**

Sums of money set aside out of the profits of a firm/company that have not been distributed as dividends. They are created for the purpose of meeting future capital needs of the company through either a bonus or rights issue.

### **7.3.13 Devaluation**

A fall in price of a local currency in terms of other currencies. Less foreign currency can be bought with a unit of the currency that has been devalued. Devaluation makes exports cheaper abroad in terms of foreign currency and the imports dearer at home in terms of home currency hence it tends to improve the balance of trade.

### **7.3.14 Budget**

A statement of a government's planned receipts and expenditures for some future period, normally a year. A statement of actual receipts and expenditures for the previous period usually accompanies it. The annual budget statement in Kenya is a statement of the government's financial plans made in Parliament by the Minister for Finance.

### **7.3.15 Development Plan**

Documentation by a government planning agency of the current national economic conditions, proposed public expenditures, likely developments in the private sector, a macroeconomic projection of the economy and a review of government policies. Many developing countries publish five year development plans to announce their economic objectives.



**7.3.16 Cash Flow**

The pattern over time of a firm's or Government's actual receipts and payments.

**7.3.17 Projection**

A prediction made based on past and current observations.

**7.3.18 Indicative Planning Figures (IPFs)**

A set of forecasts produced by government of activity in various sectors, which would persuade firms that their own investment would be profitable.

## **8. TOURISM AND MIGRATION**

### **8.1 Tourism Concepts**

#### **8.1.1 Tourism**

The activity of persons traveling to and staying in places outside their usual environment for not more than twelve consecutive months for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited.

#### **8.1.2 Tourist**

Any person traveling to and staying in places outside their usual environment for less than 12 months for leisure, business and other purposes, whose main purpose of trip is not the exercise of an activity remunerated from within the place visited.

#### **8.1.3 Visitor**

Any person traveling to a place other than that of his/her usual environment for less than twelve months and whose main purpose of trip is other than the exercise of an activity remunerated from within the place visited.

#### **8.1.4 Tourist (Overnight Visitor)**

A visitor who stays at least one night in a collective or private accommodation in the place visited.

#### **8.1.5 Same Day Visitor**

A visitor who doesn't spend a night in a place visited.

#### **8.1.6 International Visitors**

Visitors whose country of usual residence are different from the country visited; these international visitors also include nationals residing permanently abroad, cross national borders.

#### **8.1.7 International Tourist**

A non-resident visitor who comes to the country for a pleasure trip, holiday, business, family affairs, mission, meeting and religious purposes and stays at least for one night in a collective or private accommodation in the country.

### **8.1.8 Domestic Visitors**

Visitors whose country of usual residence is the same country visited;

- they can be nationals or foreigners of this country
- They do not cross national borders

### **8.1.9 Inbound Tourism**

This is the tourism of non-resident visitors within the economic territory of the country of reference

### **8.1.10 Outbound Tourism**

The tourism of resident visitors outside the economic territory of the country of reference

### **8.1.11 Tourist Accommodation**

Any facility that regularly provides overnight accommodation for tourists. It is divided into *collective tourist establishments and private tourist accommodation*.

### **8.1.12 Collective Tourist Establishment**

Any accommodation establishments that provides overnight lodging for the traveler in a room or some other unit.

### **8.1.13 Private Tourist Accommodation**

Any form of accommodation that does not conform to the definition of collective tourist establishment.

### **8.1.14 Bed Nights**

The total number of nights spent by guests in an accommodation establishment over a given period of time. The following should be presented:

### **8.1.15 Bed-place**

The number of beds set up in the accommodation establishment, ignoring any extra bed(s) that may be set up by customer request. The term bed-place applies to a single bed, Double beds being counted as two bed-places.

### **8.1.16 Room Occupancy Rate**

Percentage number of room nights sold to the average number of room nights on offer for sale during a particular period. It shows the level of utilization of rooms.

### **8.1.17 Bed Occupancy Rate**

Percentage number of bed-places sold to the number of bed-places on offer for sale in a particular period. It shows the level of utilization of beds

## **8.2 Migration Concepts**

### **8.2.1 Migration**

The movement of persons from their usual environment to another place either to stay there permanently or temporarily. There are two broad categories of movements namely, internal migration and international migration.

### **8.2.2 Immigration**

The management of the flow of persons into and out of a country.

### **8.2.3 International Migration**

The movement of persons across national boundaries. It has two components, namely, emigration and immigration.

### **8.2.4 International Emigration**

The movement of a non-resident of Kenya into the country to settle permanently or temporarily.

### **8.2.5 Life Time Migrant**

A person who migrates from one place to another to stay there permanently.

### **8.2.6 Return Migrant**

A person who migrates from one place to another on a temporary basis.

### **8.2.7 Resident**

A person whose usual residence is in Kenya including those whose nationality is non Kenyan.

## **9. TRANSPORT, INFORMATION AND COMMUNICATION CONCEPTS**

### **9.1 Transport Concepts**

#### **9.1.1 Transport**

Transport is the movement of people and/or goods from one place to another using a given network/mode

#### **9.1.2 Traffic**

Movements by vehicles, aircraft, ships etc for passengers, freight or mail; departing or arriving at airports, stations, seaports, parks, etc.

#### **9.1.3 Domestic/Local Traffic**

The traffic performed between two points located in the same country/territory.

#### **9.1.4 International Traffic**

The traffic performed between the designated points in one country and points in another country/territory.

#### **9.1.5 Freight**

Any property carried on a transport mode other than mail, stores and baggage. For statistical purposes, freight includes express freight and parcels and diplomatic bags but not passenger hand luggage.

#### **9.1.6 Passenger**

Any person, excluding on-duty crews, who makes a journey. Infants even if carried in arms are included as passengers in Air Transport.

#### **9.1.7 Station/Port**

An area of land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival and departure of vehicles, trains or ships.

#### **9.1.8 Airport**

A defined area of land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

### **9.1.9 Aircraft**

Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of air against the earth's surface.

### **9.1.10 Aircraft Movement**

An aircraft take-off or landing at an airport. For airport traffic purposes one arrival and one departure is counted as two movements

### **9.1.11 Commercial Air Transport Flight**

The operation of an aircraft on one or more flight stages on a scheduled or non-scheduled basis where the aircraft is available to the public for the transportation of passengers and/or freight and mail, for remuneration and for hire.

### **9.1.12 Direct Transit Traffic**

Traffic, which continues its journey on the same aircraft on a flight having the same flight number as the flight on which it arrived. Direct transit traffic is not unloaded and reloaded at an airport it directly transits.

### **9.1.13 Domestic Airport**

Any airport not designated to handle international air traffic.

### **9.1.14 Domestic Flight**

A flight having exclusively domestic flight stages (airport), using the same flight number.

### **9.1.15 International Airport**

Any airport designated by the State in the territory of which it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, agricultural quarantine and similar procedures are carried out, whether such facilities are provided on a full time or part time basis.

### **9.1.16 International Flight**

A flight having one or more international flight stages, where all its flight stages use the same flight number.

### **9.1.17 Non-scheduled Commercial Air Transport**

Commercial air transport flights other than scheduled service flights.

### **9.1.18 Transfer or Indirect Transit Passengers**

Passengers arriving and departing on a different aircraft within 24 hours, or on the same aircraft bearing different flight numbers. They are counted TWICE: once upon arrival and once on departure.

### **9.1.19 Tonne-km**

The volume of cargo transported over a certain mode of transport multiplied by the distance travelled in kilometers

### **9.1.20 Passenger-km**

The number of passengers carried over a certain mode of transport multiplied by the distance travelled in kilometers

### **9.1.21 Pipeline Throughput**

The volume of petroleum products that are transported through the pipeline system in a given period of time. It has a meaning similar to that of capacity, and the two are often used as synonyms.

### **9.1.22 Deadweight Tonnes**

The weight of cargo, fuel, stores, passengers and crew carried by a ship when loaded to her maximum summer load line.

## **9.2 Information and Communication Technology Concepts**

### **9.2.1 Tele-density**

The number of landline telephones 100 persons living within an area. A tele-density greater than 100 means there are more telephones than people. Most third-world countries may have a tele-density of less than 10.

### **9.2.2 Tele-accessibility**

Metrics of specifically and often uniquely identified indicators for a certain region or population to measure access levels more accurately than teledensity

### **9.2.3 Mobile density**

The number of mobile subscribers per 100 inhabitants. It is obtained by dividing the number of mobile cellular phone subscribers by the total population multiply by 100.

#### **9.2.4 ISPs**

The acronym refers to Internet Service Providers

#### **9.2.5 Information and Communication Technologies**

“The means of generating, processing, transporting and presenting information” - (OECD)

#### **9.2.6 Data**

The raw material of information. Refers mostly to the information entered into, and stored within a computer or file.

#### **9.2.7 Data Collection**

The process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes.

#### **9.2.8 Data Processing**

Any process that converts data into information

#### **9.2.9 Data Storage**

Information stored electronically to be used at a given time.

#### **9.2.10 Information**

The result of processing, manipulating and organizing data in a way that adds to the knowledge of the person receiving it.

#### **9.2.11 Information Dissemination**

The systematic distribution of information or knowledge through a variety of ways to potential beneficiaries.

#### **9.2.12 Information Technology**

The methods and techniques used in information handling and retrieval by automatic means. These include computer hardware and peripherals, computer software and computer literacy



### **9.2.13 Computer**

A computer refers to a desktop or a laptop computer. It does not include equipment with some embedded computing abilities such as mobile cellular phone, personal digital assistants (PDAs) or TV sets.

### **9.2.14 Computer Hardware**

A comprehensive term for all of the physical parts of a computer.

### **9.2.15 Peripherals**

Any hardware device connected to a computer, such as a monitor, keyboard, printer, disk, tape, graphics tablet, scanner, joy stick, paddle and mouse.

### **9.2.16 Computer Software**

A generic term for organized collections of computer data and instructions, often broken into two major categories: system software and application software.

### **9.2.17 System Software**

Computer programs (instructions) that control, integrate, and manage the individual hardware components of a computer system.

### **9.2.18 Application Software**

Computer programs (instructions) that accomplish specific tasks for which people use computers, other than just running the computer system.

### **9.2.19 Computer Literacy**

Computer Literacy is the knowledge and ability a person has to use computers and technology efficiently. Computer literacy can also refer to the comfort level someone has with using computer programs and other applications that are associated with computers. Another valuable component of computer literacy is knowing how computers work and operate. Literacy, which refers to having knowledge and understanding, needs to be distinguished from competency, which refers to having a skill.

### **9.2.20 Communication Technology**

Technologies used to transmit data. There is a wide range of communication technologies available. These fall into two broad groups of either cable (land) based or wireless. Cable technologies include telephones and facsimiles. Wireless technologies include radio, television, microwave and satellite.

### **9.2.21 Network**

A group of two or more computer systems linked together

### **9.2.22 The Internet**

The internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used (not assumed to be only via a computer – it may also be by mobile phone, PDA, games machine, digital TV etc). Access can be via a fixed or mobile network.

### **9.2.23 An internet**

A network of other networks. The function of an internet is to move information from one Local Area Network (LAN), for example, to another LAN that may be geographically distant.

### **9.2.24 World Wide Web (WWW)**

A specific kind of internet interface that uses hyperlinks and multimedia documents. The WWW is a system of Internet servers that supports a collection of documents that are written and formatted using the same type of programming language, called Hypertext Markup Language, or HTML.

### **9.2.25 Bandwidth**

The amount of data that can be carried from one point to another in a given time period (usually a second). This kind of bandwidth is usually expressed in bits (of data) per second (bps). Occasionally, it is expressed as bytes per second (Bps). A modem that works at 57,600 bps has twice the bandwidth of a modem that works at 28,800 bps

### **9.2.26 Narrowband**

Narrowband includes analogue modem (dial-up via standard phone line), ISDN (Integrated Services Digital Network) < DSL at speeds below 256 Kbits/s, and mobile phone and other forms of access with an advertised download speed of less than 256 Kbit/s. Note that narrowband mobile phone access services include CDMA 1x (Release 0), GPRS, WAP and i-mode.

### **9.2.27 Fixed Broadband**

Fixed broadband refers to technologies at speed of at least 256 Kbit/s, in one or both directions, such as DSL (Digital Subscriber Line) < cable modem, high speed leased lines, fiber-to-the-home, power line, satellite, fixed wireless Local Area Network and Imax.

### **9.2.28 Mobile Broadband**

Mobile broadband refers to technologies at speeds of at least 256 Kbit/s, in one or both directions such as wideband CDMA (W-CDMA), known as universal Mobile Telecommunications System (UMTS) in Europe; High-speed Downlink Packets Access (HSUPA); CDMA2000 1X EV-DO and CDMA 2000 1Xev-dv. Access can be via any device ( handheld computer, laptop or mobile cellular telephone etc)>

### **9.2.29 Radio**

A radio is a device capable of receiving broadcast radio signals, using common frequencies, such as FM, AM, LW, and SW. It includes a radio set integrated in a car or an alarm clock but excludes radios integrated with mobile phone, a digital audio player (MP3 player) or in a computer.

### **9.2.30 Television**

A TV (television) is a stand-alone device capable of receiving broadcast television signals, using common access means such as over the air, cable and satellite. It excludes TV functionality intergraded with another device, such as a computer or mobile phone.

### **9.2.31 Fixed Telephone Line**

A fixed telephone line refers to a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange.

### **9.2.32 Mobile Cellular Telephone**

A mobile cellular telephone refers to a portable telephone subscribing to public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems, as well as IMT-2000 (3G). Users of both post-paid subscription and prepaid accounts are included.

## **10. OTHER CONCEPTS AND DEFINITIONS**

This part presents some of the other main concepts and definitions used in the National Statistical System which have not been classified in the previous chapters.

### **10.1 Decentralization and local government concepts**

#### **10.1.1 Decentralization**

The transfer of legal, administrative and political authority to make decisions and manage public functions, from the central government to local governments. The major forms of decentralization include de-concentration, devolution, delegation and privatization.

#### **10.1.2 De-concentration**

This involves minimum transfer of power. It amounts to shifting workload from the centre.

#### **10.1.3 Devolution**

The transfer of resources, tasks and decision making power to lower-level authorities which are largely or wholly independent of the central government, and democratically elected people.

#### **10.1.4 Fiscal Decentralization**

The transfer of powers to raise local revenue from a range of specific taxes such as market dues, trading licenses, property rates etc. in order to finance the delivery of decentralized services to the population.

#### **10.1.5 Grant**

Financial Assistance/funds in form of soft loans given to Local Governments as support to undertake their mandated roles in improving service delivery.

#### **10.1.6 Local Revenue**

Financial resources generated, mobilized or collected from taxes or revenue sources which are controlled by the Local Government such as licenses, permits, market dues, plan fees, etc.

#### **10.1.7 Central Government Transfers**

Release of funds from the Central Government to Local Governments such conditional grants, unconditional and equalization grants.

### **10.1.8 Conditional Grants**

Funds given to Local Governments to finance programmes agreed upon between the central Government and Local Governments.

### **10.1.9 Unconditional Grant**

The minimum grant that is extended to a local Government to run decentralized services.

### **10.1.10 Equalization Grant**

The money paid to a Local Government that is lagging behind the national average standard for a particular service.

### **10.1.11 Development Project**

A set of interrelated with specific objectives to address the identified needs and problems. Projects normally have a limited life span of between 3-5 years.

### **10.1.12 Development program**

A form of social activity that normally consists of an interrelated group of projects covering a large area

### **10.1.13 Development Plan**

Involves a series of well-planned activities, which are intended to change/improve the well-being of an area.

### **10.1.14 Development Planning Process**

The process of setting goals and objectives, mobilization and judicious allocation of resources with the aim of achieving sustainable socio-economic development and poverty eradication in an area.

### **10.1.15 Logistics**

An acronym for the Local Government Information and Communication System. It is a computerized system, designed to help Local Governments monitor the performance of their own service delivery.

### **10.1.16 Monitoring**

A systematic and continuous collecting, analyzing and using of information for the purposes of management control and decision-making.

**10.1.17 Evaluation**

A periodic assessment of the efficiency, effectiveness, impact, sustainability and relevance of a project in the context of stated objectives.

**10.1.18 Budget Framework Paper**

Provides comprehensive data and background information to the budgeting process of Local Governments, reviews past performance, medium term framework reflecting on funded priorities.

**10.1.19 Co-funding**

A complementary contribution to a given grant by the local community to ensure project sustainability.

**10.1.20 Accountability**

The means by which institutions are entrusted with authority, powers and resources of the public or defined stakeholders to explain how well they have discharged their responsibilities and used the resources to achieve stated objectives. It is being answerable for the actions taken and resources used in discharging responsibilities. It is an essential feature of a democratic government and leads to transparency and good governance.

**10.1.21 Degree of Autonomy**

The extent of Local Government total budget resources on which they have discretion to allocate to different expenditure obligations.

**10.1.22 Grants Allocation Formulae**

The criteria of allocating grants among local governments

**10.1.23 Fiscal Capacity**

The ability of local governments to raise revenue from their own sources.