STATISTICS BOTSWANA
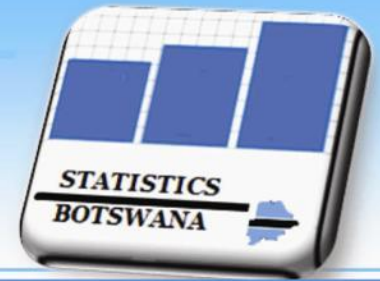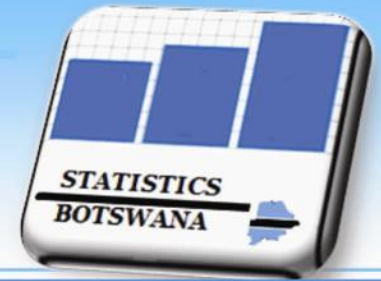
DATA QUALITY ISSUES

Prepared by:

Kebonyethebe Johane
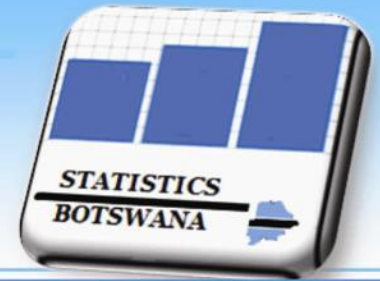# Manager, Statistical Standards

Presentation layout:

- Introduction

- Quality and its dimensions

- Initiatives to improve quality

- Conclusions

Introduction to Quality

Statistics Botswana is mandated to coordinate the National Statistical System. Thus, Statistics Botswana has the responsibility to:-

- inform users and producers of statistics on the concepts, definitions and classifications

- methodologies used in collecting, processing and analysing data

- the accuracy of the data produced, and any other features that may affect data quality.
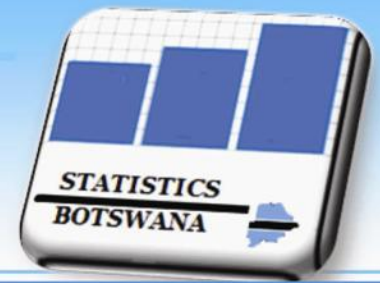
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The Statistics Act of 2009 confers a legislative obligation on Statistics Botswana to adhere to the principles of official statistics.
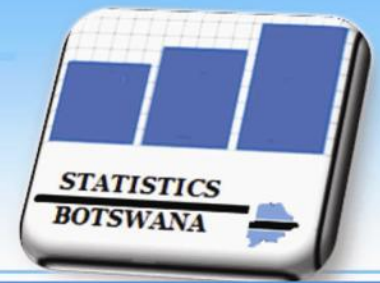
NSS Responsibilities:

Must focus on the improvement and maintenance of quality statistics by ensuring that:

- statistics are in compliance with all the required dimensions of quality
- UN Fundamental Principles of Official Statistics are adhered to

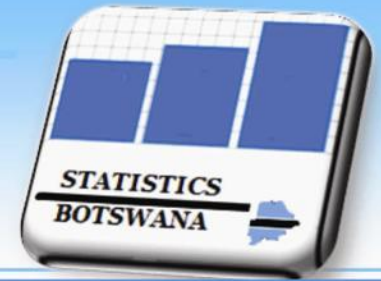**AIM:** To produce quality statistical products to inform national planning, policy formulation and decision making

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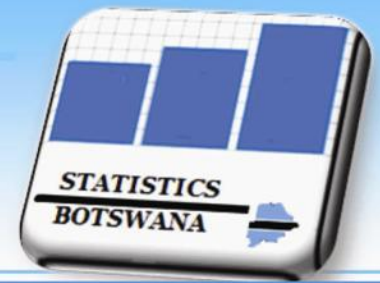
Definition of Quality

- Quality is defined as the "degree to which a set of inherent characteristics fulfils requirements".

- Statistics Botswana like other Statistical Agencies defines data quality in terms of "fitness for use".

- the quality of statistical data can be determined by the extent to which they meet user needs.

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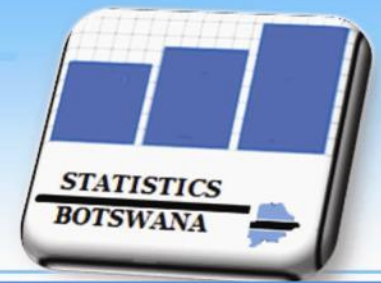**Quality can also be defined by 8 dimensions , these are**:

- **Relevance** (degree to which the collected information meets user needs)

- **Accuracy** (the degree to which the product correctly describes and or estimates the phenomena it was designed to measure. Refers to the closeness of the values provided to the (unknown) true values

- **Timeliness and Punctuality** (refers to the time lag between the reference point to which the information pertains and the date on which the information becomes available.

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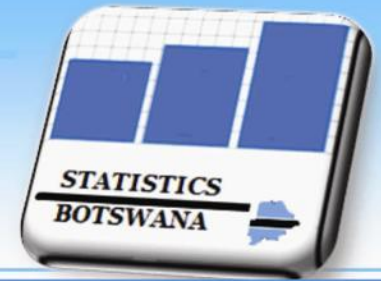
Quality Dimensions-Continued

- **Accessibility (**refers to the ease with which it can be obtained from the agency. This includes the ease with which the existence of information can be ascertained, as well as the suitability of the form or medium through which the information can be accessed)

- **Interpretability (**refers to the ease with which users understand statistical information through the provision of supplementary information (metadata and relevant supporting documents).
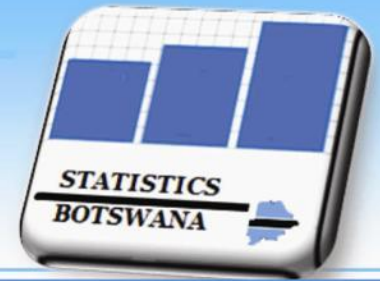
STATISTICS BOTSWANA

Dimensions - Continued

Comparability and Coherence (is the ability to compare statistics on the same characteristic between different points in time, geographical areas or statistical domains; while coherence of statistical information reflects the degree to which it can be successfully brought together with other similar statistical information from different sources)
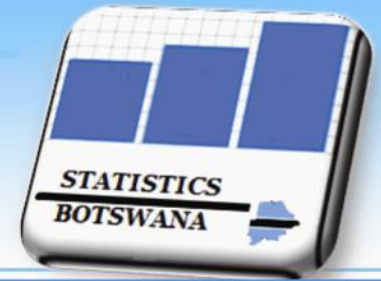
- **Methodological Soundness (**refers to the application of international, regional and national standards, guidelines, and good practices to produce statistical outputs)

- **Credibility (**refers to values and related practices that maintains users' confidence in the agency producing statistics and ultimately in the statistical product)
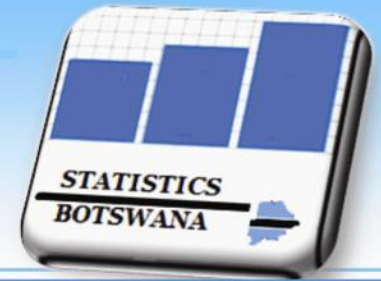
Initiatives To Improve Quality

- The Data Quality Assessment Framework (DQAF)

- Compendium of Concepts and Definitions

- Internationally Adapted Classifications

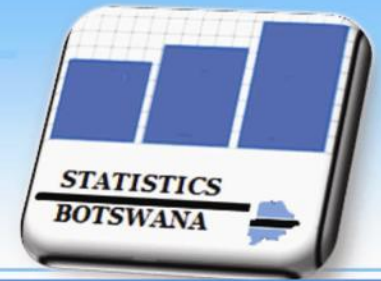- National Classifications

- Sampling Frames

DQAF

The organization has developed a National Statistics Strategy in an effort to realize its objective on quality statistics. The development of the Data Quality Assessment Framework (DQAF) plays an important role in promoting the production of statistics that conform to the UN Fundamental Principles of Official Statistics.
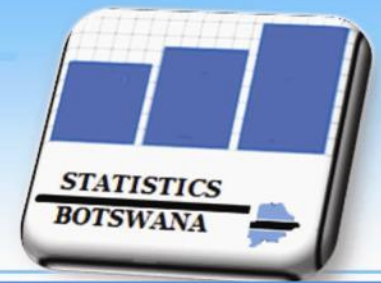
- **Purpose of DQAF**

- DQAF is a set of procedures and instruments that are used to assess and report on the quality of the statistical products in the NSS

- focuses on compliance to agreed standards, best practices and certification of official statistics

- provides an opportunity to make a distinction between 'official' and 'national' statistics

Compendium of Concepts and Definitions

• is an effective tool that facilitates harmonisation, comparability and use of standard statistical concepts and definitions in the NSS.

• The intention though is to release the next publication within a year of this issue which will cover the relevant stakeholders especially those that are within the NSS.
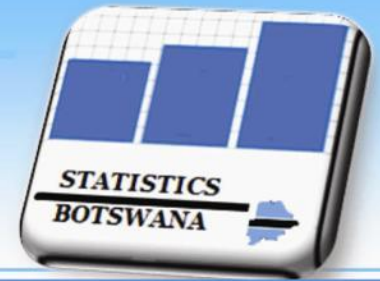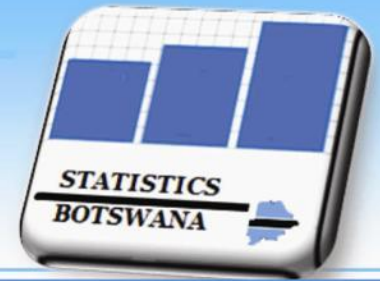
Example

The head of a household is any person, male or female, at least 12 years old, who is regarded by other members of the household as their head. This person may or may not be a blood relative of other members of the household.

The head of the household must be someone who spent the previous/Census/Survey night with the household.

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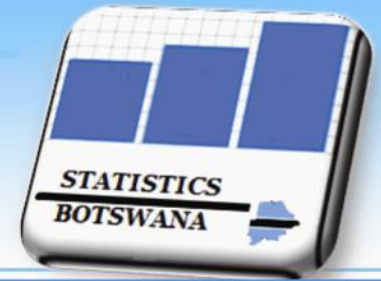
Internationally Adapted Classifications

- **The Botswana International Standard Industrial Classifications** - is a standard UN classification of economic activities arranged so that entities can be classified according to the activity they carry out.

- **The Botswana Standard Classification of Occupations**
  - provides a system for classifying and aggregating occupational information obtained by means of statistical censuses and surveys, as well as from administrative records.

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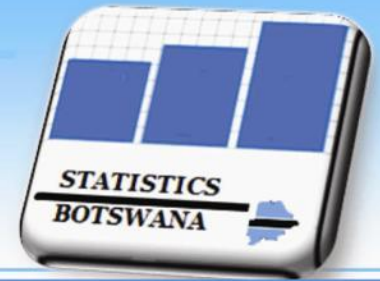- Classifications-Cont'd

International Classification of Education

- The ISCED classification serves as an instrument to compile and present education statistics both nationally and internationally.

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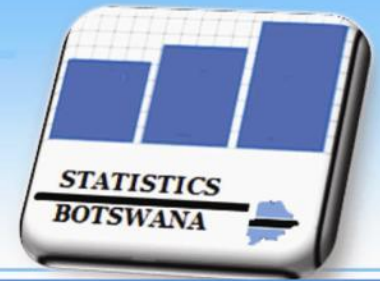
Classifications-Cont'd

National Classifications

- Locally developed classification schemes to assist in data categorisation

- E.g Village/locality coding scheme,

- Employment, Institutional codes

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Sampling Frames

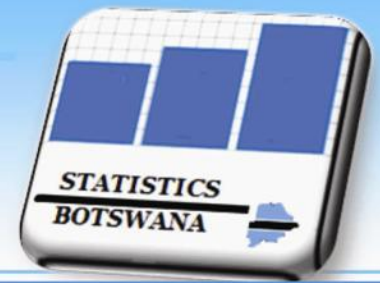SB currently maintains two Sampling Frames

- Enumeration Areas/Household

- Statistical Business Register (SBR)

Conclusions

- Appropriate concepts, definitions, classifications and methodologies are applied during the statistical value chain

- To adhere to the UN Fundamental Principles of Official Statistics

- Adherence to international standards

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Thank You