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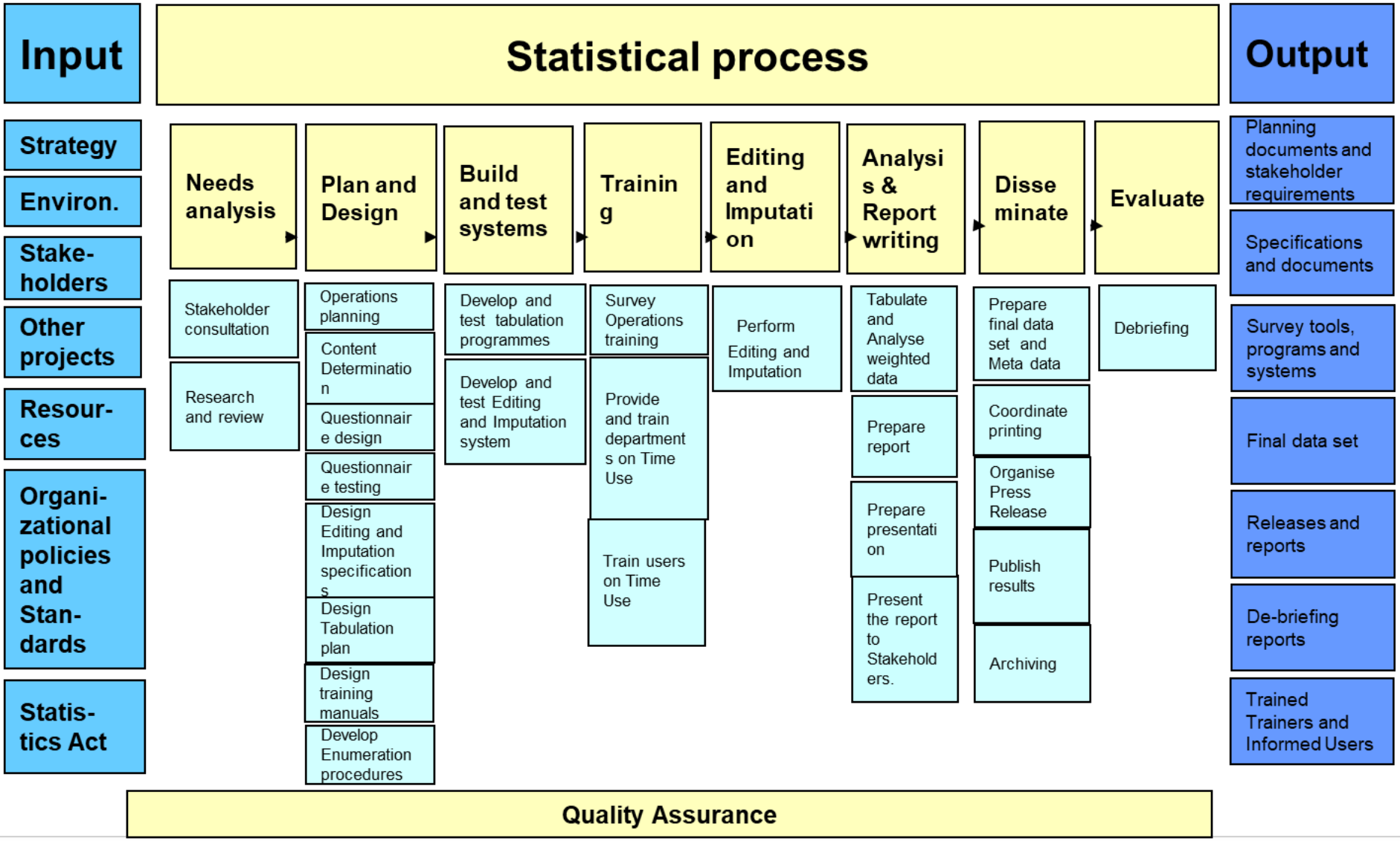
South African Time Use Survey: Quality Assurance

Purpose

Quality statistics

- How quality is assured and measured in the context of the time-use survey in South Africa.

Statistics value chain for Labour Statistics: Time Use Survey



Quality statistics

- Quality is generally accepted as ‘fitness for purpose’ and this implies an assessment of an output with specific reference to its intended objectives.

To address the quality gap one needs to measure the existing level of quality

SASQAF(South African Statistical Quality Assessment Framework) is the tool used in Stats SA to measure this.

It covers various quality aspects of the entire statistical value chain

Quality is a multidimensional concept

SASQAF identifies  **dimensions of quality**

Each dimension has associated quality indicators, standards and benchmarks.

South Africa Dimension	Description	Key Components	TUS
1. Prerequisites of quality	Refers to the institutional and organisational conditions that have an impact on data quality. It defines the minimum set of necessary conditions that have to be met in order to produce good quality statistics.	• Legal and institutional environment (including Memoranda of Understanding (MoUs) or Service Level Agreements (SLAs) • Privacy and confidentiality • Commensurability of resources • Quality as the cornerstone of statistical work	• Since 2016 the organisation has been unable to conduct the Time Use survey because of lack of finances. We have made a request maybe in 2021.
2. Relevance	Relevance of statistical information reflects the degree to which the data meet the real needs of clients.	• Why do you need to conduct the survey or collect data? • Who are the users of the statistics? • What are their known needs? • How well does the output meet these needs? • Are user needs monitored and fed back into the design process?	• List of stakeholders for Time Use • Stakeholder engagements input used to improve the questionnaire.

Examples of Indicators, Standards and Assessment Levels

Chapter 2: Relevance

2.1 Description

Relevance of statistical information reflects the degree to which the data meet the real needs of clients. It is concerned with whether the available information sheds light on the issues of most importance to users.

2.2 Key components

- Why do you need to conduct the survey or collect data?
- Who are the users of the statistics?
- What are their known needs?
- How well does the output meet these needs?
- Are user needs monitored and fed back into the design process?

2.3 Quality indicators, standards and benchmarks

Indicator	Standards	Assessment Levels			
		Quality Statistics Level 4	Acceptable Statistics Level 3	Questionable Statistics Level 2	Poor Statistics Level 1
2.1 Have both the internal and external users of the data been identified?	2.1.1 An up-to-date user database must exist.	An up-to-date user database exists.	A user database exists but is not up-to-date.	Users are known but not recorded in a database.	Users have not been identified.
2.2 Is there a process to identify user needs?	2.2.1 A process to identify user needs must exist.	A process to identify user needs exists.	N/A	N/A	A process to identify user needs does not exist.

South Africa	Description	Key Components	SA TUS
3. Accuracy	• The degree to which the output correctly describes the phenomena it was designed to measure.	• Assessment of sampling errors where sampling was used. • Assessment of coverage of data collection in comparison to the target population. • Assessment of response rates and estimates of the impact of imputation. • Assessment of non-sampling errors and any other serious accuracy or consistency problems with the survey results or register based statistics. • Data capture, data coding and data processing errors. • Source data available provide an adequate basis to compile statistics (e.g. administrative records). • Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.	• Calculate the response rate after data collection • Editing and imputation of data rates

South Africa	Description	Key Components	SA TUS
4. Timeliness	Timeliness of statistical information refers to the delay between the reference point to which the information pertains and the date on which the information becomes available. Timeliness also addresses aspects of periodicity and punctuality of production activities	• Statistics production time • Timely receipt of administrative records. • Periodicity of statistical release. • Punctuality of statistical release.	• Time Use Survey was suppose to be produced in 2016, (But due to funds we have been unable to collect it
5. Accessibility	The accessibility of statistical information and metadata refers to the ease with which it can be obtained from the agency.	• Catalogue systems are available in the organ of state or statistical agency • Delivery systems to access information • Information and metadata coverage is adequate • Measure of catalogue and delivery systems performance • Means of sharing data between stakeholders	• The data is available on our website and the data can be downloaded on Nestar6
6. Interpretability	Interpretability of statistical information is refers to the ease with which users understand statistical information through the provision of metadata.	• Concepts and definitions, and classifications that underlie the data; • Metadata on the methodology used to collect and compile the data; • Key findings, giving the summary of the results; • Presentation of statistics in a meaningful way.	• Metadata for all the variables is available • 2000 and 2010 reports on key funding has been disseminated and they can be found in the public domain • The release of the results is done through the media release

South Africa	Description	Key Components	SA TUS
7. Coherence & Comparability	The ability to compare statistics on the same characteristic between different points in time, geographical areas or statistical domains. The coherence of statistical information reflects the degree to which it can be successfully brought together with other similar statistical information from different sources	• The use of common concepts and definitions within and between series. • The use of common variables and classifications within and between statistical series. • The use of common methodology and systems for data collection and processing within series. • The use of common methodology for various processing steps of a survey such as editing and imputations within series	• The data collected for 2000 and 2010 used common concepts ,definitions and classification. • The data between the two time series is comparable.
8. Methodological Soundness	It refers to the application of international, national, or peer-agreed standards, guidelines, and practices to produce statistical outputs.	• International norms and standards on methods. • Data compilation methods employ acceptable procedures. • Other statistical procedures employ sound statistical techniques. • Transparent revision policy and studies of revisions are done and made public.	• Time use data was based on internationally accepted guidelines.

Chapter 8: Methodological soundness

8.1 Description

It refers to the application of international, national, or peer-agreed standards, guidelines, and practices to produce statistical outputs. Application of such standards fosters national and international comparability.

8.2 Key components

- International norms and standards on methods.
- Data compilation methods employ acceptable procedures.
- Other statistical procedures employ sound statistical techniques.
- Transparent revision policy and studies of revisions are done and made public.

8.2 Quality indicators, standards and benchmarks

Indicator		Standards		Assessment Levels			
				Quality Statistics Level 4	Acceptable Statistics Level 3	Questionable Statistics Level 2	Poor Statistics Level 1
8.1	Concepts, definitions, and classifications used follow accepted standards, guidelines or good practices (national, international, peer-agreed).	8.1.1	The concepts and definitions must satisfy accepted standards, guidelines or good practice in line with national, international, peer-agreed norms; and must be documented. Deviations from the standard must be formally approved, and be fully documented.	The concepts and definitions satisfy accepted standards, guidelines or good practice in line with national, international, peer-agreed norms; and are documented. Deviations from the standard are formally approved, and fully documented.	The concepts and definitions satisfy accepted standards, guidelines or good practice in line with national, international, peer-agreed norms; and are documented. Deviations from the standard are not approved, and fully documented.	The concepts and definitions are documented, but do not satisfy accepted standards, guidelines or good practice.	No documented concepts and definitions exist.

South Africa	Description	Key Components	SA TUS
9. Integrity	The integrity of statistical information refers to values and related practices that maintain users' confidence in the agency producing statistics and ultimately in the statistical product. This includes, among others, the need for the statistical system to be based on the United Nations (UN) principles of official statistics and includes principles of objectivity in collection, compilation and dissemination of data to ensure unbiased statistics which are not subject to confidentiality breaches or premature releases	• Professionalism and ethical standards which guide policies and practices. • Assurances that statistics are produced on an impartial basis. • Ethical standards are guided by policies and procedures.	For the classification of the South African time use survey the UN Trial classification was used.

Chapter 9: Integrity

9.1 Description

The integrity of statistical information refers to values and related practices that maintain users' confidence in the agency producing statistics and ultimately in the statistical product. This includes, among others, the need for the statistical system to be based on the United Nations (UN) principles of official statistics and includes principles of objectivity in collection, compilation and dissemination of data to ensure unbiased statistics which are not subject to confidentiality breaches or premature releases.

9.2 Key components

- Professionalism and ethical standards which guide policies and practices.
- Assurances that statistics are produced on an impartial basis.
- Ethical standards are guided by policies and procedures.

9.3 Quality indicators, standards and benchmarks

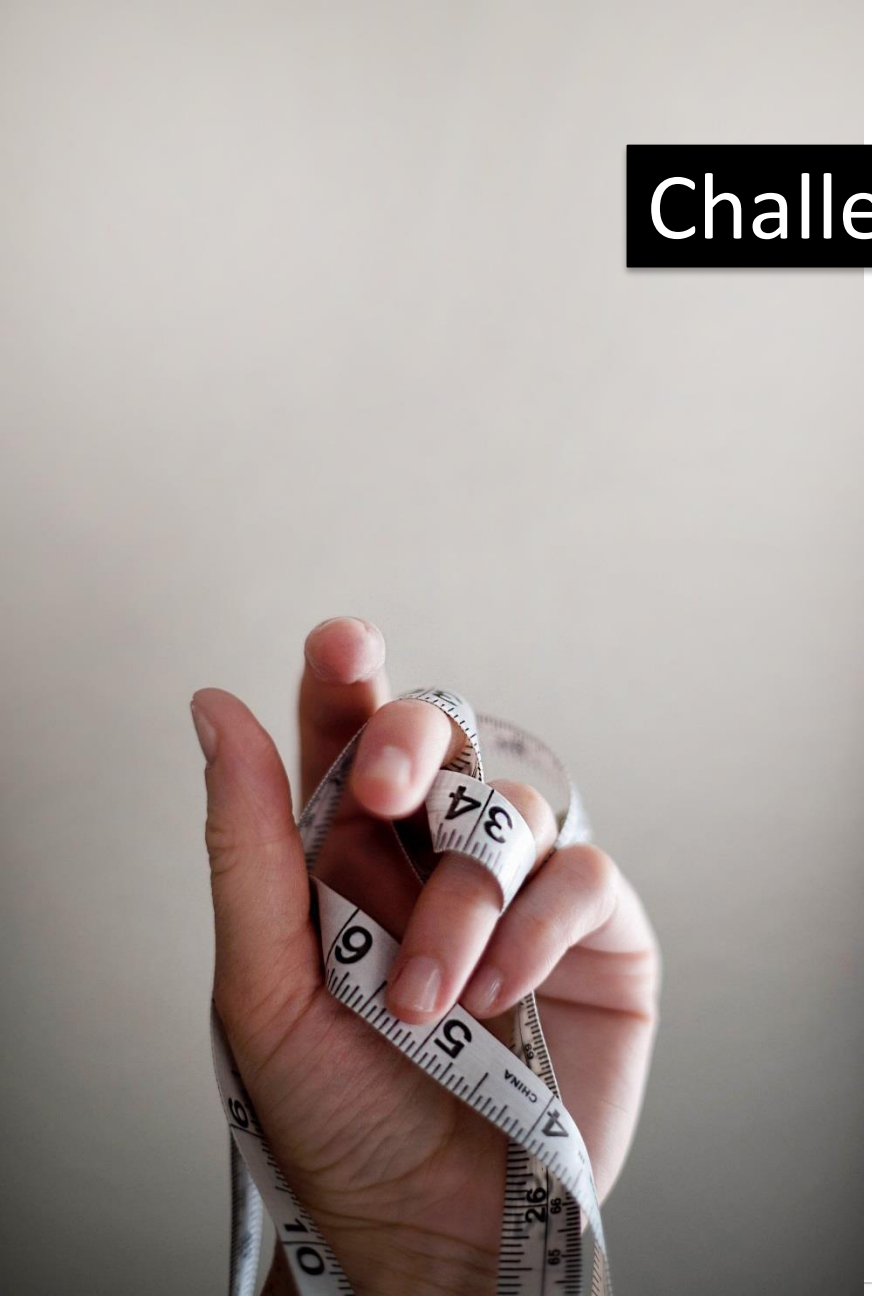
Indicator	Standards	Assessment Levels			
		Quality Statistics Level 4	Acceptable Statistics Level 3	Questionable Statistics Level 2	Poor Statistics Level 1
9.1 The terms and conditions, including confidentiality, under which statistics are collected, processed and disseminated are available to the public and follow the UN principles of official statistics.	9.1.1 A terms and conditions document must be available and accessible to the public.	A terms and conditions document is accessible to the public. The terms and conditions follow the UN principles of official statistics.	A terms and conditions document is not accessible to the public. The terms and conditions follow the UN principles of official statistics.	A terms and conditions document is accessible to the public. The terms and conditions do not follow the UN principles of official statistics.	A terms and conditions document does not exist.

Four levels of certification

Assessment report

- Confidential document, not circulated or published
- Contains details outlining findings and recommendations by the DQAT
- Contains scores by standards, dimensions and overall

Challenges



- Process lengthy
- Lots of data to be assessed
- Assembling the required metadata

Annexure E: Mapping quality indicators to activities in the Statistical Value Chain (SVC)

Activities of the statistical value chain		Quality dimensions and indicators	
Phases	**Sub-processes**	**Quality dimension**	**Quality indicator**
Need	Determine need for information	Prerequisites of quality	1.1 The responsibility for producing statistics is clearly specified.
Need	Determine need for information	Prerequisites of quality	1.2 Standards and policies are in place to promote consistency of methods and results.
Need	Establish output objectives	Prerequisites of quality	1.3 Data sharing and coordination among data-producing agencies are clearly specified.
Need	Establish output objectives	Prerequisites of quality	1.4 Measures are in place to ensure that individual data are kept confidential, and used for statistical purposes only.
Need	Determine need for information	Relevance	2.1 Have both the internal and external users of the data been identified?
Need	Determine need for information	Relevance	2.2 Is there a process to identify user needs?
Need	Establish output objectives	Relevance	2.3 Are user needs and the usage of statistical information analysed?
Need	Establish output objectives	Relevance	2.4 Changes are made as a result of user needs assessments.
Need	Check data availability	Relevance	2.5 To what extent is the primary data appropriate for the statistical product produced?
Need	Prepare business case	Timeliness	4.4 Periodicity of release.
Need	Check data availability	Accessibility	5.1 Legal arrangements are in place to allow access to administrative records via manual, automated or electronic processes.
Need	Frame and sample methodology, Data collection	Methodological soundness	8.1 The scope of the study is consistent with accepted standards, guidelines or good practices.
Need	Check data availability	Integrity	9.5 Choice of source data, techniques and dissemination decisions are informed solely by statistical considerations.
Design	Detailed project plan	Prerequisites of quality	Resources are commensurate with the needs of statistical programmes. • Staff • Facilities

Conclusion

Most of the South Africa Statistical Quality Assessment Framework dimensions and indicators are aligned to the GSBPM quality dimensions and it's quality indicators. As such it would be easy to implement it in South Africa.

Thank You