



SUSTAINABLE DEVELOPMENT GOALS

Workshop of Quality on Statistics for SDG Indicators 23 - 25 April 2018, Chiba, Japan

conducted jointly by the Statistical Institute for Asia and the Pacific, the United Nations Statistics Division and the Director-General for Policy Planning on Statistical Standards, the Ministry of Internal Affairs and Communications of the Government of Japan, with support of the International Monetary Fund

Session 4: Practical training

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Definition of quality in Statistics

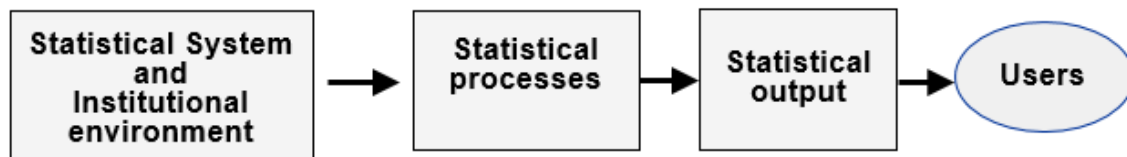
Quality = “Fitness for use”

**Degree to which a set of
inherent characteristics fulfils
requirements**

Definition: Statistical quality frameworks

Quality frameworks provide a coherent and holistic system of quality management

Quality management framework of UN NQAF



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Quality assurance framework for the SDG indicators

Background: Challenges

1. Large number of indicators taken from different statistical domains
2. Different stages of methodological development - 93 tier I indicators, 66 tier II indicators and 68 tier III indicators
3. Lack of compilation guidance and different country practices
4. Unclear requirements and guidance on disaggregation
 - With 2-4 being gradually addressed while countries have to and are moving ahead

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Quality assurance framework for the SDG indicators

Background: Reality that is setting in:

1. National indicator frameworks to be agreed in all countries consisting of a selection of global indicators (20-50%?), proxy indicators for global indicators (another 30%?) and national indicators
2. National strategies for the development of statistics to gradually address data gaps according to national priorities
3. Disaggregation based on data availability/ resource constraints and national priorities
4. Countries to establish SDG dashboards and databases with data compiled throughout the national statistical system from different data providers and data sources

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Quality assurance framework for the SDG indicators

Background: Reality that is setting in – examples:

Code	Indicator	C	P	V	E	U
1.4.1	Proportion of population living in households with access to basic services (Tier III)	Feasible with strong efforts	Easily feasible	Feasible with strong efforts	Easily feasible	Easily feasible
3.1.1	Maternal mortality ratio (Tier II) - rare event, only about one third of all countries/territories are deemed to have reliable data available; sources range from vital statistics, to census and surveys	Currently available	Currently available	Currently available	Currently available	Currently available
4.1.1	Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex (Tier III)	Feasible with strong efforts	Feasible with strong efforts	Feasible with strong efforts	Currently available	Currently available
5.4.1	Proportion of time spent on unpaid domestic and care work, by sex, age and location (Tier II)	Not feasible with strong efforts	Feasible with strong efforts	Not feasible with strong efforts	Currently available	Feasible with strong efforts

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Quality assurance for the SDG indicators – elements of possible way forward

What QAF to use

- NSO: Use National Quality Assurance Framework (NQAF) for SDG indicators
 - Data/statistics providers: Retain established domain specific quality assurance frameworks and guidelines (often sponsored by Intern. Organizations) and prescribe a minimum QAF for all other domains and data providers
 - Adapt the NQAF to the specific SDG challenges at the NSO and at data providers
- >> If more than one quality assurance framework is being used, there is a need to map and compare basic terms, quality dimensions and assessment tools to avoid confusion

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Quality assurance for the SDG indicators – elements of possible way forward

	Focus of implementation of quality assurance for the SDGs (a first possible proposal - subject to further discussions)	Relative importance for NSO as coordinator	Relative importance for data provider	Relative importance for new data sources and providers
Managing the statistical system				
NQAF 1:	Coordinating the national statistical system	Highest	Not applicable	Not applicable
NQAF 2:	Managing relationships with data users and data providers	Highest	Not applicable	Highest
NQAF 3:	Managing statistical standards	Medium	Not applicable	Not applicable
Managing the institutional environment				
NQAF 4:	Assuring professional independence	Medium	Medium	Medium
NQAF 5:	Assuring impartiality and objectivity	Medium	Medium	Medium
NQAF 6:	Assuring transparency	Medium	Medium	Medium
NQAF 7:	Assuring statistical confidentiality and security	Medium	Medium	Medium
NQAF 8:	Assuring the quality commitment	Highest	Highest	Highest
NQAF 9:	Assuring adequacy of resources	Highest	Highest	Medium
Managing statistical processes				
NQAF 10:	Assuring methodological soundness	Highest	Highest	Highest
NQAF 11:	Assuring cost-effectiveness	Medium	Medium	Medium
NQAF 12:	Assuring soundness of implementation	Medium	Highest	Medium
NQAF 13:	Managing the respondent burden	Medium	Medium	Medium
Managing statistical outputs				
NQAF 14:	Assuring relevance	Highest	Medium	Highest
NQAF 15:	Assuring accuracy and reliability	Medium	Medium	Highest
NQAF 16:	Assuring timeliness and punctuality	Medium	Medium	Medium
NQAF 17:	Assuring accessibility and clarity	Highest	Medium	Medium
NQAF 18:	Assuring coherence and comparability	Highest	Medium	Medium
NQAF 19:	Managing metadata	Highest	Highest	Highest

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Quality assurance for the SDG indicators – elements of possible way forward

Most critical elements to assure at the NSO as coordinator -**Managing the statistical system**

1. A statistical law or other formal provision establishes the responsibilities of the members of the national statistical system, including their coordination.
2. There is a mechanism and body for the coordination of the national statistical system for activities at the national, regional and international level.
3. The statistical agencies have the legal authority (permission and right) to obtain and access records maintained by corporation, business or organization that will be used for statistical purposes.

Quality assurance for the SDG indicators – elements of possible way forward

Most critical elements to assure at the NSO as coordinator – **managing the institutional environment**

1. Does the statistical agency's policy or message about its commitment to quality in statistics clearly convey and promote the shared concern for quality of all of its staff.
2. Is there a unit for quality assurance responsible for SDG indicators
3. Are the financial and human resources sufficient to implement the statistical work programme for the SDGs

Quality assurance for the SDG indicators – elements of possible way forward

Most critical elements to assure at the NSO as coordinator – **managing statistical processes**

1. Is the overall methodological framework of the statistical agency and members of the NSS consistent with international standards, guidelines and good practices?
2. If not, are divergences from international standards explained?
3. Are procedures in place to ensure that standard concepts, definitions and classifications are consistently applied throughout the statistical agency?

Quality assurance for the SDG indicators – elements of possible way forward

Most critical elements to assure at the NSO as coordinator – **managing statistical outputs**

1. Is user satisfaction regularly measured and systematically followed up?
2. Are source data, intermediate results and statistical outputs regularly assessed and validated?
3. Is data easily accessible and available in different including electronic formats that allow easy use and re-dissemination?
4. Do common standards exist with regard to definitions, units and classifications in order to enhance the comparability of the statistics?

Quality assurance for the SDG indicators – elements of possible way forward

Most critical elements to assure at the NSO as coordinator – **managing statistical outputs**

5. Are procedures or guidelines in place for metadata maintenance and dissemination?
6. Is a glossary of statistical concepts publicly available?

Quality assurance for the SDG indicators – elements of possible way forward

Institutional arrangements

- Clear mandates and responsibilities and commitment to data quality – see UN Fundamental Principles and applicable international recommendations and/or requirements
- Data quality unit at NSO
- Data quality manager or focal points at data providers
- NSS wide coordination body to promote quality assurance and address quality issues

Quality assurance for the SDG indicators – elements of possible way forward

Process

- Establish initial Data Quality Task Force
- Develop and establish NQAF
- Establish/confirm mandates and institutional arrangements
- Conduct quality assurance activities, implementing NQAF in phased approach starting with minimum

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Quality assurance for the SDG indicators – elements of possible way forward

Assurance and assessment tools

- Metadata documentation – require minimum to be available for all indicators
- Quality assessment tools
 - User surveys (mostly NSO)
 - Quality indicators
 - Quality reports
 - Self-assessment
 - Labelling (NSO)
 - Certification

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Quality assurance for the SDG indicators – elements of possible way forward

Case study – documenting metadata – choose one SDG indicator

The following 7 main concepts are suggested:

1. Data reporter
2. Definition and concepts
3. Data source type and data collection method
4. Other methodological considerations (such as method of computation)
5. Data availability and disaggregation
6. Comparability / Deviation from international standards
7. References and Documentation

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THANK YOU

Manila, 6-10 November, 2017

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