
Workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of the Africa Region

Addis Ababa, Ethiopia, 6-9 December 2022

Final Report

I. Organization, purpose and participants

1. In March 2019, the United Nations Statistical Commission adopted the United Nations National Quality Assurance Frameworks Manual for Official Statistics (Manual), including the recommendations contained therein (Decision 50/106). The Statistical Commission welcomed the Manual as an important contribution in guiding countries in the implementation of a national quality assurance framework, including for new data sources, new data providers, and for data and statistics of the Sustainable Development Goal indicators.

2. The development of the Manual greatly benefitted from a country survey conducted in 2017 by the Expert Group on National Quality Assurance Frameworks. The survey showed that many countries had yet to implement a national quality assurance framework (NQAF). The Statistical Commission at its 52nd session in March 2021 tasked the Expert Group to conduct a follow-up survey to assess progress in the implementation of national quality assurance frameworks by national statistical systems. Countries received the request to complete this global survey end of August 2022.

3. In addition to the Manual, the Expert Group released a self-assessment checklist. Also, an e-learning module has been made available. Most recently, the Expert Group released a draft Roadmap for NQAF implementation for review and testing. The Roadmap is intended to support countries in their journey of developing and implementing a national quality assurance framework. A further area of interest of the Expert Group has been quality assurance when new and administrative data sources are being used. The recent survey specifically asks countries about their practices in this area.

4. Within this overall context, the United Nations Statistics Division (UNSD) in cooperation with the United Nations Economic Commission of Africa/African Center for Statistics (UNECA/ACS) organized this workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of the Africa Region, which was held in Addis Ababa, Ethiopia, 06-09 December 2022. The Workshop aimed at training participants from national statistical offices on quality assurance and its implementation throughout the national statistical system (NSS) and support the development of additional guidelines on quality assurance.

5. A total of 15 participants from the following 12 developing countries took part in the workshop: Botswana, Cameroon, Egypt, Ethiopia, Kenya, Namibia, Niger, Nigeria, South Africa, Tanzania, Uganda, Zambia. In addition, one participant United Nations Economic Commission of Africa/African Center for Statistics (UNECA/ACS) attended the workshop.

II. Summary

4. Opening remarks were delivered by Mr. Oliver Chinganya, Director of the Statistics Division of the United Nations Economic Commission of Africa and Director of the African Center for Statistics (UNECA/ACS) and Mr. Matthias Reister, Chief of the Development Data Section, United Nations Statistics Division on behalf of UNSD.

5. The workshop introduced the contents of the Manual on National Quality Assurance Frameworks (NQAF) for Official Statistics and shared national practices. Specifically, the workshop reviewed the UN recommendations on quality assurance, the contents of the UN NQAF Manual and The African Charter of Statistics (session 1). Subsequently, the meeting reviewed several case studies of national quality assurance frameworks and their implementation and conducted brief self-assessment exercise with participating countries (session 2). The meeting introduced tools for quality assessment and assurance, including the Generic Statistical Business Process Model (GSBPM) and the Roadmap for the NQAF implementation and further discussed the implementation of NQAF in participating countries (session 3). Furthermore, the meeting discussed the quality assurance of new and administrative data sources (session 4). In its last session (session 5), the meeting briefly discussed the development of additional checklists based on the generic UN NQAF self-assessment checklist, reviewed the issue of labelling and certification, the issue of data stewardship and the preliminary results of the global survey on NQAF implementation. The meeting then also briefly reviewed some general conclusions from the meeting which were presented by UNSD

7. The workshop concluded with closing remarks by UNECA/ACS and UNSD thanking participants for their contributions and active participation and vowing to continue the joint efforts to improve the quality of official statistics.

8. All workshop presentations have been shared with participants but will shortly be also available on the meeting website at: <https://unstats.un.org/unsd/methodology/dataquality/meetings/nqafws-addis-2022/>.

III. Draft Conclusions / main points

Session 1: International recommendations on quality assurance and the UN NQAF

1. The workshop:
 - a. reviewed the content of UN quality assurance manual, the UN recommendations on quality assurance for official statistics, the African Charter of Statistics and the UN national quality assurance framework (UN NQAF)
 - b. clarified the definition of important terms such as official statistics, data and statistics, national statistical system which are available in the Manual.

Session 2: NQAF in practice

2. The workshop:
 - a. reviewed practices of Uganda, Tanzania and Zambia in implementing their NQAF
 - b. discussed country practices in labelling and certifying statistical outputs as official statistics based on a quality assessment; the assessment can be done before or after release (practices in countries vary) and is valid for a certain time
 - c. noted that based on a brief self-assessment the following requirements of UN NQAF can pose challenges for participating countries and may constitute areas for possible improvement: 1.2 and 1.3 – existence and role of NSS-wide coordination body; 2.6 – access to private data; 10.5 – cooperation with scientific community; requirements under principle 11 cost-effectiveness and 12 - assuring appropriate statistical procedures.

Session 3: Implementation of NQAF in the region and countries/Roadmap for NQAF implementation

3. The workshop:
 - a. reviewed national practices of Botswana, Ethiopia, and Niger in the development of NQAF and its implementation throughout the NSS with focuses on the assessment of outputs of NSS members; importance of training and awareness creation was stressed; challenges include funding, lack of standards for parts of the statistical value chain, lack of authority or mandate and coordination
 - b. noted that the Generic Statistical Business Process Model (referred to also as statistical value chain) which was briefly reviewed is a very important tool for achieving process and quality improvements
 - c. reviewed the draft Roadmap for NQAF implementation and the following important considerations and suggestions for improvement were identified:
 - **Step 1 Initial workshop:** it should be reflected that an external consultant is often assisting in the initial work and workshop; also, it could be pointed

out that there are variations of how the individual steps take place and may be combined with each other

- **Step 2 Clarify and establish purpose, scope and responsibility for developing NQAF:** the description should further clarify who is responsible for this step and who is involved
 - **Step 4 NQAF development and adoption:** it should be pointed out that the quality unit will require high level support and representation, e.g., through the director of methodology and development in order to be able to approach and engage with others; also, sensitization about data quality is a key for successful efforts; the need to review statistical legislation should be further stressed because of its critical importance
 - **Step 5 Set up of appropriate organization:** it should be pointed out that the Manual contains detailed information about the quality unit, quality task force and NSS wide coordination bodies than can serve as an outline for terms of reference for the respective groups
 - **Step 6 Self-assessment:** it should be clarified that this typically refers to a self-assessment of the NSO where implementation normally starts
 - **Step 8 Improvement plan:** concerning resources, the level and composition of staff (specialists of different areas as needed) should be indicated; it was noted that the staff numbers mentioned in the description are too low for many offices as it depends on the responsibilities and size of the office and that any misleading impression regarding the need for resources should be avoided.
- d. Concerning additional information on improvement actions the following suggestions were made:
- The improvement plan needs to be discussed and agreed with management; priorities, responsibilities and tasks, resources, timeframe, and follow-up should be established; follow-up needs to be institutionalized to assure accountability and clear indicators of achievement should be established
 - The improvement plan should be based on an analysis of areas for improvement and address those; the conduct of a SWOT of all departments should be considered
 - The improvement plan should be reflected in annual work plans and in the longer-term planning such as the NSDS.

Session 4: Quality assurance of new and administrative data sources

4. The workshop:
 - a. reviewed the different types of data sources including their advantages and disadvantages
 - b. noted that countries present at the workshop use administrative data extensively; often the provider of administrative data is also the producer of the official statistics; when both are different then source data checks are important for the producer of the official statistics
 - c. noted that other data sources do not yet play an important/central role for the production of official statistics in countries present at the workshop
 - d. reviewed country practices of Cameroon, South Africa, Namibia and Nigeria and additional examples in the use of administrative data:
 - administrative data sources and their data are profiled, assessed and validated and countries are undertaking efforts to systematically use administrative data and ensure it quality
 - the quality assessment of administrative data can be of wider scope and include most of quality dimensions for statistical outputs such as relevance, accuracy, timeliness, accessibility and coherence, plus prerequisites of quality
 - in a narrower scope, depending on the purpose, the assessment is more focused on the source data itself and includes quality dimensions such as accuracy, completeness, timeliness and consistency, validity and uniqueness / technical checks and integrability, which are all specifically defined
 - an example of quality assurance of surveys provided by Egypt showed that there can be similarities to the quality assessment of administrative data, especially as it concerns validity checks on data and the importance of correcting errors as early as possible
 - scope and approach of efforts regarding the use and quality assurance of administrative data varies across participating countries with one country having established a repository of source data available for government and private usage
 - e. noted the example of quality assessment of citizen generated data (defined as data produced by a civil society organization) provided by Kenya which uses 8 quality dimensions: 1. Need, 2. Interpretability and clarity, 3. Credibility, 4. Relevance, 5. Timeliness, 6. Accessibility, 7. Methodological soundness, 8. Accuracy; the first 3 are mandatory and the remaining are scored
 - f. noted the results of 2022 survey that about half of countries that responded so far indicated that they use special quality assurance frameworks, guidelines, methods

or tools for the quality assessment when administrative data or data from other data sources are used for the production of official statistics

- g. regarding the use of additional frameworks and tools etc. for quality assurance when administrative data is used the countries present at the workshop expressed the following:
 - there is a strong preference among countries for using their national quality assurance framework as basis for the quality assessment of administrative data, instead of having any additional tools or frameworks
 - reasons are that the NQAF is considered sufficiently detailed to address the specific needs and that it should be widely used and implemented first, before additional tools are introduced
 - countries which are yet to develop their NQAF may consider from the onset available tools and frameworks that address the assessment of administrative data
 - however, the development of a customized checklist based on the NQAF which indicates the elements that are applicable and some guidelines or guidance note ‘on the side’ regarding quality assurance when using administrative data were considered as potentially very useful
- h. agreed that quality assurance when administrative data sources are being used should be a joint effort between NSO and members of the NSS, and that there should be one single approach supported by clear guidelines.

Session 5: Development of additional tools/discussion of additional topics

5. The workshop:
 - a. noted that the Expert Group on National Quality Assurance Frameworks has been considering the development of additional checklists based on the generic UN NQAF self-assessment checklists for specific purposes; an example of a checklist for other statistical agencies was presented which indicates which elements to be assured are applicable to them and which should be assessed by the NSO
 - b. noted the similarities but also the differences between labelling and certification of statistical outputs; certification is done by an independent body, reviews whether certain requirements are met, has to follow a strict process and is resource intensive; Statistics South Africa pointed out that its certification process has been developed together with its national bureau of standards
 - c. noted that there is a global discussion on data stewardship; in this context, it was pointed out that quality assurance frameworks for official statistics only addresses the quality of data as it concerns their use in the production of official statistics.
