THE UNITED REPUBLIC OF TANZANIA

DATA QUALITY ASSESSMENT FOR NATIONAL ACCOUNTS STATISTICS 2022

TANZANIA MAINLAND

NBS

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Definition of Terms

Dimension   highest level of data quality assessment according to IMF where five broad data quality dimensions are common.

Element   second level of data quality assessment according to IMF where granular quality dimensions are considered.

Indicator   third level of data quality assessment where components of quality elements are identified.

Focal issue   provides more detail for each indicator that are tailored to the dataset in question

Key point   identifies quality features that may be considered in addressing the focal issues. The key points are meant to be suggestive, not exhaustive.

Relevance   the extent to which the statistics satisfy the needs of the users.

Accuracy   the closeness of estimates to the exact or true values that the statistics were intended to measure.

Reliability   the closeness of the initially estimated value(s) to the subsequent estimated value(s) if preliminary figures are disseminated.

Timeliness   the length of time between the end of a reference period (or date) and the dissemination of the statistics.

Punctuality   the time lag between the release date and the target date by which the data or statistics should have been delivered.

Accessibility   the ease and conditions with which statistical information can be obtained.

Clarity   the availability of appropriate documentation relating to the statistics and the additional assistance that producers make available to users.

Coherence the ability to reliably combine statistics and data sets in different ways and for various uses. *Consistency* is often used as a synonym for coherence.

Comparability the extent to which differences in statistics from different geographical areas, non-geographical domains, or over time, can be attributed to differences between the true values of the statistics.

Full compliance could be defined as meeting at least 80 per cent of the applicable key points (only little room for improvement).

Partial compliance meeting between 30 and 80 per cent of the applicable key points (some major improvements are needed)

No compliance meeting at most 30 per cent of the applicable key points (urgent action is necessary).

Not applicable an item is not part of the practice in the methodology or process of the statistical product which is assessed.

Prerequisites of quality Although not itself a dimension of quality, this group of "pointers to quality" includes elements and indicators that have an overarching role as prerequisites, or institutional preconditions, for quality of statistics.

Assurances of integrity This dimension relates to the adherence to the principle of objectivity in the collection, compilation, and dissemination of statistics. The dimension encompasses institutional arrangements that ensure professionalism in statistical policies and practices, transparency, and ethical standards.

Methodological soundness This dimension covers the idea that the methodological basis for the production of statistics should be sound and that this can be attained following internationally accepted standards, guidelines, or good practices. This dimension is necessarily dataset-specific, reflecting different methodologies for different datasets

Accuracy and reliability This dimension covers the idea that statistical outputs sufficiently portray the reality of the economy This dimension is also data specific, reflecting the sources used and their processing.

Serviceability   This dimension relates to the need that statistics are disseminated with an appropriate periodicity in a timely fashion, are consistent internally and with other major datasets, and follow a regular revision policy.

Accessibility   This dimension relates to the need for data and metadata to presented in a clear and understandable manner on an easily available and impartial basis, that metadata are up-to-date and pertinent, and that a prompt and knowledgeable support service is available

Abbreviation

AASS	Annual Agriculture Sample Survey
ASIP	Annual Survey of Industrial Production
BOT	Bank of Tanzania
CBR	Census of Business Register
COFOG	Classification of the Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPA	Classification of Products by Activity
CPC	Central Product Classification
DQA	Data Quality Assessment
DQAF	Data Quality Assessment Framework
EAC	East African Community
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GSBPM	Generic Statistical Business Process Model
HBS	Household Budget Survey
ICT	Information and Communication Technology
ILFS	Integrated Labor Force Survey
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
ISWGNA	Inter-Secretariat Working Group on National Accounts
ITDM	Information, Technology and Data Management
MDAs	Ministries, Departments and Agencies
MEFMI	Macroeconomic and Financial Management Institute of Eastern and Southern Africa
MoF	Ministry of Finance
MoU	Memorandum of Understanding
MTEF	Medium-Term Expenditure Framework
NA	National Accounts
NBS	National Bureau of Statistics
NPISH	Non-Profit Institutions Saving Households
NPS	National Panel Survey
NSS	National Statistical System
OCGS	Office of the Chief Government Statistician
PEPMIS	Public Employee Performance Management Information System

SDDS	Special Data Dissemination Standard
SNA	System of National Accounts
SUTs	The Supply and Use Tables
TQAF	Tanzania Quality Assurance Framework
TRA	Tanzania Revenue Authority
TSMP	Tanzania Statistical Master Plan

1. Introduction

The National Bureau of Statistics (NBS) has the responsibility of coordinating, producing, and disseminating all statistics including official administrative statistics as well as national survey and censuses. In addition, NBS, as the mandated oversight institution for producing statistics in Tanzania Mainland acknowledges the importance of providing relevant and quality statistics to users.

Through Tanzania Statistical Master Plan Phase Two (TSMP II) 2022/23-2026/27 a development goal has been set to strengthen the National Statistical System (NSS) in Tanzania to enable it produce quality statistics for decision makers in an objective, timely, and cost-effective manner. Production of high-quality statistics depends on the assessment of data quality. Without a systematic assessment of data quality, NBS will risk to lose control of the various statistical processes such as data collection, editing or weighting. Production, coordination and dissemination of data without data quality assessment would result in assuming that the processes cannot be further improved and that problems will always be detected without systematic analysis.

Given the varied quality of official statistics and increased demand for data use at all levels, NBS embarked on this data quality assessment (DQA) to characterize the quality of routine data, and to identify factors associated with the quality and use of routine data in Tanzania Mainland. Understanding data quality, processes of data collection and associated barriers to enhancing quality helps to formulate tailor-made strategies to improve data quality and use.

This report provides detailed information on indicators of statistical practices in the areas of the national accounts statistics gathered during the assessment conducted by the NBS's Research and Standards Department which will finally be a publicly available document. The information was provided by National Accounts Statistics experts of the National Bureau of Statistics. This assessment was conducted in lines with the generic International Monetary Fund (IMF) Data Quality Assessment Framework (DQAF) and used to prepare the summary assessment of data quality elements based on a four-part scale of compliance which is full compliance, partial compliance, no compliance and not applicable.

The IMF Data Quality Assessment Framework (DQAF) identifies quality-related features of governance statistical systems, statistical processes, and statistical products. It is rooted in the UN Fundamental Principles of Official Statistics and grew out of the Special Data Dissemination Standard (SDDS) and General Data Dissemination System (GDDS), the IMF's initiatives on data dissemination.

2. Objectives

The main purpose for conducting qualitative assessment for the National Accounts Statistics was to ensure that NBS in discharging its mandate of overseeing the production of these statistics is aware of the strengths, weaknesses (and risks), and limitations of the data performance as well as the extent to which the data can be trusted to influence management decisions and eventually, the identification of possible improvement actions.

3. Methodology

The Research and Standards Department in ensuring that data quality assessment for the national accounts statistics is undertaken successfully, the key procedures for conducting the assessment were followed including: issuing the roadmap for the assessment; undertaking orientation to the NBS Management and staff from the National Accounts Statistics Department; conducting pre-assessment; and conducting the actual assessment.

4. Scope

The assessment was based on levels whereby the first level covers the prerequisites of quality and five dimensions of quality; assurances of integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility. For each of these prerequisites and five dimensions, there are elements (two-digit level) and indicators (three-digit level.). At the next level, focal issues that are specific to the compilation of the National Accounts Statistics are addressed.

5. Detailed Assessment Results

The following are detailed results of the assessment based on the four (4) levels of the assessment checklist which are dimension, element, indicator and focal issue with narration and links to relative supporting documents such as the statistics Act Cap. 351, 2008 SNA, NBS staff regulation, Scheme of Service, Advance Release Calendar, NBS strategic plan and Statistical Guidelines.

0. Prerequisites of quality			
	0.1 Legal and institutional environment		
		0.1.1	**The responsibility for collecting, processing, and disseminating the statistics is clearly specified** • **The primary responsibility for collecting, processing, and disseminating the statistics is clearly established** The statistics Act Cap. 351 mandates NBS to collect, compile, analyse and disseminate official statistics. The Statistician General has delegated the powers to the heads of government institutions to collect and publish official statistics subject to guidelines issued by NBS. Statistics produced by agencies shall qualify to be official statistics if they meet criteria set by NBS and approved by the Statistician General. NBS can also make any agreement with any agency to collect jointly official statistics as the need arises. The Statistics Act can be downloaded from https://www.nbs.go.tz/uploads/documents/en-1701864877-STATISTICS_ACT_CAP_351_(R.E%202019).pdf Conflicts or potential conflicts between the legal authority to produce statistics and other laws or provisions (e.g., access to information law or bank secrecy laws) have been successfully resolved or reconciled with no major impairment to the data production as provided in section 46 of CAP 351.
		0.1.2	**Data sharing and coordination among data-producing agencies are adequate** • **Arrangements or procedures exist to facilitate data sharing and coordination between the agency (agencies) with the primary**

			responsibility for compiling the statistics and other data producing agencies
			Section 17 of the Statistics Act gives NBS the responsibility of coordinating the National Statistical System (NSS) with a view to having an integrated statistical system to ensure optimal utilization of available resources. NSS includes data providers, producers and users of statistics, research and training institutions. Coordination of NSS and mainly comprises of government Ministries, Departments and Agencies (MDAs).
			The Act provides a comprehensive approach to statistical cooperation in Tanzania, including access to data for the purposes of official statistics production. In access to public or other records, the collection of statistics relation to any matter may be obtained from any Government institution, agency, or user or producer of statistics, Statistician General shall grant access to authorized NBS officer or staff for the purpose of getting information.
			The Statistics Act empowers the NBS Statistician General to share data at the request of any person or agency free of charge, provided that data shared is not about individual persons or entities.
			NBS through Department of National Accounts Statistics in collaboration with other stakeholders conducted regular meetings with several key data providers such as the Ministry of Finance, Bank of Tanzania, Tanzania Revenue Authority, and Private Sectors to promote understanding on data requirements. The law does not enforce direct on the flow of source data. Mostly, Memorandum of Understanding (MoU) are used in data sharing with MDAs. NBS has MoU with key data providers to facilitate data sharing and ensure access to data in a standardized manner.
		0.1.3	**Individual reporters' data are to be kept confidential and used for statistical purposes only**
			• **The confidentiality of individual reporters' data is guaranteed and that guarantee is widely known.**
			Sections 31 and 33 the Statistical Act Cap 351 stipulates restriction to disclosure information and unidentified information and NBS cannot

| | | | publish, or otherwise make available to any individual or organization, information that would enable the identification of any individual person or entity.

NBS is using consent form in surveys and other statistical inquiries whereby respondents are informed of their rights and obligations with regard to the provision of information, and that the information they provide will be used for the purpose of producing statistics.

- **Procedures are in place to prevent disclosure of individual reporters' data.**

Any person other than NBS staff who is employed in the execution of any duty relating to statistical production under statistics Act are obliged to sign an oath of secrecy for the confidentiality of the statistics collected as stipulated in section 14. Penalties for disclosure of information are also insisted in the Statistical Act Cap 351 under section 43.

NBS also takes all necessary steps to ensure the security and confidentiality of official statistics are kept in accordance with the provision of the Act. Documentation for statistical products is always done in a secure manner. Information is only disseminated in an aggregated manner through Statistical releases and/or on the NBS website. |
| | | 0.1.4 | **Statistical reporting is ensured through legal mandate and/or measures to encourage response**

- **A law or other formal provision provides for the reporting of information needed to compile the statistic.**

The Statistics Act Cap 351 and its regulations specifies how data and information should be collected to ensure adherence to statistical reporting. National and international frameworks to follow during data collection has been explained in the NBS Strategic Plan.

- **Other mechanisms are in place to provide for adequate reporting of data for compiling the statistics**
During the data collection design, the burden placed on respondents is considered and measures are taken to reduce this burden. NBS policies |

			and practices emphasize the requirement for the authorized person (interviewers) to clearly explain the purposes of the survey/census to the respondent during the introduction. In this explanation, respondents are asked if they are willingly to participate and be informed on the duration of the interview. Data collection forms or questionnaire indicates contact persons who can provide assistance in responding, as well as information on how to complete the questionnaire and explanations for answering the questions. Also, every questionnaire contains legally required information on the purpose, type, and scope of the survey, obligation to provide information, reporting unit, confidentiality, and other aspects of the survey. In particular, a reference to the Statistics Act is given in surveys and statistical inquiries (section 31). NBS provides information on the results of the national accounts products to the respondents upon request and in conformity with established statistical confidentiality guidelines.
	0.2 Resources		
		0.2.1	**Staff, facilities, computing resources, and financing are commensurate with statistical programs** • **Staff resources for compiling the statistics are adequate to perform required tasks** National Accounts Statistics department comprising a total of 10 staff (eight (8) with masters' degree in statistics and two (2) with degree in statistics and economics). The staff also have the requisite training in the compilation of national accounts statistics from reputable institutions such as IMF, MEFMI (Macroeconomic and Financial Management Institute of Eastern and Southern Africa) World Bank and EAC. They all have the required and sufficient computing skills. Salary levels depend on the Government salary scale and are adequate for the nature of the work and competitive with public administration conditions in the country. The Staff are motivated by providing incentives..

			For the purposes of monitoring and evaluation, staffs are appraised weekly, monthly, semi-annually and annually through the Public Employee Performance Management Information System (PEPMIS) based on prior agreed targets that are derived from the work plan. All staff are recruited on the basis of professional qualifications, and in an open competition. • **Computing resources for compiling the statistics are adequate to perform required tasks.** The National Accounts Statistics department has sufficient computing resources that are available to all the staff and back-up procedures are utilized by Information, Technology and Data Management (ITDM) Department to ensure security of data. • **Physical facilities and other resources are adequate to perform required tasks.** NBS headquarter office building located in Dodoma and Regional Offices provide adequate working facilities such as lighting and cooling. Office furniture and equipment are adequate to perform the tasks. The transportation arrangements for data collection and other activities are provided by issuing vehicles but for outside Dodoma the transport allowance is provided to data collectors. • **Funding for compiling the statistics is adequate to perform required tasks** Funds for the National Accounts Statistics are provided by the Government through Medium-Term Expenditure Framework (MTEF) although the budget is usually tight, work plans are developed in consideration of resources availability and cost benefit analysis to maximize on outputs and outcomes. It is difficult to implement some of activities such as annual supply and use table (SUT) due to insufficient funds to support data collection and analysis.
		0.2.2	**Measures to ensure efficient use of resources are implemented** • **Management ensures that resources are used efficiently.**

Management ensures compilation of National Accounts and related activities are carried out and reviewed on the basis of the annual performance plan and efficient use of resources is monitored and evaluated on a quarterly basis by the department of Planning, Monitoring and Evaluation. The staff performances are monitored by Department of Administration and Human Resources at NBS level and the President's Office, Public Service Management and Good Governance at Government level whereby staff are given merits for promotion.

- **Costing and budgeting practices are in place and provide sufficient information to management to make appropriate decisions.**

NBS activities are guided by the Strategic Plan. An annual schedule of activities is then drawn from the NBS Business Plan. The annual work plan includes itemized budget which guide the timing of the activities as well as optimization of resources.

	0.3 Relevance	
	0.3.1	**The relevance and practical utility of existing statistics in meeting users' needs are monitored**

- **Specific actions are taken to ensure that current statistics meet needs of data users.**

The System of National Accounts Statistics (2008 SNA) and other agreed guidelines are used to compile national accounts statistics which adheres to the national and international standards. In addition, the National Accounts Statistics Department conducts ad-hoc user-producer meetings through which user needs are identified and plans for further developments shared.

Views of users of official statistics are also collected through emails, letters, telephone calls and office visits. Ad-hoc and periodic user satisfaction surveys are also conducted. NBS also organizes for dissemination workshops where participants are allowed to ask questions or make comments regarding official statistics and such feedback is used to enrich NBS understanding of users' needs.

			Commemoration of African Statistics Day is also used to disseminate NBS statistics products.
			NBS is implementing the National Accounts Statistics Revision policy which provide general rules and information regarding the possible causes of revisions, typology of revisions and documentation supporting the revisions.
			https://www.nbs.go.tz/uploads/documents/en-1707147937-National%20Accounts%20%20Statistics%20Revision%20Policy.pdf
			• **Mechanisms are in place to identify new and emerging data requirements**
			User producer meetings which include MDAs, academia, the press, and/or private sector are conducted with MDA's and other principal data users, including academia, the press, and/or other private sector representatives, to review the usefulness of existing National Accounts statistics and to identify emerging data requirements.
			Staff participate regularly in the meeting, seminars and training organized by international and regional organizations for capacity building and discuss on the emerging data requirement. The international and regional organizations that support NBS in Capacity building include IMF, World Bank, Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI), and East African Community (EAC).
	0.4 Other quality management		
		0.4.1	**Processes are in place to focus on quality**
			• **There is recognition throughout the organization that quality builds trust and thus is a cornerstone of statistical work**
			NBS management always emphasizes on quality of statistics produced by the National Accounts Department following the recommended and agreed international standards. In the NBS organization structure there is a Directorate responsible for quality management. To ensure quality statistics produced by NBS, the standard menu is provided in the website (www.nbs.go.tz). Several quality guidelines for production of quality statistics are posted in this menu. There is a handbook of quality

			guidelines for production of statistics, Statistical Methods and Standard guidelines, Concept and definitions for official statistics. https://www.nbs.go.tz/publications/statistical-guidelines NBS and OCGS are in the process of preparing the Customized Tanzania Quality Assurance Framework (TQAF) for management of Official Statistics and Manual for Strengthening and Integrating Administrative data in the Tanzania National Statistical System. Both documents are prepared with objective of ensuring quality of official statistics. The training programs that emphasize the importance of quality and give staff an understanding on how quality may be achieved are conducted at least once per year.
		0.4.2	**Processes are in place to monitor quality during the planning and implementation of the statistical program** Production of quality statistics to meet the demands of stakeholders in a timely manner is insisted in the NBS strategic plan and Tanzania Statistical Master Plan (I and II). Monitoring and Evaluation of NBS activities is conducted on quarterly basis. National Accounts statistics department uses Regional (EAC) and International (UN, IMF) guideline in ensuring standard and quality statistics are produced. Moreover, strategies are in place for improving data production for compilation of National Accounts Statistics and periodic reviews are undertaken to identify steps necessary to maintain quality requirements.

1.	**Assurance of Integrity**		
	1.1	**Institutional Integrity**	
		1.1.1	**Statistics are produced on an impartial basis** • **The terms or conditions under which the statistics are produced are in accordance with professional independence** The Statistics Act Cap 351 Section 9(1) gives the power to the President to appoint a Statistician General on the recommendation of Minister of Finance. Section 5 of the Act stated that the Bureau shall excise professional independence in the collection, processing, analysing and dissemination of official statistics so as to enhance and protect the integrity and impartiality.

			• **Professionalism is actively promoted and supported within the organization** Staff are recruited and promoted based on PEPMIS and scheme of services. The organization provides comprehensive training to staff to increase their skills and knowledge based on their professions as stated in Training Need Assessment, TSMP II Training Program and NBS training programs. The concept notes that contain the reasons forwarded for conducting any survey is developed, reviewed and approved. These notes are updated to maintain NBS professionalism.
		1.1.2	**Choice of data sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations** • **The choices of data sources and statistical techniques are informed solely by statistical considerations** The choice of statistical sources for the national accounts statistics is based on their availability, reliability, and consistency with the concepts and definitions of the 2008 SNA. National Accounts Statistics Department uses data from multiple sources including census (Agriculture census, Population Census, Census of Industrial Production), surveys (Household Budget Survey, ILFS) and administrative data. Moreover, studies are conducted during major revisions to bridge existing data gaps. • **Decisions about dissemination are informed solely by statistical considerations.** NBS use release calendar to inform the public about the planned time for dissemination of GDP and its allied aggregates. However, annual GDP is released by the Minister for Finance during the release of the State of the Economy to the Parliament. Quarterly GDP publications are released to the media and the NBS website.
		1.1.3	**The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.**

			• **The data-producing agency comments when its statistics are misinterpreted or misused** NBS provides clarification on erroneous interpretation and misuse of statistics produced through medias and NBS website. The released national accounts statistics are accompanied by key definitions and concepts for better understanding by users. Identified actions help to reduce misinterpretation or misuse of the data. Awareness on how to report and interpret national accounts estimates to media personnel and other users is conducted.
	1.2	**Transparency**	
		1.2.1	**The terms and conditions under which statistics are collected, processed, and disseminated are available to the public** • **Information is available to the public about the terms and conditions under which the statistical series are compiled and disseminated, including the obligation to compile and disseminate the statistics, the confidentiality of individual reporters' data, and other key features.** The statistical Act Cap 351 section 18 -20 and section 31 explains about the terms of which statistics are collected, processed and disseminated. NBS takes all necessary steps to ensure confidentiality of the official statistics.
		1.2.2	**Internal governmental access to statistics prior to their release is publicly identified** • **The public is made aware of internal government access to statistics prior to their release to the public.** The national accounts statistics is not released to any governmental organization prior to dissemination. The compilation of national accounts statistics once completed, is disseminated on the same day and time to all users.
		1.2.3	**Products of statistical agencies/units are clearly identified as such.** • **Statistical products are clearly identified so that the public is aware of what the data producing agency takes responsibility for.**

			National Accounts publications are clearly stated by name and logo of NBS, and in the case of joint publications, the part attributable to the data producing agency is identified.
		1.2.4	**Advance notice is given of major changes in methodology, source data, and statistical techniques.** • **Users of statistics are made aware in advance of major changes in methodology, source data, and statistical techniques** Data users are normally well informed in advance about changes in methodologies, data sources and statistical techniques through website. Metadata reports are shared with users on the NBS website and during workshops or dissemination workshops of the national accounts statistics.
	1.3	**Ethical standards**	
		1.3.1	**Guidelines for staff behaviour are in place and are well known to the staff.** • **A clear set of ethical standards has been prepared** NBS has Staff Regulations and Codes of Ethics and Conducts that guide management and staff on ethical standards. Therefore, all NBS staff are provided with a copy of the service rule to inform them on ethical standards and vetting. • **Staff are made aware of the ethical standards.** NBS staff are made aware of the guiding rules and ethical standard provided under the Code of Ethics for Public Servant and they are periodically reminded on the guiding rules during all staff meeting and Workers Council meetings. New recruited staff are provided with induction course in order to understand public servant ethics. Management and discipline committee also assures ethical standards are observed by staff.

2. Methodological soundness			
	2.1 Concepts and definitions		
		2.1.1	**The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.**
			• **Concepts and definitions used to compile the statistical series are in broad conformity with guidelines outlined in the 2008 SNA.**
			The National Accounts Statistics compilation adheres to the guidelines outlined in the 2008 System of National Accounts (SNA), EAC and other International guidelines when compiling the national accounts statistics. Additionally, the National Bureau of Statistics (NBS) has developed guidelines on concepts and definitions for official statistics that are in line with the 2008 SNA, serving as a methodological reference for producing National Accounts statistics.
	2.2 Scope		
		2.2.1	**The scope is broadly consistent with internationally accepted standards, guidelines or good practices.**
			• **The scope of the national accounts statistics covers 2008 SNA accounts/aggregates**
			The national accounts statistics cover the accounts and aggregates outlined in the 2008 SNA. The 2008 SNA tables and accounts that the Inter-Secretariat Working Group on National Accounts (ISWGNA) determined as minimum requirement and recommended for its implementation, are compiled on a regular basis and covered by the NA are as follows:
			i. Annual value added and GDP at current and constant prices by activity;
			ii. Annual GDP by type of expenditure at current and constant prices;
			iii. Annual GDP components at current prices by activity;

iv. Quarterly value added and GDP at current and constant prices by activity;

- **The delimitation of the constituent units of the economy is in accordance with the 2008 SNA.**

The constituent units of the economy are in accordance with the guidelines outlined in the 2008 SNA. Units of the economy as defined by the 2008 SNA includes territorial enclaves in the rest of the world, free zones/bonded warehouses/factories operated by offshore enterprises under customs control and workers who work part of the year in another country. Currently, such statistics on units of the economy are not covered due to a lack of reliable source of data.

- **The production boundary is in accordance with the 2008 SNA.**

The production boundary such as own-account production of all goods for own final consumption research and development for market and on own account, output of goods for own-account fixed capital formation, mineral exploration, production of entertainment, literary, or artistic originals and production of computer software were done but not in full coverage. However, illegal output sold to willing buyers are not covered.

- **The assets boundary is in accordance with the 2008 SNA.**

When compiling National Accounts statistics, the assets are covered in line with 2008 SNA including buildings, land, minerals, forests, machines and equipment, wild animals, financial assets etc.

		2.3 Classification/sectorization	

| | | 2.3.1 | Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices |

- **The classification and sectorization used in the compilation of national accounts are in broad conformity with internationally recommended systems.**

Different classification system, in accordance with the international recommendations, are used in compiling national accounts statistics to

enhance comparability and reliability of economic statistics. The 2008 SNA is followed for classifying measures of economic activities. Specifically, the National Accounts Statistics Department utilizes the International Standard Industrial Classification of All Economic Activities Revision 4 (ISIC Rev. 4) to classify economic activities of establishments and enterprises. While other institutions, such as the Tanzania Revenue Authority (TRA), further disaggregate the ISIC levels down to six digits, the National Accounts analysis operates at the four-digit level, aligning with the prescribed disaggregation standards.

The Central Product Classification (CPC) and Classification of Products by Activity (CPA) are used in National Accounts to categorize goods and services produced in an economy and organize economic data related to the production and consumption of goods and services.

The Classification of Individual Consumption by Purpose (COICOP) is used in National Accounts Statistics Department to classify household consumption and expenditures. Furthermore, the Department also uses the Classification of the Functions of Government (COFOG) to classify functions of the government.

2.4 Other quality management

2.4.1 Market prices are used to value flows and stocks

- **The valuation rules used for recording flows and stocks are in accordance with the 2008 SNA.**

The valuation rules used for recording flows and stocks are full complied with the 2008 SNA on:

  i. Market output is valued preferably at basic prices.
  ii. Output for own use is valued at equivalent market prices.
  iii. If levied, sales and excise taxes are included in the valuation of intermediate consumption.
  iv. If value added taxes are in place, they are included in the valuation of intermediate consumption, excluding the deductible part of the value added taxes.
  v. If applicable, the deductible part of the value added taxes is excluded from the valuation of final uses.
  vi. Information on insurance and freight for merchandise imports is available.

			vii. Imports are reported at cost insurance and freight (c.i.f) and exports reported at free on board (f.o.b) but during compilation c.i.f are adjusted at f.o.b and therefore valued on f.o.b. basis. Transactions in foreign currency are converted using the Annual average exchange rates. The absence of sufficient information regarding transfer prices results in a failure to do the corrections when transfer prices are detected. Moreover, in the presence of a system of multiple official exchange rates, adjustments are not properly made as they relies on the Bank of Tanzania (BOT) information.
		2.4.2	**Recording is done on an accrual basis** • **The timing rules used for recording flows are in accordance with the 2008 SNA.** Transactions and flows are recorded on modified accrual basis as and work-in-progress is specifically used in construction and agriculture activity models. However, some government related transactions are not recorded on an accrual basis, such as taxes and subsidies on products.
		2.4.3	**Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices** • **The grossing/netting procedures are in accordance with the 2008 SNA.** Basically, all procedures for the computation of GDP and its allied aggregates are aligned with SNA 2008.

3. Accuracy and Reliability			
	3.1 Source data		
		3.1.1	**Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.**

- **The data collection programs employed to compile the national accounts statistics are adequate.**

Data used to compile national accounts statistics is obtained primarily from administrative sources which has some deficiencies in terms of coverage and reliability. Other source data are periodic censuses or surveys (household budget survey, etc.).

The questionnaires for surveys conducted by NBS are reviewed in order to meet the national accounts (NA) requirements and more questions are added depending on the availability of funds.

National Accounts Department does not have full control of the data sources from MDAs and private institutions, although the Institutions are responsible to provide data to the NBS.

The coverage of financial sector is incomplete. Units engaged in microfinance, especially credit unions, are scarcely taken into account because the number is unknown and their accounting records are not available.

- **Annual enterprise/establishment statistics are collected through a regular survey program**

Establishment surveys conducted based on Statistical Business Register (SBR) and Population Census are Annual Survey of Industrial Production (ASIP) and Annual Agriculture Sample Survey (AASS). Administered questionnaires take into account all variables needed by National Accounts Department. However, not all annual surveys are conducted as planned due to financial constraint.

This is well designed since UN standards for Survey process are followed (GSBPM). The sample design ensures the population is represented properly. Benchmark collections are conducted during rebasing while administrative data are used as supplementary.

There are no regular surveys which collect annual statistics from establishments. Establishment statistics is based on the census therefore, the National Accounts Department does not have a complete list of enterprises. Items concerning fixed assets, production, intermediate

consumption, stocks, and employment lack detailed information for national accounts compilation and does not account for mergers and changeovers.

Due to the lack of regular and updated Statistical Business Register, census remains the only helpful source data. Detailed data are not sufficient in some of the systems.

- **Household surveys are conducted on a regular basis.**

Normally, the population and housing census sampling frame is used whereby scientific sampling techniques and multi-stage samples and stratification are used. Sampling techniques take care on geographic coverage.

Household Budget Survey (HBS) is conducted at least once in every five years, reference is HBS publications. Samples are refreshed in every new HBS survey. Diary is used for the whole year to cover seasonal variation. Administrative data are collected and used as supplementary information. All international standard as per UN standards for Survey process are followed (GSBPM).

- **Comprehensive government finance statistics are available regularly.**

Government Finance Statistics (GFS) covers budgetary funds and some of extra budgetary fund. Not all data can be obtained from the system in usable format.

- **Comprehensive corporate sector data are available regularly for financial and non-financial corporations.**

Non-financial public and private corporate sectors are not fully covered.

- **Data collections based on administrative data sources are adequate.**

Administrative data are sometimes inconsistent and not adequate

- **When annual surveys do not exist, periodic (two to five years) surveys/censuses are conducted.**

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			Periodic (two to five years) surveys/census are conducted.
			• Price statistics used to derive constant price estimates are adequate
			UN standards for Survey process are followed (GSBPM), though some prices including producer price indices are not available.
			• Monthly/quarterly data are adequate for compiling reliable quarterly GDP.
			Establishment based surveys done on quarterly basis e.g (Quarterly survey of Industrial production) collect adequate data required for compilation of quarterly GDP. Currently, quarterly GDP is not compiled by expenditure approach. This is expected to be done after the benchmarking and revision of National Accounts base year 2019.
			• Ad hoc surveys are conducted when needed to fill data gaps.
			Trade and transport margins, Non-Profit Institutions Serving Households (NPISH), Service Survey are conducted during major revisions aimed at bridging existing data gaps.
			• The data collection programs are sufficiently open and allow for versatility to new developments in sources.
			The meetings with stakeholders are conducted to solicit their cooperation in collection of data and to take into account national accounts data issues. Consultation is done during stakeholders' meetings and planning stages.
			Press and research paper are in place but they are not monitored. International standards, guidelines, and practices are monitored.
		3.1.2	**Source data reasonably approximate the definitions, scope, sectorization, classifications, valuation, and time of recording required.**
			• Source data approximate the definitions, scope, classifications, valuation, and time of recording required.

			Administrative data are collected depending on requirements and need of producers and users of particular administrative data and not specifically for national account statistics.
			• **The data collection program provides adequate coverage of economic activities**
			All economic activities according to ISIC Rev. 4 are covered
		3.1.3	**Source data are timely.**
			• **The data collection programs provide for the timely receipt of data.**
			Timeliness of the dissemination of data is met as per release calendar. Release calendar informs on deadlines set for reporting in advance though sometime there is delay of data submission from data source agents.
	3.2 Assessment of source data		
		3.2.1	**Source data including censuses, sample surveys, and administrative records are routinely assessed, e.g., for coverage, sample error, response error, and non-sampling error; the results of the assessments are monitored and made available to guide statistical processes.**
			• **Accuracy of the data from surveys is routinely assessed.**
			The monitoring is done by the respective department responsible for conducting surveys. Information of non-sampling error is available on NBS/OCGS website. This is done during benchmarking and revision of national accounts stastistics process in consultation with respective data producers
			The stakeholders workshop/meeting conducted to verify the data collected from the survey/census and the questions required to meet the required objective ie indicators and to verify the consistency with other related source data.
			• **Accuracy of the information from administrative data and other supplementary sources is routinely assessed.**

			Data used to compile national accounts statistics are assessed on quarterly basis.
	3.3 Statistical techniques		
		3.3.1	**Data compilation employs sound statistical techniques to deal with data sources** • **Data compilation procedures are sound** . Compilation procedures are adhered to the international guidelines whereas administrative data are analysed and any errors detected are corrected by contacting the enterprises or government agencies concerned. The current data is also compared with previous years' data for any given financial and non-financial corporations. Any inconsistencies detected are corrected in collaboration with the reporting institutions. The accuracy of fiscal data is also assessed regularly, and respondents are asked for clarifications if there are questions. Adjustments are made when necessary and procedures for imputation and adjustment for non-response follow international guidelines. • **Appropriate measures are taken to validate the source data.** Data for missing observations are adjusted by using estimation techniques and the adjustments for under coverage follow appropriate guidelines in line with the international guideline.
		3.3.2	**Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.** • **Sound adjustments are employed to make source data consistent with national accounts requirements.** The assessment of GDP, both in value and volume terms, is based on statistical techniques that are unsound owing to the deficiencies observed in the source data. Informal sector is estimated, however illegal activities are hard to cover, hence difficult to estimate.

- **Output estimates are compiled at a sufficient level of industrial detail.**

For production approach, ratios are sometime derived from outdated surveys and censuses and in some industries, data may not be available at the detailed level for national accounts purposes. Likewise, certain techniques are not consistent with the 2008 SNA and ISIC Rev. 4 is used.

- **Intermediate consumption estimates are compiled at a sufficient level of detail.**
  Intermediate consumption (IC) is available by industry but details of IC is available for the benchmark year

- **The reliance on fixed ratios derived from benchmarks or other sources is monitored.**

Fixed ratios have been used over 5 years for some economic activities

- **Proper techniques are used to address specific issues of GDP compilation.**

Housing production on own account (owner-occupied housing), called imputed rent, is estimated on the basis of the data derived from the Household Budget Survey, which give the costs of different categories of housing. However, the consumer price index line item for housing is used to estimate the imputed rents, with all the shortcomings which that implies.

The estimate is from the HBS & NPS. **FISIM is allocated as per 2008 SNA** recommendations. Agriculture and construction economic activities estimated using work in progress approach. Inventories are estimated based on the stock of Assets Recording of General government data is partially accrual.

- **Proper procedures are followed for compiling volume measures of GDP.**

Appropriate Price indices are used to deflate output and intermediate inputs as per 2008 SNA. With exception of few industries.

- **The GDP estimates by expenditure components are derived independently.**

GDP by expenditures approach is compiled annually but not independent.

- **Expenditure estimates are compiled using detailed classifications.**

Detailed classification indicated in the benchmark year. Annual movements obtained by extrapolation of benchmark estimates using appropriate indicators. Final consumption expenditure is estimated for Household, Government and Nonprofit Institutions Serving Households (NPISH)

For the household final consumption expenditure, estimates based on the data from household budget survey conducted in year 2017/18. The sampling frame base is from the 2012 census.

The household final consumption expenditure estimated by products plus adjustment for direct purchases abroad by resident less purchases of non- resident in the territory

Government final consumption expenditure is computed as gross value of output less marketed value of goods and services. The government output is mostly non-market, estimated as sum of compensation of employees, consumption of fixed capital and intermediate consumption.

Gross fixed capital formation (GFCF) compiled based on central government statistics. The estimated GFCF includes investment in building and structure, transport equipment, machinery and equipment, other machinery and equipment, animal resources yielding repeated products and intellectual property. The estimated GFCF include domestic produced goods and imported. Changes in inventories for the benchmark year is estimated using commodity flow approach

Exports and imports of goods and services data obtained for the central bank and extrapolated using appropriate export and import price indices.

			• **The reliance on fixed ratios derived from benchmarks or other sources is monitored.**
			With excerption of few industries, double deflation approach is used and the deflators are reviewed during major revisions (every five years)
			• **Proper techniques are used to address specific issues of GDP compilation.**
			Some of the expenses are captured by BOT and HBS & NPS have been used to estimate the above items. Special issues and treatment: include: Estimation of output of a central bank at cost, allocation of FISIM to different users including industries, and estimation of Life and non-life insurance services separately; Inclusion of imputed rent to owner-occupiers as part of HH final consumption expenditure; treatment of durable goods purchased by households (eg. motor vehicles) for Household use as final consumption expenditure.
			• **Adequate procedures are followed to compile volume measures of the expenditure components of GDP.**
			Consumer price indices are used for extrapolation of final consumption expenditures by households and government. the civil service wage rate index, is used is used to deflate wages components.
			The double deflation method is used when the data are available, as recommended in the 2008 SNA.
			• **Specific quarterly compilation techniques are in accordance with internationally accepted good practices.**
			All of the above items are implemented as per 2008 SNA except seasonal adjustment quarterly national accounts estimates which is not applicable for a moment.
	3.4 Assessment and validation of intermediate data and statistical outputs		
	3.4.1	**Intermediate results are validated against other information where applicable.**	

			• **Intermediate results are validated against other independent data.** NA account assess the data given from various sources before compilation.
		3.4.2	**Statistical discrepancies in intermediate data are assessed and investigated** • **The discrepancies in intermediate data are routinely investigated and measures taken to remove them.** NA team assess the data collected from various sources before using for NA compilation and hence remove the discrepancies. GDP estimates are prepared using production and expenditure approaches. However, discrepancy between estimated GDP by production and expenditure is included in the errors and omissions except for the benchmark year. Verification of the consistency of the data is currently determined by the availability of sources.
		3.4.3	**Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated.** • **The statistical discrepancies, if any, between GDP by activity and GDP by expenditure components are investigated.** The supply and use framework is conducted in every 5 years. The framework is used to crosschecking consistency between the approaches. Discrepancy is shown in GDP expenditure and when the accounts are prepared, the estimates of GDP according to the two approaches and their reconciliation are useful for detecting and correcting discrepancies. • **Other indicators of problems are investigated.** Data are validated against unofficial estimates, this is due to the fact that it differs significantly from the official GDP Estimates, During benchmarking, conducted studies include NPISH, trade margin and services.

		3.5 Revision studies	
		3.5.1	**Studies and analyses of revisions and/or updates are carried out and used** **internally to inform statistical processes (see also 4.3.3).** • **Revision studies are undertaken on a regular basis.** Studies for rebasing and revisions are carried out, and provisional, semi-final, and final accounts are produced national accounts have been revised as per EAC and IMF guidelines • **Measures are undertaken to incorporate the findings from revision and/or update studies in data compilation.** Revision studies are not undertaken on a regular basis. Therefore, measures are not undertaken to incorporate the findings from revision studies in data compilation.

		4. Serviceability	
		4.1 Periodicity and timeliness	
		4.1.1	**Periodicity follows dissemination standards** • **The periodicity of the statistics follows the IMF data dissemination standards (Special Data Dissemination Standard (SDDS) or General Data Dissemination System (GDDS))** The GDP is disseminated quarterly and annually following the IMF data dissemination standards Special Data Dissemination Standard (SDDS) and General Data Dissemination System (GDDS) respectively. The NBS website http://www.nbs.go.tz and press release is used to disseminate the GDP and its allied aggregates.
		4.1.2	**Timeliness follows dissemination standards** • **The timeliness of statistical series follows the IMF data dissemination standards (SDDS or GDDS)**

			The accounts are published timely following IMF data dissemination standards. The quarterly GDP estimates are disseminated within three months after the end of reference quarter (SDDS). The annual GDP estimates are disseminated within six months after the end of reference year (GDDS).
	4.2 Consistency		
		4.2.1	**Statistics are consistent within the dataset** • **Statistical series is internally consistent** The quarterly GDP estimates are consistent and annual estimates. The concepts, definition, and classification for compiling quarterly GDP estimates are the same as those used to compile annual estimates. Annual National Accounts Statistics is published in the "Annual Economic Survey", NBS website (http://www.nbs.go.tz) and "Statistical Abstract" publications. Annual GDP estimates by production are consistent by activity and expenditure annually. The GDP estimates at current prices, volume measures, and (implicit) deflators are consistent within the "value = volume × price" framework
		4.2.2	**Statistics are consistent or reconcilable over a reasonable period of time** • **The statistical series is consistent over time** The Tanzania Mainland GDP Series 1966-2022 is publicly available in the NBS website. Public is informed when then there is change in source data, methodology and historical techniques.
		4.2.3	**Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical framework** • **The statistics are consistent or reconcilable with other statistical frameworks.** The national accounts statistics are consistent with balance of payments, government finance statistics and other statistical framework. However, NBS is the only institution responsible for producing national accounts data

		4.3 Revision policy and practice	
		4.3.1	**Revisions and/or updates follow a regular and transparent schedule** • **The practice of revisions (e.g., from provisional estimates, for weight updates, for changes in methodology) follows a predictable pattern of which users of statistics are informed.** The revision cycle is made known to the stakeholders like BOT, TRA, MoF and other users through release calendar. Six rounds of revisions have been done since the first compilation of national accounts statistics in 1954. The first revision of national accounts statistics in Tanzania was done for the year 1966, the second revision was done for the year 1976, the third revision was for the year 1992, the fourth revision was for the year 2001, the fifth revision was for the year 2007 and the sixth revision is for the year 2015. The revision of national accounts statistics of Tanzania Mainland for the year 2015 used the Supply and Use Tables (SUTs). Adequate information about the revision is included in the statistical release publication. When the revision is outside the regular cycle stakeholders are informed. Quarterly GDP estimates are subject to revisions during annual GDP compilation, The annual estimates are published in economic survey publications every year.
		4.3.2	**Preliminary and/or revised/ updated data are clearly identified** • **Users are informed about the preliminary nature of the data.** At the time of data dissemination, users are informed on whether the data disseminated is preliminary or revised as indicated in the the revision policy.
		4.3.3	**Studies and analyses of revisions are made public** • **Users are informed of the results and studies of the revisions to the statistics.** Before rebasing users are informed about the purpose, steps to be undertaken during rebasing, studies reports, analyses of revisions or any updates are explained and documented. Rebasing report is disseminated

			in the website (NBS/OCGS) and disseminated data are also accessible to users.

5. Accessibility			
	5.1 Data accessibility		
		5.1.1	**Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)** • **The presentation of the statistics data is commensurate with users' needs** Statistical data are published as database charts and tables in the NBS database. The database is the primary publishing site of data,. When releasing statistical data, existing database charts and tables are updated with new data or completely new database tables can be published. The statistical data published in the NBS database, a release on the key data is usually published in the web service. The release contains data concerning several reference periods specifically quarterly and annual data, a review bringing together these data is published in the web service. Estimates are disseminated at a detailed level and with time series that is, the time series of more than 5 years in every annual GDP.
		5.1.2	**Dissemination media and format are adequate** • **Statistics are disseminated in formats to suit users' needs** Comprehensiveness and detailed statistics are assured by NBS and are disseminated through paper and electronic copies. Statistics users are accessing the current statistics and longer time series through an electronic database of the NBS for free. That is, there is no fee in accessing the data.
		5.1.3	**Statistics are released on a preannounced schedule** • **Statistics are released on the preannounced schedule** Release calendar announces in advance the dates the statistics have to be released. The punctuality on statistics release is not fully complied (sometimes there is one to two weeks delay of data release especially in quarterly and when there is a revision of data).

		5.1.4	**Statistics are made available to all users at the same time**
			• **The statistics are made available to all users at the same time**
			By issuing the press release, the data are released simultaneously to all interested parties. All users obtain the statistics after being released by NBS. This released statistics are made available at the NBS website.
		5.1.5	**Statistics not routinely disseminated are made available upon request**
			• **Statistics not routinely disseminated are made available to users upon request.**
			Users can freely obtain additional available data and customized tabulations upon requests or visiting NBS.
5.2 Metadata accessibility			
		5.2.1	**Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated**
			• **The metadata give adequate information about the meaning of the data and about the methodology used to collect and process them,**
			The metadata are readily accessible on statistical publications through NBS website. The SDDS/ GDDS metadata, SDDS summary methodologies, and other related description are reviewed and updated on quarterly and annually basis.
		5.2.2	**Levels of detail are adapted to the needs of the intended audience**
			• **Different levels of metadata are made available to meet users' requirements**
			The levels of metadata detail in national account statistics are available which summarize the key information of statistics and updated during rebasing..

			The adapted metadata to different levels and are available to the public upon request.
	5.3 Assistance to users		
		5.3.1	**Contact points are publicized** • **Adequate assistance is given to users of statistics** Contacts for accessing statistical publications are readily available through various channels, including NBS head office, regional offices, libraries, and NBS websites. Users can access the information they need through the NBS websites, and assistance is provided through face-to-face interactions, phone calls, and emails. User satisfaction is monitored through surveys, and there has been a positive response to all methods of assistance.
		5.3.2	**Publications, documents, and other services, including information on any charges, are widely available** • **Publications and other services are available to users of statistics** Publications and documents are available freely in soft and hard copy through NBS website, libraries and regional offices.

6. Conclusion

In general, the assessment results reveal that the business processes for production of National Accounts Statistics complied to all dimensions as follows:

On **Prerequisites of quality**, the NBS has broadly effective legal frameworks (the Statistics Act, CAP 351) to support the compilation and dissemination of National Accounts statistics.

On **Assurances of integrity** of NBS, the Statistics Act, CAP 351 clearly assure the professional independence of the Bureau. Recruitment and promotion of staff are mostly based on competence and expertise in specific subject areas. Staff are given every opportunity to take part in training courses and seminars.

On **Methodological soundness**, the general framework for compiling the National Accounts Statistics is the 2008 SNA.

On **Serviceability**, the quarterly GDP estimates are disseminated within three months after the end of reference quarter (SDDS). The annual GDP estimates are disseminated within six months after the end of reference year (GDDS).

On **Accessibility of data**, National Accounts statistics are published in a clear manner with charts and tables that make the data easily understood by users.

7. Recommendations

S/No	Dimension	Recommendation
0.	Prerequisites of Quality	• Budget allocated for production of National Accounts statistics should be prioritized, sufficient and ringfenced by the government. • Continue providing more trainings on compilation of National Accounts Statistics and related field to staff so as to upgrade their skills and knowledge which will enable them to improve production of quality statistics.
1.	Assurances of integrity	• Continue creating awareness on ethical standards for the betterment and protection of statistics professionalism. • Induction course for the new recruited staff should be emphasized and the copies of

		Staff Regulation and Codes of Ethics and Conduct documents should be provided to the staff.
2.	Methodological Soundness .	• Prepare documentation for each important activity during the production of National Accounts Statistics.
3.	Accuracy and Reliability	• Periodic studies and analyses of updates should be carried out and used internally to inform statistical processes and findings from such studies of other sources of error/bias should be used to define the optimal revision cycle that is largely driven by the availability of major data sources, implement change in National Accounts Statistics methods. • A mechanism should be put in place so as to ensure adequate and consistent with administrative data used for National Accounts Statistics compilation.
4.	Serviceability	• Efforts should be made to rebase the national accounts annualy. This will increase the proper representation of price trends in this fast-changing world. • Regular Studies and revisions should be done and shared to the public.
5.	Accessibility	• Metadata should be updated during rebasing

8. References

1. IMF Data Quality Assurance Framework
2. The Statistics Act, CAP 351 (R.E 2019)
3. NBS Strategic Plan 2021/22-2025/26
4. Tanzania Statistical Master Plan 2022/23 – 2026/27 (TSMP II)