

# THE GAMBIA

## Report on the Observance of Standards and Codes (ROSC)—Data Module, and Detailed Assessment Using the Data Quality Assessment Framework Tool For Consumer Price Index Statistics

### *Prepared by*

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The Report on the Observance of Standards and Codes (ROSC)—Data Module provides an assessment of The Gambia’s Consumer Price Index Statistics against the recommendations of the General Data Dissemination System (GDDS) and Special Data Dissemination System (SDDS), complemented by an assessment of data quality based on the IMF’s Data Quality Assessment Framework (DQAF), May 2012. The DQAF lays out internationally accepted practices in statistics, ranging from good governance in data-producing agencies to practices specific to datasets.

The report is based on self-assessment information provided by staff of the Consumer Price Index and Government Finance Statistics unit of the Gambia Bureau of Statistics (GBoS) after a training workshop conducted on 16-20 December 2019, and three weeks period allowed for the filling of the DQAF assessment toolkit. Further training on DQAF report writing was given after which the draft report was prepared by GBoS and finalized by the consultants.

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## Abbreviations

AFRITAC	Africa Technical Assistance Centre
AU	African Union
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
DQA	Data Quality Assessment
DQAF	Data Quality Assessment Framework
ECOWAS	Economic Community for West African States
EU	European Union
GBoS	Gambia Bureau of Statistics
GDDS	General Data Dissemination System
IMF	International Monetary Fund
MoU	Memorandum of Understanding
NSDS	National Strategy for the Development of Statistics
NSS	National Statistical System
PPI	Producer Price Index
ROSC	Report on Standards and Codes
SDDS	Special Data Dissemination System
WFP	World Food Programme
ILO	International Labour Organization

# REPORT ON OBSERVANCE OF STANDARDS AND CODES (ROSC)

## Methodology

The DQAF evaluation framework covers the different steps in the compilation, processing and dissemination of statistics, and assesses the strengths and weaknesses on the available structures, based on the six DQAF dimensions:

1. Prerequisites of quality;
2. Assurance of integrity;
3. Methodological soundness;
4. Accuracy and reliability;
5. Serviceability; and
6. Accessibility

The assessment provides a comprehensive evaluation of the quality of data by comparing a country's practices with current international standards. To do so, a number of practices (fundamental principles to be observed for the production of good quality data), depending on the subject matter, are organised into sub-dimensions under the six dimensions mentioned. The essential part of the assessment is scoring each of these practices according to a four-point scale as shown below:

### Key to symbols

Level of observance	Meaning
<b>O</b> = Practice observed	Current practices generally meet or achieve the objectives of DQAF internationally accepted practices without any significant deficiencies
<b>LO</b> = Practice largely observed	Some departures, but these are not seen as sufficient to raise doubts about the authority's ability to observe the DQAF practices
<b>LNO</b> = Practice largely not observed	Significant departures and authorities will need to take significant action to achieve observance
<b>NO</b> = Practice not observed	Most DQAF practices are not met

Scores assigned to each practice are then aggregated to arrive at a single score for each of the six DQAF dimensions. These scores are intended to indicate where efforts to improve statistical functions should be focused.

The assessment relied on information gathered through self-assessment of staff nominated by their respective institutions using a self-administered toolkit. In this approach, data per se have not been assessed but rather the entity for managing the data collection, processing, analysis and dissemination processes, are the ones that have been assessed. So, the team of consultants cannot confirm the reliability of the information given by the staff.

Following the evaluation of each DQAF practice, a global score based on Gambia's degree of compliance to all six DQAF dimensions – and relative to international standards and norms – has been calculated.

## Summary of assessment

The Gambia Bureau of Statistics (GBoS) compiles and disseminates Consumer Price Index (CPI) statistics for The Gambia. The Report on the Observance of Standards and Codes (ROSC)—Data Module contains the following main observations on the compilation of CPI statistics in The Gambia using the DQAF May 2012. Overall, the compilation and dissemination of the CPI statistics largely observe (with a score of 78%) international compilation principles and good practices.

On **Prerequisites of quality**, GBoS has broadly effective legal frameworks to support the compilation and dissemination of CPI statistics. Specifically, Article 13(3b) of The Statistics Act 2005 gives a strong legal basis for compiling the statistics, and it appears same in Article 24(3d) of the revised Statistics Act 2019 which is yet to be approved by parliament. Confidentiality of respondents' data is guaranteed under the Statistical Act, with penalties for breaches provided. However, the practice of some staff carrying home laptops that have some unaggregated data can compromise the non-disclosure provisions in the Act.

Inadequate staff is a critical issue for the CPI unit as the total staff strength is two with one pursuing a master's degree. A critical problem looms ahead if the unfortunate happens and both staff are not available at the same time. Computer and storage facilities are inadequate. Proper and effective back-up systems are not available now, posing a great threat to data security. However, office accommodation is conducive to good working conditions.

The main user consultations are done through the user producer forum, a major annual event that brings together users and key stakeholders in the NSS to discuss and review existing statistics and new developments. Quality as a cornerstone of statistical work is stressed when and where it is appropriate.

On **Assurances of integrity** of GBoS, the Statistics Act 2005 explicitly guarantee the professional independence of the Bureau. Conditions for the appointment and removal of the Statistician-General is provided in the Act. 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

The Statistics Act 2005 has been published on the GBoS website and it is freely downloadable. The revised Act will also be published on the website when approved. Disseminated data has clear identification of GBoS as the authoritative source. GBoS is clearly identified in joint publication series with other stakeholder institutions Statistical publications often include details of GBoS address and also the website where users can easily access the publications etc.

Some statements on ethics are contained in the appointment letter given to new staff. However, there is no program to provide regular reminders to existing staff.

On **Methodological soundness**, the general framework for compiling the CPI is the ILO CPI compilation manual and COICOP is used in the classification. The CPI was recently rebased

from the 2004 base year to 2019. The weights are based on the 2015/2016 Integrated Household Survey. The level of details of the CPI in terms of products, prices, and classifications is sufficient for detail analysis.

Tablets are used instead of paper questionnaire, an improvement that seeks to minimise data entry and processing errors.

On **Accuracy and reliability**, household surveys for CPI expenditure weights are based on a sample frame that is comprehensive in scope and coverage (data is collected from all regions). Sample frames are not regularly updated, and this affects the frequency of the rebasing of the CPI. Thus, rebasing of the CPI is not regular. Before the CPI was rebased and published in February 2020, the base year was 2004 which grossly breached international standards. The weight reference period for the current rebased CPI is 2015/2016, while the price reference period is January 2019. The rebased CPI basket contains 265 products (goods and services) compared to 207 from the August 2004 CPI basket.

Some of the selected markets do not have all the products in the basket that is why the CPI has been stratified into rural and urban CPIs. Products that are available only in the urban areas form the basket for the urban CPI. The national CPI is the weighted average of the rural and urban CPI. There has never been replacement of outlets / markets in the price data collection as they have been reliable. Adjustments made to price data from the field follow laid down procedures in the CPI manual.

GBoS uses Jevons method to calculate the elementary indices, while the use of short term modified Laspeyres index is being considered in the near future.

On **Serviceability**, the CPI is made available to the public on the 15<sup>th</sup> of each month for the preceding month whose information is being disseminated. Consistent time series data are available for an adequate period of time. For instance, the rebased 2019 indices have been linked to the 2004 base year data. The old CPI series have been brought to January 2019 prices and a long series of the CPI are available from August 2004 to the current month.

On **Accessibility of data**, CPI are published in a clear manner with charts and tables that make the data easily understood by users. Analysis of current developments is included with dissemination to show reasons for movement in prices. Current statistics and long time series are easily accessible in electronic format from GBoS website.

Information on methodology and statistical techniques used in computing CPI are adequately documented during rebasing. All CPI information are made available to the public free of charge.

## Recommendations

- a) Make adequate provision for upgrading the skills of existing staff and for additional human and other resources (computer and storage devices) for statistics

- b) Encourage staff to undertake research, when resources permit
- c) Efforts should be made to periodically undertake revision studies between rebasing periods
- d) Efforts should be made to rebase the CPI at shorter intervals, in order for the statistics to properly represent price trends in the fast-changing world.

## Level of adherence to internationally accepted statistical practices in the compilation of CPI statistics

A four-point scale assessment of the CPI was conducted, and the results are presented at the level of the DQAF elements in Table 1.

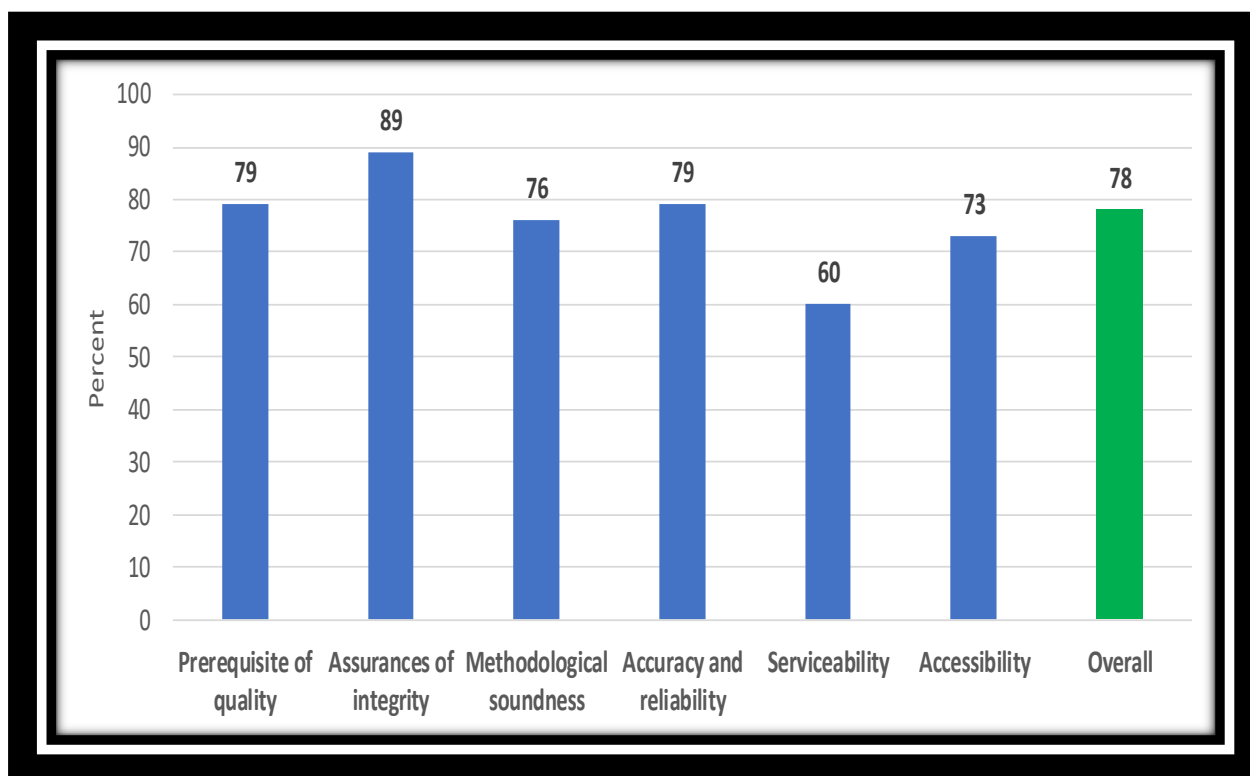
**Table 1: The Gambia: DQAF May 2012 – Summary for CPI statistics**

	Elements assessed	O	LO	LNO	NO	Comments on the assessment
<b>0. Prerequisite of quality</b>			●			
	0.1 Legal and institutional environment		X			Staff and computer resources are inadequate
	0.2 Resources		X			
	0.3 Relevance	X				
	0.4 Other quality management		X			
<b>1.0 Assurance of quality</b>			●			
	1.1 Institutional integrity	X				
	1.2 Transparency		X			
	1.3 Ethical standards	X				
<b>2.0 Methodological soundness</b>			●			
	2.1 Concepts and definitions		X			
	2.2 Scope	X				
	3.3 Classification/sectorisation		X			
	2.4 Basis for recording		X			
<b>3.0 Accuracy and reliability</b>			●			
	3.1 Availability of source data		X			
	3.2 Assessment of source data		X			
	3.3 Statistical techniques Validation of intermediate data and	X				
	3.4 statistical outputs		X			
	3.5 Revision studies			X		Revision studies are done only during rebasing
<b>4.0 Serviceability</b>			●			
	4.1 Periodicity and timeliness		X			
	4.2 Consistency		X			
	4.3 Revision policy and practice			X		Studies and analysis of revisions are not published
<b>5.0 Accessibility</b>			●			
	5.1 Data accessibility		X			
	5.2 Metadata accessibility	X				
	5.3 Assistance to users		X			
<b>OVERALL</b>			●			

● Overall score by the quality dimension

Figure 1 gives a graphical presentation of the level of compliance to international good practices in CPI compilation by quality dimension.

**Figure 1: The Gambia: Level of observance of international principles and good practices in the compilation of CPI statistics using DQAF May 2012**





## DETAILED ASSESSMENTS USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the CPI, was gathered from self-assessment using the DQAF tool by the Gambian officials.

### **0. PREREQUISITES OF QUALITY**

*This category in the DQAF identifies conditions within the agency in charge of producing statistics that have an impact on data quality. The elements within the category refer to the legal and institutional environment, resources, and quality awareness.*

#### **0.1 Legal and institutional environment — *The environment is supportive of statistics.***

*0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.*

The Statistics Act 2005 mandates Gambia Bureau of Statistics (GBoS) as the authority for collecting, analyzing and disseminating official statistics, conducting population and housing censuses and ad hoc surveys in The Gambia. Further, it empowers GBoS to coordinate and monitor the National Statistical System (NSS) to ensure sustainability in the production of credible data. Also corroborated in the statistical act is the authority conferred on GBoS for the compilation of consumer price indices.

The Statistics Act 2005 is above all other Acts in the National Statistical System for statistical activities in the Gambia.

*0.1.2 Data sharing and coordination among data-producing agencies are adequate.*

GBoS organizes on an annual basis, the user-producer forum as a way of commemorating the African Statistics Day. The forum attracts personnel from Ministries, Departments and Agencies (MDAs) that are involved in the use and production of statistics in the country. Discussions during the forum includes among other things the developments and challenges in the production of statistics and how to mitigate them as well as how to harmonize to save resources and efforts.

The CPI Unit do not use secondary data for the compilation of the indices but supply other institutions with raw price data for their own analysis. Memorandum of Understanding was signed with the World Food Program (WFP) who uses the raw data for their monthly analysis.

*0.1.3 Individual reporters' data are kept confidential and used for statistical purposes only.*

According to the Statistics Act 2005, individual data usage for any other reason such as, legal proceedings, administrative decision-making etc., by any person, institution or international bodies is against the Act.

Provisions in the Act prohibits unauthorized disclosure of confidential statistical information. Any staff of the Bureau who being in possession of any information which to his or her knowledge has been disclosed in contravention of the Act has committed an offence and liable to punishment. Aggregation methods agreed upon is used to maintain the confidentiality of the individual records; data is disseminated in aggregated form, which prevents the disclosure of individual records. Standard procedures are applied to anonymize individual data. Hard copies that are no more important to the Bureau are usually destroyed to avoid leakage of confidential information. All data collected by GBoS are carefully stored.

The GBoS premises is well secured and the computer systems are well maintained to ensure that individual data remained secured. Although some staff carry their laptops home to continue their unfinished assignments but even in that, the confidentiality of the individual data is maintained. Though unit record requests are not common, it is catered for in the Statistics Act that, any staff who is handling the anonymized individual data for further research project subject to statistical confidentiality, will have to sign an undertaking first.

The front page of all data collection instruments asks for the consent of the respondent after clearly explaining the purpose of the survey, the confidentiality of the response and that it is voluntary to participate in the process. Provisions in the Act prohibits unauthorized disclosure of confidential statistical information. Any staff of the Bureau who being in possession of any information which to his or her knowledge has been disclosed in contravention of the Act has committed an offence and liable to punishment.

*0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.*

The Statistics Act 2005 mandates GBoS as the authority for collecting, analysing and disseminating official statistics, conducting population and housing censuses and ad hoc surveys in The Gambia.

The monthly nature of collecting price data and from the same respondent all the time if possible is a factor that can cause respondent burden. This has been a challenge for GBoS since it is difficult for GBoS to do something in that area as that is the recommended practice for collecting price data. Importance of the respondents in the data collection process is highly recognised by GBoS, and thus respondents are all the time reminded of the importance of their response towards the success of the process and the development of the nation as a whole. The interviewers are always mindful of the respondent's concerns to ensure their cooperation and participation in the process.

**0.2 Resources — Resources are commensurate with needs of statistical programs.**

*0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.*

Human resource is still inadequate in the Consumer Price Index unit; at least four qualified staff should be working on the compilation and analysis of the index instead of the current two. One staff is currently pursuing her master's degree. Most of the other staff need to be trained to obtain the necessary capacity and qualifications to be able to carry out their statistical operations. The identified capacity gaps need to be closed.

Trained staff are highly motivated through some form of motivations thus the staff turnover is very low. The salary is reasonable compared to other government institutions in the country. The salary attracts staff from other institutions.

Computer infrastructure including software is not enough. Complete back-up systems for the computers are limited and any unforeseen disaster will result in data loss. The bureau lacks central back up system to act as retrieval point should there be any data loss. Printers and photocopiers are not enough and this at times cause delays in timely dissemination of data.

The office environment is conducive as both lighting and cooling systems are good and there is a standby generator that is used in case of power cuts to avoid any interruptions in work.

Transport is available for data collection though not enough as only data collectors have motor bikes while their supervisors do not have. Vehicles are also available for other related activities.

Annual budgeting procedures are in place for all activities. At the end of every year, a new budget is prepared for the activities for the coming year. In addition, budget for the medium-term statistical activities to be carried out are included in the National Strategy for the Development of Statistics (NSDS). Government subvention caters for some of the activities but most activities are funded by donors and these may result into donor fatigue.

#### *0.2.2 Measures to ensure efficient use of resources are implemented.*

The Directorate of Administration and Human Resources carry out performance management assessments. The assessment forms are issued to all the staff to be filled and rated by their supervisors. In this form, staff have the opportunity to report all the activities they have been involved in during the period under review. The undertaken activities include assignments in their Terms of Reference (TOR) as well as other activities assigned to them by their supervisors. The Human Resource Unit then forwarded the completed forms to the GBoS governing council for review and consideration.

External Technical Assistance are available to help in carrying out some statistical work. For example, the IMF assisted the price unit to complete the rebasing of the CPI. Capacity gaps still exist in some areas where expert interventions are required so as to adopt and follow international best practices. Periodic reviews for statistical activities, including costings, are carried out as part of the monitoring system. Reviewing and comparing resources periodically for similar survey series are done. Proper budgeting procedures are always

followed to help in the effective allocation of resources. These are done to avoid misallocation of resources.

### **0.3 Relevance — *Statistics cover relevant information on the subject field***

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

A major annual event that brings together users and key stakeholders in the National Statistical System (NSS) to discuss and review existing statistics and new developments is the Conference of Official Statistics organized by GBoS and partners. This event allows users, planners, academia etc. to review and identify issues where necessary. GBoS staff always participate in international meetings, trainings and conferences relating to statistics. Some of the international and regional institutions which invite GBoS are African Development Bank (AfDB), West Africa Institute for Financial and Economic Management (WAIFEM), Africa Regional Technical Assistance Centre West 2 (AFRITAC-West 2), Economic Community of West African States (ECOWAS), etc. Some of these programmes are held in the country.

The User Satisfaction Survey was conducted to identify user needs, including new data requirements. Harmonisation with sister countries also help to identify new data needs.

### **0.4 Other quality management — *Quality is a cornerstone of statistical work***

*0.4.1 Processes are in place to focus on quality.*

Producing quality data is always emphasised by the management of GBoS and they are very concerned about the production of high-quality statistics. These are also stressed on during trainings, dissemination programmes and workshops.

Trainings are conducted to build capacity of the technicians for producing and maintaining quality statistics. For example, training on rebasing of the CPI is important in producing quality indices. GBoS has implemented some externally recognised quality measures to have quality statistical outputs. Data editing, and review for consistencies are always carried out with the aim of maintaining high quality statistics. Other review methods are also carried out during surveys.

Information on CPI is published and sent to several recipients through email and on the GBoS website for a broader usage. Dissemination of data through the website enable users to have easy access to the CPI data.

*0.4.2 Processes are in place to monitor quality during the planning and implementation of the statistical program.*

There is a monitoring system in place to inform management about the quality level for most statistical activities. Data is edited, compared to identify outliers; all these are geared towards maximizing the quality of the statistical products. GBoS has been guided by external

consultants in the production of statistics such as the CPI rebasing which was completed recently.

## **1. ASSURANCES OF INTEGRITY**

*Integrity identifies features that support firm adherence to objectivity in the collection, compilation, and dissemination of statistics in order to maintain users confidence. Elements refer to the professionalism and ethical standards that should guide policies and practices, which should be reinforced by their transparency.*

### **1.1 Institutional Integrity — *Statistical policies and practices are guided by professional principles.***

#### **1.1.1 *Statistics are produced on an impartial basis.***

Article 15(1) of the Statistics Act 2005 gives the power to the President to appoint a Statistician-General in consultation with the Public Services Commission. Article 15(2d) mandates the Statistician General to be professionally independent and impartial in the exercise of his/her duties, while Article 15(5) spells out the conditions under which the Statistician General can be removed from office.

Recruitment and promotion are to be based on staff qualifications, but this sometimes change based on other considerations. The concept notes that contains the reasons forwarded for conducting any survey is developed, reviewed and approved. These notes are updated to maintain the professionalism of the Bureau.

GBoS staff are formally trained on the job by their supervisors and or technical assistance from regional and international bodies. Staff are also sent on short term training, visit to other statistical offices to learn the job etc. All these are geared towards enhancing the capacity of the staff.

Working at GBoS entails being discipline, hardworking, adopting and following international best practices in producing statistics and maintaining professionalism. Peer reviews are rarely conducted and should be encouraged.

#### **1.1.2 *Choice of data sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.***

Primary data is used to compile price statistics and these are always available - the data is collected directly from the vendors at the selling points. Although statistical considerations inform decision on when and how to disseminate data for public consumption but timely data is also essential for appropriate policies. CPIs are compiled and published on a monthly basis.

*1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.*

All reports by GBoS are accompanied by key definitions and concepts for the understanding of the users. These help to reduce misinterpretation of the data. Journalist are also trained to understand these concepts to enable them report accurately. A two-day training was conducted recently for the media and other institutions that use the CPI to understand the concepts of the CPI and how is it used by the audience or users.

## **1.2 Transparency — *Statistical policies and practices are transparent***

*1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.*

The GBoS educates users about the 2005 Statistics Act through workshops, surveys and censuses using excerpts from the Act. Similar education is done during the commemoration of World Statistics Day, African Statistics Day, World Population Day and during meetings with players within the National Statistical System (NSS) and the public. All CPI documents or publications specify or spell out clearly the use of the GBoS website in case they need more information and there is provision for telephone numbers of contact persons for cases of inquiries.

*1.2.2 Internal governmental access to statistics prior to their release is publicly identified.*

The CPI is not released to any governmental organization prior to dissemination. The CPI, when completed, is disseminated same day and time to all users.

*1.2.3 Products of statistical agencies/units are clearly identified as such.*

All CPI publications clearly have the GBoS's name, logo and insignia printed on them. Production of the CPI is exclusive to GBoS and there is no joint publication with another agency. GBoS requests from users to clearly reference or cite its statistics when the data compiled by GBoS is used in reproducing other statistics or policy reports.

*1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.*

Data users are normally well informed about changes in methodologies, data sources and statistical techniques through Metadata reports and these are shared with users on the GBoS's website and through bilateral engagements in plenaries and during workshops or dissemination workshops of the CPI.

## **1.3 Ethical standards — *Policies and practices are guided by ethical standards***

*1.3.1 Guidelines for staff behaviour are in place and are well known to the staff.*

GBoS has a service rule that guides management and staff on ethical standards of the office. Therefore, all GBoS staff are issued with a copy of the service rule to inform them of ethical standards and each member of staff signs oath of secrecy.

## **2. Methodological Soundness**

*Methodological soundness refers to the application of international standards, guidelines, and agreed practices. Application of such standards, which are specific to the dataset, is indicative of the soundness of the data and fosters international comparability. Elements refer to the basic building blocks of concepts and definitions, scope, classification and sectorization, and basis for recording*

### **2.1 Concepts and definitions - *Concepts and definitions used are in accord with internationally accepted statistical frameworks.***

*2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.*

The CPI compilation by GBoS follows the guidelines of the International Consumer Price Index manual and follows classifications such as Classification of Individual Consumption by Purpose (COICOP). Concepts and definitions are followed as prescribed by the Consumer Price Index manual especially for food and non-food items periodic price measurements. Hence, the level of details of the CPI in terms of products, prices, and classifications is sufficient for detailed analysis.

### **2.2 Scope — *The scope is in accord with internationally accepted standards, guidelines, or good practices***

*2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.*

The CPI compilation follows the guidelines stated in the CPI compilation manual and follows the Classification of Individual Consumption by Purpose (COICOP) 1999. Differences between the scope and coverage between the CPI and capital formation final expenditure are followed to an extent.

### **2.3 Classification/sectorization — *Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.***

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

The classification of COICOP follows Classification of Individual Consumption by Purpose (COICOP) 1999 which is in conformity with international standards.

## **2.4 Basis for recording — *Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.***

### *2.4.1 Market prices are used to value flows and stocks.*

Prices of items for the CPI are collected from retail outlets / markets. These are prices that consumers pay for the goods/services. Products included in the CPI basket are well specified, thus reflecting price determining characteristics of the item, the terms of the transactions, and services provided by the outlet.

### *2.4.2 Recording is done on an accrual basis.*

Prices are recorded as they are in the period they are purchased or posted.

### *2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.*

Price data collection is from fixed established outlets/markets which are continuously reviewed or assessed for product availability. Some markets do not have all products and therefore, it is sometimes difficult.

## **3. Accuracy and Reliability**

*Accuracy and reliability identify features that contribute to the goal that data portray reality. Elements refer to identified features of the source data, statistical techniques, and supporting assessments and validation.*

### **3.1 Source data — *Source data available provide an adequate basis to compile statistics.***

#### *3.1.1. Source data are collected from comprehensive data collection programs that take into account country-specific conditions.*

CPI data is collected on a monthly basis and published on the 15th of every month for the preceding month. Retail prices of consumer items are collected monthly and items are classified by Classification of Individual Consumption by Purpose (COICOP). Retail prices of consumers compiled are consistent with time of recording and valuation of CPI estimates.

Household surveys for CPI expenditure weights are based on an area sample frame that is current and comprehensive for the scope of the index. Geographical coverage is comprehensive given that data is collected from all the regions of the country. Questionnaires are well designed in consultation with stakeholders and users, and it is tested before application or adoption. Data collection for the CPI is undertaken using tablets. Some markets do not have all products and therefore, it is sometimes difficult. There has never been replacement of outlets / markets in the price data collection as they have been reliable.

No separate data collection/ compilation routines are specifically designed for efficient and accurate price collection. This is not done since new products and development in markets



are captured during Integrated household surveys for rebasing CPI for improvement. Monthly verification of price data to ascertain quality and international best practices is done.

*3.1.2 Source data reasonably approximate the definitions, scope, sectorization, classifications, valuation, and time of recording required.*

The ILO Manual 2004 is followed. No other data source different from the prevailing ones are used.

*3.1.3 Source data are timely*

Price data collection is done once a month which is adequate to support the publication frequency of the index. Source data which are prices from market outlets are consistent with definitions, scope and classification of CPI estimates. Retail consumer price data is consistent with time of recording and valuation of CPI estimates.

### **3.2 Assessment of source data — *Source data are regularly assessed***

*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*

Rebasing of CPI is not done regularly i.e. every five years depending on availability of resources to determine changes in consumer purchasing and behaviour as recommended by the ILO. Before the CPI was rebased and published in February 2020, the base year was 2004 which grossly breached international standards.

### **3.3 Statistical techniques — *Statistical techniques employed conform to sound statistical procedures***

*3.3.1 Data compilation employs sound statistical techniques to deal with data sources*

Introduction of tablets to minimise data capturing and processing error is implemented. Adjustment to unit values are done upon clear verification from source data provider. Adjustment for non-response or missing items are made appropriately. Missing data is calculated using a well-recognized statistical technique recommended by the CPI manual. Prices of missing products are imputed on a monthly basis using month to month price changes of a higher group. Prices are imputed for seasonal products using the price relative of the sub group in which the items reside. In case where a comparable product is missing from the market, the enumerator chooses a replacement item that can be comparable to the missing item's quality and also the price. Otherwise the overlap method is use to link in the price change. New products that have weights of 0.1% of the total expenditure of goods and services are included in the consumer basket.

*3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

Both carli and chained carli are not use in calculating the index for the Gambia. GBoS shifted to using the Jevons to calculate the elementary indices and also use for both homogeneous and heterogeneous items. GBoS is yet to shift to short term modified Laspeyres index: this is being looked at and it will be considered in the near future.

The weight reference period for the current rebased CPI is 2015/2016, while the price reference period is January 2019. The LOWE index is not used, as the expenditure weights obtained remain constant for all the periods. GBoS uses the Young index to compute the CPI., The expenditure shares obtained from the 2015/2016 Integrated Household Survey (IHS) remain constant for all the periods till the next rebasing. The current rebased CPI basket contains 265 products and services compared to 207 from the August 2004 base, therefore the product list increased by 58 items. The methodology also changed from arithmetic mean to geometric mean while the classification remained the same, that is, COICOP 1999. These changes are all documented in the methodological guide.

### **3.4 Assessment and validation of intermediate data and statistical outputs — *Intermediate results and statistical outputs are regularly assessed and validated***

#### *3.4.1 Intermediate results are validated against other information where applicable*

The comparison of the CPI with other indices is not done although GBoS compiles the Producer Price Index (PPI) as well. This is because, while CPI collects final price paid by consumers, PPI collects factory-gate prices.

#### *3.4.2 Statistical discrepancies in intermediate data are assessed and investigated*

Large movements in index of a particular sector are always investigated to ensure accuracy.

#### *3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated*

The CPI data is thoroughly reviewed and edited to correct any errors or inconsistencies. Adjustments are undertaken to deal with discrepancies in the data before finalizing.

### **3.5 Revision studies — *Revisions, as a gauge of reliability, are tracked and mined for the information they may provide***

#### *3.5.1 Studies and analyses of revisions and/or updates are carried out and used internally to inform statistical processes*

Substitution bias in the CPI is detected during updating the weights, when consumers change their taste for other goods with low prices. However, this is not fully analyzed. No other studies to investigate bias of CPI is conducted. Documentation on revisions including methods and data sources during rebasing are documented.

## **4. Serviceability**

*Serviceability focuses on practical aspects of how well a dataset meet users' needs. Elements refer to the extent to which data are relevant, produced and disseminated in a timely fashion with appropriate periodicity, are consistent internally and with other datasets, and follow a predictable revisions policy.*

#### **4.1 Periodicity and timeliness — *Periodicity and timeliness follow internationally accepted dissemination standards***

##### *4.1.1 Periodicity follows dissemination standards*

The CPI data are compiled every month in selected centres within the country in accordance with the GDDS and SDDS.

##### *4.1.2 Timeliness follows dissemination standards*

The CPI is made available to the public (i.e. policy makers, researchers, and all interested individuals) on the 15<sup>th</sup> of each month preceding the month whose information is being disseminated. This also follows GDDS and SDDS standards.

#### **4.2 Consistency — *Statistics are consistent within the dataset, over time, and with major datasets***

##### *4.2.1 Statistics are consistent within the dataset*

CPI produced for all classification typologies are consistent within the dataset.

##### *4.2.2 Statistics are consistent or reconcilable over a reasonable period of time*

Consistent time series data are available for an adequate period of time. For instance, the rebased 2019 indices have been linked to the 2004 base year data. Also detailed methodological notes identify and explain the main breaks and discontinuities in time series, their causes, as well as adjustments made to maintain consistency over time. However, challenges occur sometimes.

##### *4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

The consumer price statistics are largely consistent with other price statistics, especially some portions of the GDP deflator.

#### **4.3 Revision policy and practice — *Data revisions follow a regular and publicized procedure***

##### *4.3.1 Revisions and/or updates follow a regular and transparent schedule*

Revisions are recommended in five-year periods for country's like the Gambia. However, household expenditure surveys which are the source of data for updating and revising the basket and item weights are not done regularly. As indicated earlier, the base year was recently changed from 2004 to 2019, a period of 15 years interval. Meanwhile, efforts are being made to conduct Integrated Household Surveys regularly in order to overcome such issues.

## **5. Accessibility**

*Accessibility deals with the availability of information to users. Elements refer to the extent to which data and metadata are clear and easily available and to which assistance to the user is adequate to help them find and use the data*

**5.1 Data accessibility — Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis**

### *5.1.1*

*Charts and tables are disseminated with the data to enable users have good picture and understanding of the result.*

CPI are published in a clear manner with charts and tables that make the data easily understood by users. Analysis of current developments is included with dissemination to show reasons for movement in prices. CPI is disseminated at detail level with the series from the old 2004 base year.

### *5.1.2 Dissemination media and format are adequate*

CPI is disseminated in a way that facilitates re-dissemination in the media by preparing press briefing including charts. Current statistics and long time series are easily accessible in electronic format from GBoS website. Comprehensive statistics are disseminated both in paper / electronic format on a monthly basis.

The statistics are released according to the preannounced schedule which is the 15th of every month.

### *5.1.3 Statistics are released on a preannounced schedule*

A schedule announces in advance the dates the monthly CPI statistics are to be released.

### *5.1.4 Statistics are made available to all users at the same time*

Users of CPI are informed during meetings and workshops of statistics being released and procedures to access them via website or email or through hard copy based on request. CPI is released to all users on the same day. It is uploaded on GBoS website and shared with to key stakeholders on the same day.

### *5.1.5 Statistics not routinely disseminated are made available upon request*

Statistics that are not routinely published are made available based on request e.g. statistics on prices of individual items of a specific group or category. Customize tabulations are done based on request without a fee. Additional statistics is provided based on request only.

## **5.2 Metadata accessibility — *Up-to-date and pertinent metadata are made available***

*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*

Information on statistics produced are made available and published during rebasing and when updates are done.

Information on methodology and statistical techniques used in computing CPI are adequately documented during rebasing. Metadata, reports and monthly bulletins are made available on the website for consumption of users.

## **5.3 Assistance to users — *Prompt and knowledgeable support service is available***

*5.3.1 Contact points are publicized*

All CPI publications clearly indicate contact points / persons for enquiries by mail or telephone.

Limited request is made via email as most of the information could be found on the website.

*5.3.2 Publications, documents, and other services, including information on any charges, are widely available*

Publications, documents and other services to users are available and updated on ad hoc basis

Statistics produced are made available to users at no cost or fee via website, emails, telephone etc.

## Appendix I: Data Quality Assessment Framework—Generic Framework (May 2012 Framework)

Quality dimensions	Elements	Indicators	
<b>0. Prerequisites of quality</b>	<b>0.1 Legal and institutional environment</b> — <i>The environment is supportive of statistics</i>	0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.	
		0.1.2 Data-sharing and coordination among data producing agencies are adequate.	
		0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only.	
		0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.	
	<b>0.2 Resources</b> — <i>Resources are commensurate with needs of statistical programs .</i>	0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.	
		0.2.2 Measures to ensure efficient use of resources are implemented.	
	<b>0.3 Relevance</b> — <i>Statistics cover relevant information on the subject field.</i>	0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.	
	<b>0.4 Other quality management</b> — <i>Quality is a cornerstone of statistical work</i>	0.4.1 Processes are in place to focus on quality.	
		0.4.2 Processes are in place to monitor the quality of the statistical program.	
		0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.	
	<b>1. Assurances of integrity</b> <i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to</i>	<b>1.1 Professionalism</b> — <i>Statistical policies and practices are guided by professional principles.</i>	1.1.1 Statistics are produced on an impartial basis.
			1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.
			1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.
<b>1.2 Transparency</b> — <i>Statistical policies and practices are transparent.</i>		1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.	
		1.2.2 Internal governmental access to statistics prior to their release is publicly identified.	
		1.2.3 Products of statistical agencies/units are clearly identified as such.	
		1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques	
<b>1.3 Ethical standards</b> — <i>Policies and practices are guided by ethical standards.</i>		1.3.1 Guidelines for staff behaviour are in place and are well known to the staff.	

Quality dimensions	Elements	Indicators
<b>2. Methodological soundness</b>  <i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i>	<b>2.1 Concepts and definitions—</b> <i>Concepts and definitions used are in accord with internationally accepted statistical frameworks</i>	2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices
	<b>2.2 Scope—</b> <i>The scope is in accord with internationally accepted standards, guidelines or good practices</i>	2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.
	<b>2.3 Classification/sectorization—</b> <i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i>	2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices
	<b>2.4 Basis for recording—</b> <i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good</i>	2.4.1 Market prices are used to value flows and stocks.
		2.4.2 Recording is done on an accrual basis.
2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.		
<b>3. Accuracy and reliability</b>  <i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality</i>	<b>3.1 Source data –</b> <i>Source data available provide an adequate basis to compile statistics.</i>	3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.
		3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.
		3.1.3 Source data are timely.
	<b>3.2 Assessment of source data—</b> <i>Source data are regularly assessed.</i>	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
		3.3.1 Data compilation employs sound statistical techniques to deal with data sources.
	<b>3.3 Statistical techniques—</b> <i>Statistical techniques employed conform to sound statistical procedures</i>	3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.
		<b>3.4 Assessment and validation of intermediate data and statistical outputs—</b> <i>Intermediate results and statistical outputs are regularly assessed and validated.</i>
	3.4.2 Statistical discrepancies in intermediate data are assessed and investigated	
	3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.	
	<b>3.5 Revision studies—</b> <i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i>	3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes

Quality dimensions	Elements	Indicators
<b>4. Serviceability</b>  <i>Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i>	<b>4.1 Periodicity and timeliness</b> — <i>Periodicity and timeliness follow internationally accepted dissemination standards</i>	4.1.1 Periodicity follows dissemination standards.
		4.1.2 Timeliness follows dissemination standards
	<b>4.2 Consistency</b> — <i>Statistics are consistent within the dataset, over time, and with major datasets.</i>	4.2.1 Statistics are consistent within the dataset.
		4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.
		4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks
	<b>4.3 Revision policy and practice</b> — <i>Data revisions follow a regular and publicized procedure</i>	4.3.1 Revisions follow a regular and transparent schedule.
		4.3.2 Preliminary and/or revised data are clearly identified
4.3.3 Studies and analyses of revisions are made public		
<b>5. Accessibility</b>  <i>Data and metadata are easily available and assistance to users is adequate</i>	<b>5.1 Data accessibility</b> — <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis</i>	5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).
		5.1.2 Dissemination media and format are adequate.
		5.1.3 Statistics are released on a preannounced schedule.
		5.1.4 Statistics are made available to all users at the same time
		5.1.5 Statistics not routinely disseminated are made available upon request.
	<b>5.2 Metadata accessibility</b> — <i>Up-to-date and pertinent metadata are made available .</i>	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
		5.2.2 Levels of detail are adapted to the needs of the intended audience
	<b>5.3 Assistance to users</b> — <i>Prompt and knowledgeable support service is available</i>	5.3.1 Contact points for each subject field are publicized.
		5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.