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TECHNICAL ASSISTANCE REPORT—NATIONAL ACCOUNTS STATISTICS MISSION

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TECHNICAL ASSISTANCE REPORT

BOTSWANA

Report on the National Accounts Mission

NOVEMBER 2022

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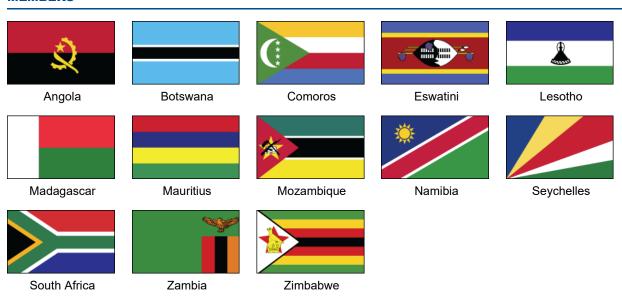
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Glossary

2008 SNA System of National Accounts, 2008

AFS IMF's Regional Technical Assistance Center for Southern Africa - AFRITAC South

BMTHS Botswana Multi Topic Household Survey
BURS Botswana Unified Revenue Services
CEE Census of Economic Establishments

COICOP Classification of Individual Consumption According to Purpose

CPI Consumer Price Index GVA Gross Value Added

HFCE Household Final Consumption Expenditure

IMF International Monetary Fund

ISIC, Rev. 4 International Standard Industrial Classification, Revision 4

SB Statistics Botswana
SUT Supply and Use Tables
TA Technical Assistance

SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS

- 1. A technical assistance (TA) mission was conducted by IMF's Regional Technical Assistance Center for Southern Africa (AFS)¹ during October 2022 to assist Statistics Botswana (SB) in the development of the strategic plan for the next rebase of the national accounts statistics. The SB will be focusing on the rebase over the coming years and has no plans to expand on what they currently produce unless adequate resources are obtained.
- 2. The mission reviewed and suggested updates of two strategic documents pertaining to the rebase with the national accounts team. The first document broadly outlined the main objectives of a rebase and the key tasks. It had been prepared for the previous rebase so many of the objectives needed to be updated as they had already been completed, e.g., implementing the *System of National Accounts, 2008 (2008 SNA)*. The second document concentrated on the implementation strategy and was more detailed. It was agreed that this document needed to be updated significantly as many key milestones and activities were missing. These were discussed and SB will update the document accordingly.
- **3.** The timeline for the rebasing exercise was reviewed and agreed. The rebase will officially commence in April 2023 and is likely to take four to five years to complete, i.e., finish in 2028/29. The next base year will be 2024 given the timings of when key surveys will be undertaken, namely the Agriculture Census (2024/25), the Botswana Multi Topic Household Survey (BMTHS) (2023/24) and the Census of Economic Establishments (CEE) 2024.
- 4. The data input and processing system development will be undertaken during 2023/24, commencing in May 2023. Therefore, the strategic documents, questionnaire design and sample frame need to be close to final by the end of April 2023. The questionnaires used in the last rebase were reviewed with the aim of improving the response rate and minimizing costs. The mission provided some other examples of questionnaires which should provide some guidance. The national accounts team were able to draw on the experience of the issues they faced during previous rebase as well. SB are planning to use the tax list to identify the sample frame for this rebase. They will commence discussions with the Botswana Unified Revenue Services (BURS) to determine the sample frame.
- 5. The following priority recommendations will improve the national accounts statistics for Botswana:

¹ AFS provides TA and training to Angola, Botswana, Comoros, Eswatini, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Zambia, and Zimbabwe. AFS donors are the European Union, Switzerland, Germany, China, Mauritius, the United Kingdom, Netherlands, European Investment Bank, Australia and Canada.

Table 1. Botswana: Priority Recommendations

Target Date	Priority Recommendation	Responsible Institutions
April 2023	Finalize strategic plan for rebasing the national accounts	SB
April 2023	Determine sample frame for the rebasing of the national accounts.	SB
April 2023	Finalize the questionnaire design for the 2024 CEE	SB

Further details on the priority recommendations and the related actions/milestones can be found in the action plan under *Detailed Technical Assessment and Recommendations*.

ANNUAL NATIONAL ACCOUNTS REBASE

- 6. SB currently has a base year of 2016 which was released in July 2021. The recommended timeframe between rebases is five years. Therefore, in theory, 2021 may have been the next base year. However, with the impacts of Covid19 this is not possible. Many of the required censuses and surveys required for a rebase (such as the Census of Population and Housing (2022), the BMTHS and CEE) have been delayed thus resulting in a review of the timing for the next rebasing of the national accounts. It has been decided that the next base year will be 2024.
- 7. The 2016 Rebase Strategy Notes document which broadly outlined the objectives and main activities of the last rebase was reviewed and updated. Many of the objectives remained the same but it was suggested that the focus be on what specific tasks SB is expected to undertake in the upcoming rebase, rather than having a generalized document. The main activities of the previous rebase were the implementation of the 2008 SNA and the International Standard Industrial Classification, Revision 4 (ISIC, Rev. 4). Both of these were completed and will be removed. Other recommendations were to indicate that there are three main tasks (i.e., estimation of the base year/Supply and Use Tables (SUT); the update to data sources and methods of the forward years; and backcast the timeseries) and each should be explained.
- **8.** The rebase relies on data from several irregular surveys and censuses. Many of these will be undertaken by other areas within SB which therefore requires the national accounts team to be involved in their developments to ensure their needs are met. The Census of Population and Housing is currently being processed. It was recommended that the national accounts team articulate their needs while it is still being processed, otherwise it may be difficult to extract the required data at a later date.
- 9. The BMTHS is essential for the estimation of the household final consumption expenditure (HFCE) estimate as well as updating the consumer price index (CPI). Unfortunately, the data from the previous BMTHS was not of good quality. Significant

adjustments were made so that it could be used in the previous rebase and the update of the CPI. The Classification of Individual Consumption According to Purpose (COICOP), which underpins the HFCE and CPI, has been updated and this needs to be included in the BMTHS. Both the national accounts and prices teams need to be involved in the development of this BMTHS to ensure the data is usable for both the national accounts as well as the CPI.

- 10. It is essential that the Agriculture Census provides the data required for the national accounts rebase. Typically, it will not collect the economic data necessary to calculate gross value added (GVA), unless it is expressly requested. If GVA data are not included in the census, then the CEE will have to include agriculture. This can cause irritation with data providers as the same agency is collecting similar data using different forms. It is recommended that SB ensure that all of the required data is collected only once using the Agriculture Census form. Consequently, the national accounts team need to be involved in the development of the Agriculture Census form.
- 11. The CEE is the main survey used to estimate GVA and populate the SUT. The previous CEE had a very low response rate which the SB wants to improve this time. Therefore, the questionnaires were reviewed, and many recommendations were provided. The main recommendation was to simplify the form by including only what was necessary. There should not be any additional sections such as ICT as was included last time. The questions to be included should align with business accounts and not use SNA terminology. Keep them simple and specific. The previous rebase had 14 different questionnaires and included very specific items. The mission recommended that the number of questionnaires should be reduced significantly and include "write in" items instead of specifying items. For example, instead of asking for the value of the sale of wood products, ask the data provider to write in the product they have sold and report its value. This enables a more generic questionnaire be developed for the majority of businesses and it also enables the validation of the industry code. Alternate questionnaires would only have to be developed where the method of deriving output is different, e.g., construction, trade services.
- 12. The 2016 Implementation Strategy document was also reviewed. This document is more detailed outlining the key milestones and tasks for the rebase. More detail was identified to be included in the document as the previous version concentrated on the CEE collection and SUT compilation. Considerable discussion was undertaken on what should be done within the next 18 months especially as they have money dedicated for the rebase in 2023/24. It was decided that this money would be best used to develop the CEE data input and processing system. In order to commence this exercise in May 2023 it is necessary that the national accounts team will have developed the CEE questionnaires and have a sample frame.
- 13. The sample frame needs to be finalized by May 2023. It was decided that the tax list would be used as the business frame from which a sample will be drawn to undertake the CEE. The national accounts team need to commence discussions with the BURS to produce a frame as soon as possible. There are likely to be many issues that need to be resolved during this process.

- 14. The previous data processing system was only a data input system. Consequently, the compilation of the GVA estimates were done manually. The mission strongly recommended that the IT system this time is also a data processing system whereby the main aggregates are derived. The system should also include several consistency checks. This will reduce errors and save time to do the follow ups with businesses in a timely manner. The national accounts team will need to start developing the IT data processing system specifications so that in May 2023 they will have something to provide the IT consultant.
- **15. The next mission is planned for March 2023.** This timing will enable a review of the strategic documents, 2024 CEE questionnaires, sample frame and IT data processing specifications before May 2023.
- **16.** The current NA team have the necessary skills to undertake the rebase. They were responsible for the previous rebase so can draw on those experiences to ensure improvements are adopted in the next rebase. The mission hopes that SB is able to keep this team together as the next rebase exercise progresses.

Recommended actions:

- The National Accounts team to update the Rebase Strategy Notes and Rebase Implementation documents.
- The National Accounts team to be involved in the development of key surveys to ensure the data required for the rebase is obtained.
- The National Accounts team develop the 2024 CEE questionnaires.
- The National Accounts team finalize the sample frame in conjunction with the BURS.
- The National Accounts team commence develop of the IT data processing system specifications.

DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS

Table 2. Botswana: Results Based Framework

Objective: Strengthen compilation and dissemination of data on macroeconomic and financial statistics decision making according to the relevant internationally accepted statistical standard, including developing/improving statistical infrastructure, source data, serviceability and/or metadata.

Outcome	Verifiable Indicators		
Data are compiled and disseminated	The general framework, concepts and definitions broadly		
using the concepts and definitions of the	follow the 2008 SNA.		
latest manual/guide			
Milestones	Assumptions	Target Completion Date	Comments
Strategic plan for 2024 rebase of NA developed		30 April 2023	

Milestones	Assumptions	Target Completion Date	Comments
Determine sample frame for the rebasing of the national accounts.		30 April 2023	
Finalize the questionnaire design for the CEE		30 April 2023	
Commence development of data input and processing system		1 May 2023	
Undertake the CEE		FY 2025/26	
Data gathering and assessment (Analysis of data; BMTHS, Agric census, CEE etc.)		FY 2026/27	
Compilation of SUT		FY 2026/27	
Dissemination of rebased GDP estimates.		FY 2028/29	
Disseminate back cast series from 1994 to 2024 (the new base year)		FY 2028/29	

A. Officials Met During the Mission

Name	Position
Dr Lucky Mokgatle	Deputy Statistician General; ECOSOC
Boitumelo Matlhaga	Director: Economic Statistics
Phaladi Labobedi	Manager; National Accounts & Prices
Lekoko Simako	Senior Statistician
Winstern Kabo	Statistician
Chandler Madisa	Statistician
Boitumelo Kobua	Statistician
Godiraone Gaolaolwe	Statistician
Phemelo Ntwayapelo	Statistician
Michael Andina	Statistician