



BOTSWANA

TECHNICAL ASSISTANCE REPORT—REPORT ON PRICE STATISTICS MISSION

June 2019

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International Monetary Fund
Washington, D.C.



Regional Technical Assistance Center for Southern Africa
International Monetary Fund
7th Floor, Bramer House, Ebene, Mauritius
Tel.: +230-401-2500 - Fax: +230-468-1618



BOTSWANA

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2019

REPORT ON PRICE STATISTICS MISSION (FEBRUARY 4–15, 2019)

Prepared by Chris Jenkins

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Glossary

AFS	IMF's Regional Technical Assistance Center for Southern Africa - AFRITAC South
COCIOIP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
GDP	Gross Domestic Product
MTHS	Multi-Topic Household Survey
OOH	Owner Occupied Housing
PPI	Producer Price Index
RTWG	Rebasing Technical Working Group
SB	Statistics Botswana
TA	Technical Assistance

SUMMARY OF MISSION OUTCOMES AND PRIORITY RECOMMENDATIONS

- 1. A technical assistance (TA) mission was conducted by AFRITAC South (AFS)¹ during February 4–15, 2019 in response to a request from Statistics Botswana (SB) to assist with updating the consumer price index (CPI) and to review progress with the development of the producer price index (PPI).** A previous mission to assist with developing PPIs was held in April–May 2018.
- 2. A broad range of representative price indexes are essential in understanding inflationary pressure in the economy and to better-inform economic policy making by the authorities.** An updated CPI more broadly reflects current consumption patterns of households in Botswana and meets the requirements of the Southern Africa Development Community. National accounts have expressed the need for PPIs to develop more reliable volume estimates of economic growth for Botswana.
- 3. SB are in the process of finalizing new CPI weights to be introduced by end February 2019.** The mission reviewed in detail the supplementary data and adjustments made to the 2015/2016 Multi-Topic Household Survey (MTHS) expenditure data and recommended improvements to these data. Additional improvements to the weights were identified, including the removal of double-counted expenditure and recalculating the weights.
- 4. SB have compiled a draft PPI for mining and quarrying and plan to disseminate these data in September 2019.** Further work to expand PPI coverage has been slower than anticipated for a number of reasons, including: data from the 2017 census of economic activity are still not available; resources diverted to support updating the CPI; and issues with the collection of price data. Improvements were identified in the compilation of the mining PPI. The progress with development of PPIs for other activities was also reviewed and a detailed work plan agreed with the authorities. SB plan to initiate price collection for a manufacturing PPI towards the end of 2019 and may request technical assistance (TA) to support this work.
- 5. The price statistics unit in SB is responsible for the development and publication of all price indexes.** The unit consists of three full time staff. Whilst the staff clearly show the capability for developing price indexes, they are limited by the amount of resource available with which to develop and disseminate indexes. SB management should carefully review the staff and budgetary resources needed to continue a program of development for PPI and ongoing improvement of the CPI.

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 Australia, the European Union, Switzerland, Germany, China, Mauritius, Netherlands, European Investment Bank, and the United Kingdom.

Table 1. Priority Recommendations

Target Date	Priority Recommendation	Responsible Institutions
End February 2019	Review adjustments applied to Multi-Topic Household Survey (MTHS) expenditure, in discussion with data suppliers and recalculate weights as necessary.	SB
End February 2019 ¹	Finalize CPI weights based on 2015/2016 MTHS expenditure, validate with technical working group and publish updated CPI.	SB
March 2019	Disseminate technical summary of the updating process for users.	SB
September 2019	Improve the use of unit value price calculation in the draft PPI for mining.	SB

¹At the time of finalising this report SB were in the final stages of approving the updated CPI for dissemination. The rebased CPI was released on March 5, 2019.

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

CONSUMER PRICE INDEX (CPI)

A. Rebasing CPI

7. CPI weights are currently based on expenditure data collected via the Botswana core welfare indicator survey during 2009/2010. These data are outdated and there is an urgent need to update CPI weights. The basket of items underpinning the CPI and the outlet sample used to collect prices also needs to be updated to reflect current household consumption.

8. Data from the 2015/2016 multi-topic household survey (MTHS) are now available and provide more representative expenditure data to compile updated CPI weights. The MTHS currently represents the most suitable and detailed source of household expenditure available to SB for updating the CPI weights. The expenditure data from MTHS reflects the period 2015/2016, whilst the price reference period for the rebased CPI will be 2018. SB are content the MTHS expenditure is sufficiently representative for the current rebasing.

9. Expenditure data from MTHS has been augmented by various other sources of data to account for under reporting. This is a standard practice because expenditure from household surveys may not be sufficiently reliable in certain areas and subject to under reporting. For example, households tend to under report their expenditure on items such as alcohol and tobacco. Further adjustments, in some cases judgmental, are also applied by SB to

the augmented data to ensure they represent only household expenditure and do not include expenditure made by businesses and government.

10. The initial compilation of 2015/2016-based CPI weights displayed some changes that didn't align with the expectation of a CPI rebasing technical working group (RTWG).

In particular, there were concerns regarding an increase in weight for the food group in the 'cities' strata (the Botswana CPI is stratified by three regions for cities, rural areas and urban areas), when the other strata for food were falling as expected (see table below). The mission conducted a thorough investigation of all the adjustments applied to the MTHS, and it was recommended SB meet with data suppliers to discuss the data used to augment and adjust the MTHS expenditure data. Of particular concern was the adjustment applied using data from International Merchandise Trade Statistics. These data, which provide the value of food being imported into Botswana was being used to account for missing imported food expenditure in the MTHS. This investigation and ensuing discussion with data suppliers (MTHS and trade statistics) uncovered a number of issues of double counting. These issues were corrected, and the CPI weights were recalculated. The analysis highlighted the need for more regular communication between the price statistics unit, MTHS colleagues and national accounts. It is recommended that staff from the price statistics unit be involved in the planning and processing of the next MTHS to ensure a better understanding of the data and any potential limitations of MTHS for the next update.

CPI expenditure-based weights 2009/10 and draft 2015/16								
Type of consumption expenditure	2009/10 weights				2015/16 first draft			
	Cities Towns	Urban Villages	Rural	National	Cities Towns	Urban Villages	Rural	National
Food	10.8	17.5	25.1	16.5	13.1	13.9	20.7	14.9
Alcohol and Tobacco	7.0	7.8	9.3	7.8	6.7	7.6	5.2	6.8
Clothing and Footwear	5.6	6.8	6.6	6.3	5.7	6.1	7.4	6.2
Housing Costs	15.8	16.3	11.3	14.9	15.2	15.5	15.0	15.3
H/hold Goods and Services	6.3	6.4	6.4	6.4	6.0	5.8	6.9	6.1
Medical/Health care	1.7	3.1	7.7	3.6	3.9	3.3	6.6	4.1
Transport	24.6	18.9	16.3	20.6	21.2	21.9	17.7	20.8
Communication	4.2	4.6	4.0	4.3	4.6	5.0	4.5	4.7
Recreation and Culture	3.3	2.6	2.6	2.9	3.5	3.8	2.7	3.5
Education	4.4	3.2	1.7	3.3	5.0	3.5	1.6	3.7
Restaurants and Hotels	4.3	2.0	1.1	2.8	3.1	2.9	2.1	2.8
Miscellaneous	11.9	10.8	7.9	10.5	12.1	10.8	9.5	11.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Botswana.

11. It has been six years since SB updated CPI weights. It is recommended that CPI weights are updated at least every five years. Given this extended lapse in time between updates,

it is expected that the weighting pattern will exhibit change. SB will need to validate any large changes in weight, providing the rationale for the changes, where applicable. For example, since the 2009/2010 update of weights, an alcohol and tobacco levy has been increased by the government for the consumption of these items. The expectation is that this levy would reduce the amount households spend on these products and subsequently the weight in CPI would be expected to reduce. To ensure there is confidence in the final weights, it is recommended they are again validated with the CPI RTWG. SB may also consider disseminating a technical summary of the weight update to ensure transparency in the approach used so users get a better understanding of the changes being introduced. This summary will also act as a reference document when the next CPI update takes place.

12. The basket of CPI items has also been updated. New items have been added to the basket (and non-representative items removed) to reflect the change in availability of new consumption items since the last rebasing. In addition, some of the outlets used in the collection of price data have been replaced. Details of both improvements should be included in the technical summary referenced above.

13. SB would benefit from the production of an instruction manual that covers updating the CPI. This manual would clearly document the weights update process, in particular the adjustments applied to source data and rationale for using them. This will ensure consistency in the future update of CPI weights and limit the risk of double-counting expenditure in the underlying data sources.

Recommended Actions:

- *SB should immediately review the data used to augment MTHS and the subsequent adjustments made to the weights.*
- *CPI weights should be recalculated following the validation of adjustments.*
- *A near-final iteration of CPI weights should be validated with the CPI RTWG.*
- *A technical summary document of the rebasing should be prepared and disseminated, providing details on the source data, methodology used in rebasing, any notable changes in weights and what new items have been introduced to the basket.*
- *The final set of weights should be used in the compilation of the January 2019 CPI and disseminated by end February 2019.*
- *The price statistics unit should work closer with MTHS and national accounts for the next update of CPI.*
- *SB should consider the production of an accompanying set of CPI update instructions.*

B. Dissemination of CPI

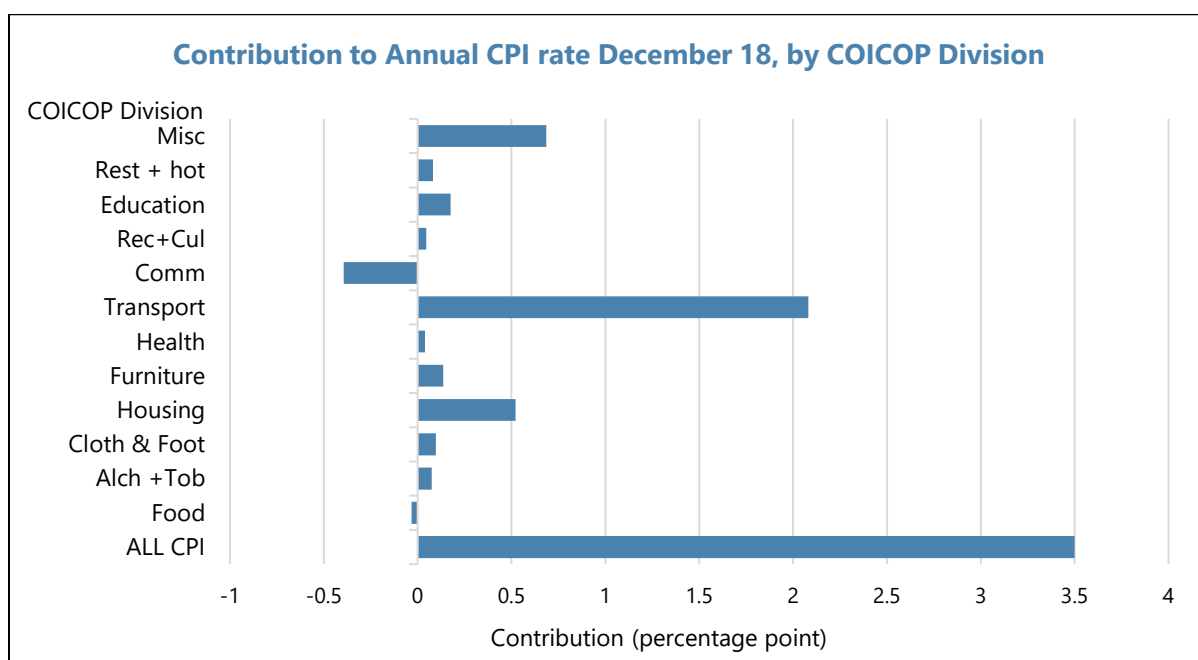
14. SB disseminates a monthly CPI via the SB website. The CPI publication document² includes commentary to support headline inflation estimates and explains the notable

² <http://www.statsbots.org.bw/sites/default/files/publications/CPI%20DECEMBER%202018.pdf>.

movements in price indexes for each of the divisions of the Classification of Individual Consumption by Purpose (COICOP). This commentary is supplemented by charts and tables displaying further component indexes, such as by COICOP division, by core inflation and by region (towns & cities, urban villages and rural villages). No technical details regarding the methodology or sources of data are currently included in the dissemination of CPI.

15. It is important that technical details concerning the compilation of statistics are made available to support users in their interpretation and understanding of estimates. A technical summary describing CPI compilation methods was produced by SB in 1996 but never disseminated. A hard copy exists in the SB library and it contains comprehensive information regarding the methodology, data sources, and quality assurance used to compile the CPI. The dissemination of such information ensures users are able to better understand the methods used in compilation, ensures transparency in the compilation process and allows for the assessment of the quality of the statistics. SB should update this guide to reflect the current compilation methods and disseminate the guide with the release of the updated CPI.

16. SB would like to develop additional analysis to assist users in understanding the monthly CPI estimates. The contribution of component COICOP divisions and groups to the headline inflation rate is helpful in providing users with a clearer understanding of the main sources of inflationary pressure. The compilation of this analysis was demonstrated during the mission and a system developed that will allow SB to calculate the contribution of each of the twelve divisions to the headline rate of inflation each month (see chart below which displays the contributions to the December 2018 CPI). This system will also allow SB to compile analysis on the contributions to the change in the inflation rate each month. SB will review the proposed system and include the analysis in the monthly dissemination of CPI.



Source: Statistics Botswana, CPI.

Recommended Actions:

- *SB should include analysis of contributions to headline inflation in the monthly dissemination of the CPI.*
- *The 1996 CPI technical guide should be updated to reflect the current methodology, data sources, and compilation process and disseminated.*

C. Owner Occupied Housing

17. The current CPI excludes owner occupied housing (OOH). These costs are important for consumers and should be included in the index. SB have indicated they would like to use the rental equivalence approach for measuring OOH. This approach requires a robust survey of private rental prices that can be used as equivalents for OOH costs. Therefore, the equivalent rents used should be representative of typical owner-occupied properties and weighted to reflect the housing stock of owner occupiers in the weight reference period.

18. SB conducts a quarterly rental survey, collecting the average rental price for various property types. The survey is carried out in Gaborone and Francistown, the two biggest cities in Botswana. Prices are collected for six representative housing types. For OOH, only market rent should be used, so the housing corporation strata would not be used. While the survey is conducted quarterly, it captures monthly price data.

19. Rental prices in Botswana are stable. Typically, there is no formal contract in place when renting a property in Botswana, so there is opportunity for landlords to freely adjust rents on a month-by-month basis. However, this does not appear to be the case with the results from the rental survey showing stable price development. The rental prices collected by SB are obtained from either the tenant or landlord, and represent the price of the rental only, excluding any additional costs such as utilities etc. It is important that prices are collected on a like-for-like basis. There is a likelihood the prices collected from a tenant will differ when compared to a price collected from a landlord for the same property, so SB should ensure consistency in the collection. The collected price should reflect the actual transaction price wherever possible.

20. The private rental price data required for a reliable rental equivalence approach should be representative of the stock of owner-occupied property. Typically, owner occupiers reside in different properties to those that are being privately rented. The current rent survey may not broadly represent the total housing stock and, in the medium term, should be reviewed to expand and improve coverage of typical owner-occupied properties. In addition, the rental prices should be weighted to reflect the stock of OOH in the base period. In discussion with SB, there doesn't appear to be a readily available set of current housing stock data available for this purpose. SB should continue working to identify sources of housing stock data that can be used to improve the calculation of OOH. Furthermore, in identifying sources of housing stock data, this would also provide SB with a better understanding of the owner-occupied housing

sector in Botswana and will guide on-going improvements in the medium-term to the current rental survey to improve measures of OOH.

21. SB are in the process of planning the next population and housing Census for 2021.

Depending on the availability of housing stock data, SB should engage with Census colleagues to understand what data will be collected, and to discuss what questions can be added to the Census to meet their housing requirements. SB will need data on the stock of owner-occupied property and private rented property and therefore it is recommended this detail is included in the next Census questionnaire.

22. To include OOH in CPI, a suitable source of expenditure is required to calculate a representative weight.

The latest data from the MTHS suggests that imputed rental costs are not adequately covered so alternative data sources will be needed. Initial discussions took place with national accounts staff to assess what data are available to assist with the development of OOH. National accounts measure imputed rental using benchmark housing data from the 2011 Census and a separate measure of pricing information broken down by type of property. This is then extrapolated forward each year, until a further benchmark period is collected (i.e., in the 2021 Census). These national accounts data could be used by SB to compile an initial set of weights for OOH, that could allow SB to include OOH in the CPI in the short-term.

23. Including OOH in a CPI can have a large impact on the headline rate of inflation. As such, it is essential OOH costs are accurately captured and as representative of the OOH stock as possible, given available data sources. As noted above, the collection of price data should be improved for the current survey before these data are used to include OOH in the index.

Recommended Actions:

- *A suitable source of housing stock data should be investigated by SB to better understand the composition of OOH in Botswana.*
- *Engagement should take place with national accounts and Census colleagues to discuss data requirements for OOH. As a minimum, SB should ensure the next Census collects data on the stock of owner occupied and privately rented property.*
- *SB should improve the collection of rent data to ensure a reliable and representative measure of price change.*
- *In the medium-term, SB should expand and improve coverage of the rent survey to more broadly represent the total housing stock.*

PRODUCER PRICE INDEX (PPI)

D. Mining and Quarrying

24. To date, SB does not disseminate a PPI. A technical assistance mission was conducted in April-May 2018 to review and assess progress developing a PPI. A detailed workplan was compiled and agreed with the authorities for the ongoing development of these indicators.

25. The dissemination of a PPI is essential to broaden the range of inflation indicators available for policy making and economic understanding. The compilation of a PPI is critical in supporting the improvement of national accounts volume estimates and will augment the monthly CPI data to provide a fuller assessment of inflationary pressure across the various sectors of the economy.

26. Progress with the development of PPI has been slower than anticipated. Particularly for manufacturing where final data from the 2017 census of economic activity, which were expected to be available late in 2018, are still being finalized. These data will provide both a sampling frame and source of data for the compilation of weights. In other sectors of the economy, development of indexes has been challenging due to difficulties in the collection of price data. However, good progress has been made with the initial compilation of a PPI for mining and quarrying, which is almost ready for dissemination.

27. In the short-term, SB should focus on the dissemination of a PPI for mining and quarrying. According to the 2016 national accounts, mining contributed 22 percent to total gross domestic product (GDP). The dissemination of a PPI for mining and quarrying would provide a sound basis for the ongoing development of PPIs covering other important sectors of the economy, which should be aligned to the requirements of national accounts. The ongoing compilation of a PPI for mining will also assist in building staff capacity in the compilation of price indexes.

28. SB would like to disseminate a PPI for mining and quarrying by end September 2019. SB have finalized the basket and weights (2017 weight reference period) for a mining and quarrying PPI. The mining and quarrying industry in Botswana is dominated by diamond mining, which represents over 90 percent of all mining activity according to the 2017 weights, which were compiled using sales data from all Botswana mining establishments. There are very little local sales for mined products in Botswana, with approximately 99 percent of sales to export markets. Therefore, there seems little benefit in producing separate indexes for exported and domestic products, unless there is a critical user requirement for such a breakdown.

29. The preferred measurement of price to be used in the PPI for mining is the unit value. It is recommended this approach is reviewed before dissemination of initial PPI estimates.

The unit value approach takes the total value of sales and the total units of production (in the case of mining this could be total tonnage, for example) to derive a price per unit of sale. For unit values to be reliable, the products included must be homogeneous, otherwise the derived unit price will be unreliable and subject to volatility. Given difficulties in the collection of alternative price measures, such as detailed specification prices, the use of unit values is the preferred approach for SB. The calculation of unit values by SB for the draft mining PPI was reviewed in detail during the mission and analysis of the data identified a number of products which were displaying large movements in price relative that appeared to be driven by insufficient homogeneity of products. SB should engage with the mining establishments to assess if the data provided can be grouped into more homogeneous groups or if not, SB should consider what alternative measures of price could be used. If there are insufficient alternatives available or establishments are unable to provide more homogenous products, SB should consider removing the volatile products from the initial dissemination of a mining PPI. The mission reiterated and explained the importance of product homogeneity in using unit values.

30. This will be the first dissemination of a PPI by SB, so they should initiate outreach activities with key data users, such as national accounts and the central bank, to explain PPI concepts and methods. This will provide confidence that the price development for mining is in line with expectations.

31. SB have produced a short technical note to accompany the dissemination of a PPI for mining. The dissemination of such details should be encouraged for all inflation estimates. The technical document should include full details regarding the methodology and data sources used in the compilation process. Furthermore, the technical note should be expanded as more indexes are developed by SB. The mission provided some initial suggestions that SB may wish to incorporate before dissemination.

E. Coverage of PPI

32. In the medium-term, SB should expand PPI coverage to include other activities. The previous mission suggested indexes for agriculture, utilities and manufacturing should be developed, which along with mining, would represent approximately 30 percent of total GDP, based on 2016 Botswana national accounts data. The detailed action plan from the previous mission has been updated and agreed with the authorities.

33. Weights have been compiled for agriculture and utilities (in addition to mining and quarrying). The weights reference period is 2017. The revenue used to calculate the weights is only available at a total output level. In some cases, there is no export market (such as agriculture) and in other cases (such as utilities) the data suppliers were unable to provide an appropriate split of the revenue between domestic and export. The initial PPI will be compiled on a total output basis, however, in the medium-term SB should work with respondents to collect the data needed to develop separate weights for the export versus domestic market.

34. The development of a PPI for agriculture has been held up due to issues with the collection of price data. Price data are collected from a number of different sources for agriculture. The prices for a number of agricultural crops is provided by the Botswana Agricultural Marketing Board. The prices for crops are set for one year in advance, so these will only be updated once per year. The price for livestock is provided via the Botswana Meat Commission, representing the price per weight of livestock, broken down further by the type of livestock. The main issue delaying progress reside with the collection of horticulture prices. These prices are collected via farmers, who unfortunately have not been responding to requests for updated price data. SB have indicated they will be visiting these respondents to negotiate the ongoing supply of price data, which should enable the development of the agriculture indexes to move forward. However, the absence of horticulture prices shouldn't slow the good progress made by SB. In the medium-term, SB should consider releasing a PPI for agriculture that initially covers crops and livestock. In the longer-term, SB should work with farmers to secure sufficient price data that can be used to expand the coverage of the agriculture PPI.

35. The price data for poultry and eggs are collected directly from all Botswana poultry farms. These data will also be used in the compilation of the agriculture PPI. Revenue and quantities are collected for both broilers and eggs, from which a unit value will be derived as the price measure. Whilst this looks acceptable for the broilers, where the price per kilogram is calculated and appears stable, the use of unit values for eggs is less reliable. The quantity unit provided for the eggs data is per dozen. It doesn't distinguish by the size of the egg when in reality the price of eggs varies depending on the size. SB believe the poultry farms may be able to provide an average price per size, but not the accompanying revenue split. It is recommended SB meet with the poultry farms and consider using the average price per egg size if this is available, and ask if each farm can provide an estimated proportion of total revenue by size of egg (or at the least a ranking of egg size according to sales) so the weights can be calculated accordingly.

36. SB collect data on the total value of sales and the consumption of utilities from the Botswana electricity and water companies. There is only one provider for each utility in Botswana, so this represents full coverage of the industry. The data provided by the electricity establishment is broken down by customer type, however, this type of detail is not available from the water establishment. It is recommended that SB engage with the water establishment to identify if they can provide estimated proportions of sales to each customer type that can be used by SB to split the water revenue appropriately in the 2017 weights compilation. Of course, this split is only necessary if the price development by type of customer is different. During the engagement, SB should attempt to better understand the pricing strategy used by water utilities. If the same pricing structure is used for all types of customer, then splitting the revenue is unnecessary.

37. The unit value pricing approach is being considered by SB for the utilities PPI. The use of a unit value is the preferred approach. One issue is that the sales data provided by the

utilities establishments doesn't match consumption as some customers don't pay the expected amount when billed each period. As a result, applying a unit value based on total revenue and total consumption would be unreliable and the authorities should collect on the total kilowatt paid for each period and not the total consumed. Each of the tariffs used are regulated and set for 12 months at a time. Therefore, the price per tariff (on a price per kilowatt basis) should be available from the utilities (it was suggested the same regulation is in place for electricity supply) and this could be used for the price component of a utilities PPI in the short-term, whilst in the medium-term SB should work with the utilities establishments to collect data that allows for the compilation of reliable unit values. Should sufficient progress be made with the further development of a utilities PPI, SB may consider disseminating this alongside the PPI for mining.

38. SB indicated the development of a PPI for manufacturing will continue once the development work of PPIs for mining, utilities and agriculture has been completed. SB will use the recently available 2017 census of economic activity data as the basis for developing weights and selecting a sample of establishments for manufacturing. SB should ensure the basket for manufacturing covers sufficient sales and products and therefore SB may wish to discuss any proposed basket (and subsequent weighting structure) with colleagues in national accounts. National accounts should be able to guide the prices unit on what important areas of manufacturing are essential to be included in the PPI. The development of a manufacturing PPI is likely to commence later in 2019. In anticipation of this, the mission reiterated that the initial recruitment of price data from establishments is critical to ensure sufficient price determining characteristics are captured and provided at basic prices. Examples of suitable guidance and specimen price quotations were produced during the mission and shared with SB to help with the ongoing development of questionnaires for a manufacturing PPI. SB may wish to request further technical assistance to concentrate on the development of a PPI for manufacturing.

Recommended Actions:

- *SB should review the use of unit prices across all PPIs for which it is currently used to ensure the products include are sufficiently homogeneous. If not, SB should consider what alternative measure of price change are available.*
- *SB should plan to disseminate an initial PPI for mining and quarrying by September 2019.*
- *Engagement with key users of PPI (such as national accounts and the central bank) should take place before any dissemination.*
- *In the short-to-medium term, SB should resolve the issues with indexes for utilities and agriculture. If sufficient progress is made with the utilities PPI, this may be ready for dissemination alongside the PPI for mining.*
- *In the medium-term, SB should commence the initial collection of price data for a manufacturing PPI.*

STAFF RESOURCES

39. The SB prices unit includes three permanent staff. These staff are responsible for the compilation, dissemination and update of CPI alongside the development of a PPI. The staff show a good understanding of price indexes and the approach needed to develop new indexes.

40. SB has committed to developing and disseminating a PPI. Initially the PPI will cover mining and quarrying, but further development will expand coverage of PPI to include manufacturing, utilities and agriculture. SB would also like to expand coverage of CPI to include OOH.

41. The ongoing development of PPI and CPI will put pressure on the current staff. In particular, the development programme for PPI is challenging and SB may wish to review the resources required to deliver this work programme.

Recommended Action:

- *SB should carefully consider the resources required to develop PPI.*

DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS

A. Detailed Workplan for CPI

Priority	Action/Milestone	Target Completion Date
Outcome: Update the CPI		
H	Update CPI basket.	Completed
H	Select variety sample.	Completed
H	Develop detailed item specifications.	Completed
H	Consultation with key stakeholders.	Completed
H	Finalize outlet sample.	Completed
H	Price collection questionnaires updated.	Completed
H	Calculate base period prices.	Completed
H	Collect prices for new basket.	Completed
H	Finalize new 2016/17 weights	February 28, 2019. Complete
H	Validate new weights with CPI rebasing technical working group	February 28, 2019. Completed

Priority	Action/Milestone	Target Completion Date
H	Disseminate updated CPI.	February 28, 2019. Completed, was released on March 5, 2019
M	Document complete CPI rebasing conceptual basis, data sources and compilation methodology.	March 30, 2019
Outcome: make improvements to dissemination of CPI		
M	Incorporate contributions to inflation rate analysis into monthly CPI	March 30, 2019
M	Update 1996 CPI technical guide and disseminate	July 31, 2019
Outcome: include OOH in CPI		
M	Commence project for the development of OOH to be included in CPI	Next rebase of CPI

B. Detailed Work Plan for PPI

Priority	Action/Milestone	Target Completion Date
Outcome: Develop and disseminate PPI		
H	Finalize weighting scheme for agriculture, mining and utilities.	July 31, 2019
H	Calculate base period prices	July 31, 2019
H	Review the use of unit value pricing for PPI	July 31, 2019
H	Collect price data for the period January – June 2019.	August 31, 2019
H	Disseminate indexes for mining and if possible, also utilities.	September 30, 2019
H	Disseminate indexes for Agriculture	October 31, 2019
H	Develop weighting scheme for manufacturing.	October 31, 2019
H	Develop sample frame of establishments using data from 2017 economic census.	October 31, 2019
H	Draft questionnaires to be used for initiation/recruitment of establishments and monthly pricing.	November 30, 2019
M	Develop and initiate outreach efforts to business groups, trade associations and other stakeholder users.	November 30, 2019
H	Initiate/recruit establishments for the manufacturing PPI.	December 1, 2019 – June 30, 2020
H	Develop and finalize weights at the product and transaction level for manufacturing PPI.	July 31, 2020

Priority	Action/Milestone	Target Completion Date
H	Review all products and transactions selected for PPI pricing.	July 31, 2020
H	Finalize base prices from establishments for each item/transaction selected.	August 31, 2020
H	Begin regular price collection for Manufacturing PPI	November 15, 2020
M	Design publication brochure and tables for publication.	November 15, 2020
H	Release and publish indices for the period July - September 2019.	November 30, 2020
M	Document complete PPI conceptual basis, data sources and compilation methodology.	December 31, 2020
M	Classify products according to Central Product Classification (CPA).	January 31, 2021

C. Officials Met During the Mission

Name	Institution	E-mail Address
Dr Burton Mguni	Statistics Botswana (Statistician General)	bmguni@statsbots.org.bw
Malebogo Kerekang	Statistics Botswana (Deputy Statistician General)	mkerekang@statsbots.org.bw
Boitumelo Matlhaga	Statistics Botswana	Bmatlhaga@statsbots.org.bw
Lilian Mogapi	Statistics Botswana	lmogapi@statsbots.org.bw
Ketso Makhumalo	Statistics Botswana	kmakhumalo@statsbots.org.bw
Koontse Mokgwathi	Statistics Botswana	Kmokgwathi@statsbots.org.bw
Temba Sibanda	Statistics Botswana	tsibanda@statsbots.org.bw
Phaladi Labobedi	Statistics Botswana	plabobedi@statsbots.org.bw
Lekoko Simako	Statistics Botswana	lsimako@statsbots.org.bw
Rejoyce Mbalekelwa	Statistics Botswana	rmbalekelwa@statsbots.org.bw
Daniel Magogwe	Statistics Botswana	Dmagogwe@statsbots.org.bw
Tetelo Thuo	Statistics Botswana	tthuo@statsbots.org.bw
K. Molefhi	Statistics Botswana	kmolefhi@statsbots.org.bw
O. Gaosekelwe	Statistics Botswana	ogaosekelwe@statsbots.org.bw
O. Phatshwane	Ministry of Finance and Economic Development	ogphatshwane@gov.bw
M. Otukile	Ministry of Finance and Economic Development	motukile@gov.bw
K. Mokhurutshe	E-Consult	kitso@econsult.co.bw
K. Jefferies	E-Consult	keith@econsult.co.bw
T. Munyengwa	Non-Banking Financial Institution Regulatory Authority	tmunyengwa@nbfira.org.bw
M. Ntsosa	Bank of Botswana	ntsosam@bob.bw
B. Powder	Bank of Botswana	powderb@bob.bw