

Experience in the 2021 International Comparison Program Implementation



I. Administrative Set-Up

The National Accounts and Price Statistics division of the Maldives Bureau of Statistics (MBS) oversaw the 2021 ICP activities in Maldives. In 2021, the MBS was under the Ministry of Planning, Housing, and Infrastructure. As of 2024, the MBS was under the Ministry of Housing, Land, and Urban Development.¹

The 2021 MBS ICP team consisted of five members. The head of the National Accounts and Price Statistics Division served as the national coordinator, while the head of the National Accounts and Economic Statistics Section acted as the deputy national coordinator. Two staff members collected prices for the ICP and the consumer price index (CPI) in the islands; one in the north and one in the south. One contract staff member in Malé was hired solely for ICP price collection. Additional temporary staff were hired during housing rental price, machinery and equipment, and construction price collections.

The coronavirus disease (COVID-19) pandemic was a challenge for Maldives. In early 2021, all staff worked from home. However, shops opened with restricted hours, and price collection was conducted by visiting outlets and via phone. The organizational structure and number of staff remained unchanged. Price collection in Malé was extended until the first quarter (Q1) of 2022, although this extension did not apply to the atolls. Only a few items for which prices were collected in Q1 2022 prices were used for backcasting to 2021.

II. Use of Existing Infrastructure in Collecting International Comparison Program Data

There were 418 items in the ICP's household consumption basket, of which four items were directly sourced from CPI (i.e., medium grain rice, fresh tuna, red snapper, and petrol). No separate ICP price collection was carried out for these 4 items. Prices for six fruit and six vegetable varieties from CPI outlets were also used to better represent price trends in the markets. To minimize costs, the MBS selected major food outlets for the ICP from the CPI outlet list. These outlets represented a wider variety of products and had a larger market. All CPI food outlets from the islands were selected for the ICP, while only the major outlets in Malé were selected because there was only one price collector for the ICP in Malé. Some nonfood outlets not included in CPI were selected in Malé for the ICP because of difficulty finding items that met the structured product descriptions. The ICP questionnaires were generated using the ICP Asia Pacific Software Suite (ICP APSS), while a different questionnaire is used for the CPI. The ICP household price collection was carried out by three staff (two from the islands and one in Malé). Four staff were hired for 2 to 3 months for construction, machinery and equipment, and housing rental.

The CPI–ICP integration in Maldives presents several challenges. The base periods for the ICP and the CPI differ, and the lists of specific items vary. Despite operating on the same computer systems, the ICP is edited and maintained through the ICP APSS, while the CPI utilizes Microsoft Excel due to limited technology.

For the 2024 ICP cycle, the MBS ICP team is utilizing the CPI staff in Malé for some ICP price collection. However, the data will be maintained separately. ICP data will be collected using the ICP questionnaire, while CPI data will be collected using a separate questionnaire.

¹ Since 26 December 2024, the Maldives Bureau of Statistics is under the Ministry of Finance and Planning.



III. Survey Framework

The CPI price collection covered major markets in the island's capital and four other islands: one located in Haa Dhaal atoll in the north, and three islands from different atolls in the southern end. The MBS ICP team collected prices from three islands for the ICP: the island in the north, the capital island, and the island in the southernmost atoll. For the household price survey, 413 outlets were selected; 300 were from the capital, and the remaining outlets were from the other two islands. The prices of food items and miscellaneous goods and services were collected monthly, while other categories were priced quarterly.

Prices for machinery and equipment and construction items were collected only once for one price point and only from Malé.

Rental prices for selected dwelling types were collected twice for the entire year. Households were asked about any changes in rent during the year, and data collection was limited to the Malé region. The housing rental survey also included households from the 2017 ICP in which blocks were selected randomly from the Malé region based on the proportion of households in each ward. Rental prices were also collected from the web and through acquaintances to ensure that the sample size was more representative and maximized.

Compensation data for relevant government occupations in Maldives and other related indicators were collected from the government administrative system of compensation data and government ministries.

IV. Gross Domestic Product Expenditure Values

In 2020, Maldives began reporting GDP by the expenditure approach. Although expenditure estimates are available at the main aggregate level, the ICP requires GDP expenditure values at the level of 155 basic headings. The GDP expenditure values were estimated for 138 out of the 155 basic headings based on the 2021 ICP classification. Some of the ICP's basic headings—such as pork, alcoholic beverages, games of chance, and prostitution—were not applicable in Maldives.

To estimate individual consumption expenditure by households, the 2019 Household Income Expenditure Survey was utilized, as GDP expenditure data do not provide product-level information. The 2019 survey ratios allocated the GDP expenditure aggregate value accordingly. Imputed rentals for housing and financial intermediation services indirectly measured were directly sourced from GDP. No separate estimate was available for the final consumption expenditure of nonprofit institutions serving households. Similarly, the GDP expenditure value estimate for net purchases abroad was not calculated separately.

For gross capital formation, due to a lack of independent estimates, supply-side data (the ratio of imports and domestic production of capital goods) were used to allocate the GDP expenditure aggregate value properly. Any statistical discrepancy was absorbed within the "change in inventories" category.

Data regarding individual and collective consumption expenditure by the government were obtained from the national budget of the Ministry of Finance and coded using the classification of the functions of government. These data were used as ratios to properly allocate the GDP expenditure aggregate value accordingly.

Imports and exports of goods and services were directly sourced from the GDP expenditure data.



V. Data Validation and Quality Control

Unlike in the 2017 ICP round, staff from Malé could not visit other islands to train the staff through practical field visits because of COVID-19 restrictions. Online training was provided to the island staff to ensure that prices from all regions represented the same quality of products.

Upon receiving prices from all the islands, the MBS used the validation tool of the ICP APSS to identify items that needed further attention and verification. The MBS also followed workshop instructions to improve the quality of price data.

The regional technical and data validation workshops organized by the Asian Development Bank were a valuable platform for discussing product lists and addressing issues related to specific price collection. These workshops allowed participating economies to learn from each other and suggest ideas for improving the representativeness of items in the participating economies. The workshops contributed to achieving the common goal of producing reliable prices for the ICP exercise.

VI. International Comparison Program Price Collection Tools

The 2024 version of the ICP APSS is convenient and easy to use. In 2021, the MBS ICP team experienced some difficulties in construction and machinery and equipment data management. The first issue was the differences between the manually inputted total costs and the total generated by the tool. This could be solved by removing the manual input of the total and enabling the tool to generate the total automatically or by revising the controls applied to the input data cells in the ICP APSS. The second issue was probably caused by mismatches in the information entered in the cells and the type of information expected. Because of this issue, it was not possible to edit—especially the construction data—through the ICP APSS. As a result, the MBS ICP team had to download the file and make revisions in Microsoft Excel format. The compensation section also had some problems. For instance, in some occupations with duty schedules like nurses—who are not eligible for public holidays—the ICP APSS did not accept a zero value. The MBS ICP team hopes these problems will not occur in the 2024 ICP cycle.

The data entry and validation processes are generally convenient, but there are some challenges:

(i) During data entry, selecting the price collection period before moving to an outlet is necessary. However, once data entry for one outlet has been completed, restarting the process for the next outlet by selecting the price collection period again can be time-consuming and repetitive. Simplifying the process to allow direct selection of the next outlet after completing entry for one outlet would improve efficiency.

(ii) In the validation section, it would be easier if the “next” button appeared at the same location regardless of the number of items or the length of comments given for each item. This would reduce the need to reposition the pointer every time.

(iii) Feedback included suggestions for additional analysis and/or report formats. One suggestion was to enable the selection of multiple outlets for a specific category of items, where the available prices of all mapped items for those shops would appear at the monthly and quarterly levels or according to a specified reference period. This will help identify missing prices for mapped items for those outlets.



VII. Challenges in the International Comparison Program Implementation

Supervising and guiding price collectors promptly was challenging as each person worked from home. This mainly affected the timely pricing of household items. Shops were open for limited hours, and the price collector was asked to visit the shops during this time. The MBS ICP team avoided visiting households during the 2021 housing rental survey. Instead, households visited in 2017 were contacted via phone. Additionally, online pricing was conducted to better represent the situation in 2021.

Due to the COVID-19 pandemic, price collection was extended for an additional quarter to ensure no items were missing because of initial challenges in visiting the various outlets. There were also some delays because of COVID-19-related illnesses, as anyone in direct contact with a suspected case had to stay away from work for 2 weeks. Some items—for instance, cinema tickets—were not available during Q1 as outlets were closed because of restrictions on gatherings.

For construction and machinery and equipment, the MBS ICP team encountered data entry issues with the ICP APSS. Some items could not be edited after entry, requiring manual adjustments through Microsoft Excel. The need for extensive conversions before data could be entered into the ICP APSS was quite challenging. Additionally, labor costs are often difficult for companies to estimate. Separating salary from other costs like health insurance could be beneficial. For machinery and equipment, the difficulty was finding the items that matched the specifications. In addition, special-purpose machinery and road transport items were not available on the market. For the next cycle, the MBS ICP team plans to collect prices for road transport items through customs data; however, these may not be accurate market prices.

VIII. Lessons Learned and Future Directions

The MBS ICP team gained useful knowledge regarding the importance of product specifications and effective data validation, which will further improve price statistics. Drawing from the ICP, a similarly structured product description is now used in the CPI.

With only a few overlaps between ICP and CPI product specifications, ICP activities are conducted separately from the CPI. With limited staff and budget, the MBS has not yet fully integrated ICP work into its regular statistical work plan. However, in the 2024 ICP cycle, price collection in Malé will be carried out using CPI price collectors to the extent possible.

Resources for price statistics are also heavily utilized for conducting ICP work. CPI price collectors carry out ICP price collection in the islands (excluding capital).

ICP advocacy is limited to the outlets and organizations the MBS directly communicates with for data needs. There are plans to publish the ICP results on the MBS website and to disseminate the ICP results to technical researchers and policymakers.

The computation of subnational PPPs will be an interesting exercise for future consideration. However, there are no current plans due to limited capacity.

Prepared by Maldives Bureau of Statistics (Sajida Ahmed, Lizama Faheem, and Mariyam Shadeena); edited by the ADB ICP team and Melanie Kelleher.



Annex 2: List of Members of Core International Comparison Program Team (Maldives Bureau of Statistics)

Name	Title	Responsibility
Sajida Ahmed	Statistician	National Coordinator
Mariyam Shadeena	Deputy Statistician	Deputy National Coordinator
Lizama Faheem	Assistant Statistician	Checking item availability, data validation, coordination, etc.
Mohamed Shaimal	Data entry staff (temporary)	Price collection
Fathimath Umaira	Assistant Statistical Officer	Price collection
Ali Umar	Assistant Statistical Officer	Price collection