

Experience in the 2021 International Comparison Program Implementation



I. Administrative Set-Up

The Department of Economic Planning and Statistics (DEPS), Ministry of Finance and Economy, participated in the 2021 ICP for Asia and the Pacific through the Department of Statistics (DOS).

The two main divisions involved were the price, income, and expenditure statistics (PIES) and the macroeconomic statistics divisions. The PIES division was responsible for compiling and producing the consumer price index (CPI), producing household income and expenditure statistics, and collecting ICP prices. The ICP activities were supervised by the assistant statistics officer from PIES, who served as the national coordinator, while the junior statistics officer was appointed deputy national coordinator. The macroeconomic statistics division oversees the compilation of the national accounts.

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

CPI and ICP data collections were integrated into the DOS work plan as regular activities. Each month, the prices for the ICP were collected concurrently with the prices for the CPI. Five price collectors were involved. Different editing procedures and computer systems were used for the ICP and the CPI.

For the 2021 ICP, the CPI infrastructure was used to facilitate the ICP price collection activities, as the staff were well-acquainted with collecting prices and accurately identifying the specified items. Approximately 14% of the household items in the CPI basket were also used for the ICP. For non-overlapping items, selected CPI outlets and a few additional outlets in the urban area were surveyed.

Existing data sources—such as the CPI, a real estate agency survey, and an internet-based survey conducted in 2021—were crucial in completing the housing rental survey. However, as the existing types of dwellings covered in the CPI price collection did not match the ICP specifications, a separate data collection with selected real estate agencies was conducted to obtain rental housing information.

Housing volume indicators were sourced from the 2021 Population and Housing Census, its extrapolation for national coverage, and the Household Expenditure Survey 2015/16.

Additionally, average government compensation data and other relevant indicators on government occupations—primarily civil servant wages—were gathered using administrative data. Separate data collection efforts were carried out for machinery and equipment and construction, covering selected outlets in the Brunei–Muara district. No separate government budget has been allocated for ICP activities.

Further integration of CPI and ICP price survey collection and processes is planned. The move toward digitalizing price collection and validation processes in 2025 is hoped to enhance efficiency and accuracy significantly.

III. Survey Framework

The 2021 ICP covered the urban areas of all four districts of Belait, Brunei–Muara, Temburong, and Tutong. Areas were selected based on population density and business activity, while outlets were selected using purposive sampling based on revenue data obtained from the Economic Census of Enterprises.



The sampled outlets were reviewed regularly to ensure the representativeness of places where most of the population made their purchases. The outlets were updated when necessary, considering events such as changes in business activity, closure, or the entrance of new retailers in the market. Any replacements were ensured to be in the same general locality. The selection of outlets for non-household categories was also reviewed, and separate data collection efforts were made.

The frequency of the survey depended on the price behavior of the item. Items with volatile prices (such as perishable food items) were surveyed weekly or monthly. In contrast, items with more stable prices—such as service and conservancy charges, utility tariffs, bus and air fares, school fees, medical services, and household durables—were surveyed quarterly, semi-annually, or as and when the prices or rates changed. Price collection was scheduled consistently—as much as possible—on the same weekday each month from the same outlet.

IV. Gross Domestic Product Expenditure Values

The DEPS ICP team successfully estimated the GDP expenditure values for most of the basic headings. However, a few basic headings were not covered because they were not applicable in the economy (such as passenger transport by railways, alcoholic drinks, and prostitution), and for which breakdown of data were not available (e.g., individual consumption expenditure by nonprofit institutions serving households). To allocate GDP expenditures into the necessary basic headings, the following data sources and methodology were used:

Individual consumption expenditure by households. Data sources for estimating the main aggregates and breaking them down by basic headings were the Household Expenditure Survey (HES) 2015/16, the quarterly survey of businesses, balance of payments statistics, and external trade statistics. Compilation methodologies were based on extrapolation, the commodity flow method, and direct estimates. Due to the lack of data on nonprofit institutions serving households, the value of consumption expenditure was estimated to reduce statistical discrepancies.

Government final consumption expenditure. The estimates for the main aggregates came from the Treasury Department, Ministry of Finance and Economy. However, the structure from the 2011 ICP was used to break them down into the required basic headings. The methodologies used for compilation were based on direct estimates and extrapolation.

Gross fixed capital formation. Main aggregates were estimated using the Economic Census 2011, the government financial account, a quarterly survey of businesses, balance of payments statistics, and external trade statistics. However, the 2011 PPP structure was used to break them down into the required basic headings.

Compilation methods were based on extrapolation, the commodity flow method, and direct estimates.

Changes in inventories and acquisitions, less disposals of valuables. The main aggregates used direct estimation using data from the Economic Census 2011 and the Quarterly Survey of Business. The 2011 ICP structure was used to break them down into the required basic headings.

Balance of exports and imports. Data sources were the balance of payments statistics and external trade statistics. The compilation methodology was based on direct estimates.



V. Data Validation and Quality Control

Utilizing the ICP Asia Pacific Software Suite (ICP APSS) allowed consistency checks using statistical criteria such as the coefficient of variation, standard deviation, and the minimum-to-maximum ratio.

Similar items in the CPI and ICP were also compared to validate price movements. During price collection, new field staff underwent training on price collection according to the structured product descriptions, emphasizing quality checks and addressing issues that arose from unavailable items in the market.

Participation in the regional data validation workshop organized by the Asian Development Bank (ADB) facilitated comparative analysis across economies, aiding in resolving data quality issues.

Data issues and concerns raised before and during the workshops were revisited by telephone or e-mail. Continuous interaction with the ADB ICP team was pivotal for the success of the program.

VI. International Comparison Program Price Collection Tools

Using the ICP APSS simplified price collection and data entry, efficiently generating summary statistics. As a result, price review and validation became more straightforward and precise.

VII. Challenges in the International Comparison Program Implementation

Brunei Darussalam experienced the widespread impact of the coronavirus disease (COVID-19) slightly later than the rest of the world. Price collection proceeded smoothly during the first half of 2021, but challenges arose with the onset of widespread infections in mid-August. To adapt, alternative methods such as email and phone calls were utilized for ICP price collection. The collection was consequently completed in 2021 without the need to extend into 2022. COVID-19 impacted work schedules and limited human resources. However, these issues were mitigated by heavily relying on the internet and transitioning many operations to online platforms as alternatives. The COVID-19 lockdowns resulted in the non-availability of certain ICP items in the market, particularly since most products were imported.

A significant issue for construction and machinery and equipment was the unavailability of certain items as specified in the structured product description. While some items were available, their specifications significantly deviated from the structured product description, often too low a grade and unsuitable for heavy construction or industrial use. Furthermore, the limited number of outlets selling the required specific items further complicated the price collection process. Most fieldworkers were inexperienced and had limited knowledge of the items, adding complexity to the process. Assistance from outlet owners and staff facilitated the price collection process.

VIII. Lessons Learned and Future Directions

The divisions within DOS directly involved in the 2021 ICP significantly benefited from the regional technical assistance project. The knowledge and experience gained from the ICP improved the price collection activities in DOS. Furthermore, the project facilitated networking with regional counterparts, fostering communication on related issues.

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While DOS has not fully incorporated all ICP practices into the CPI surveys, there is considerable potential in adopting these approaches, especially with the planned digitalization of the CPI price collection and validation processes. This digitalization aims to enhance data reliability and improve the CPI product list. The CPI-ICP integration would streamline data collection, reduce non-overlapping items, and increase efficiency.

Collaborating with relevant stakeholders will increase awareness of the importance of ICP data for policymaking, thereby enhancing the quality and relevance of price data, especially in machinery and equipment and construction.

To enhance the integration of the CPI and ICP surveys, DOS prioritizes item alignment and synchronization of the price collection periods between the two surveys. As part of the upcoming CPI basket update, DOS plans to incorporate ICP items into the CPI basket, where appropriate. Moreover, price movements of similar items in the CPI basket can be cross-checked whenever feasible to ensure data consistency and accuracy.

While machinery and equipment and construction items are not currently part of the routine CPI data collection, DOS is actively exploring the adoption of ICP methodologies for these non-household components. Plans are underway to produce new datasets based on collected prices, leveraging lessons learned from ICP implementation.

DOS plans to upload the 2021 ICP Final Report onto the DEPS website for public access. Advocacy activities promoting PPPs are important for increasing user awareness and usage.

While subnational PPP computation may offer valuable insights in certain contexts, as a relatively small economy, the primary focus and efforts are directed towards maintaining national representation within the framework of the ICP.

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**Annex 2: List of Members of Core International Comparison Program Team
(Department of Economic Planning and Statistics, Ministry of Finance and Economy)**

Name	Title	Responsibility
Siti Kamariyah Mohammad	Assistant Statistics Officer	National Coordinator
Nurul Aziemah Hamidon	Junior Statistics Officer	Deputy National Coordinator
Edwin Khalid Haji Mohd Salleh	Senior Statistics Officer	National Accounts (Gross Domestic Product)
Ummul Murjiah Haji Abdullah	Statistics Clerk	Price Collector
Syahidatun Nabilah Haji Kipli	Statistics Clerk	Price Collector
Masdiana Jambin	Clerk	Price Collector
Siti Noradillah Junit	Clerk	Price Collector
Hartini Haji Suzaini	Clerk	Price Collector