Experience in the 2021 International Comparison Program Implementation



I. Administrative Set-Up

As in the 2017 cycle, the Prices and Wages and the National Accounts Divisions of the Department of Census and Statistics (DCS) implemented the 2021 ICP activities. The Prices and Wages Division's head (director or deputy director) was the national coordinator for ICP activities, and a statistician in the same division was the deputy national coordinator. The ICP unit was established in the Prices and Wages Division, with its staff assisting the national coordinator. Statistical officers of the division and 40 district officers attached to the district offices of the DCS were involved in the data collection for ICP price surveys under the supervision of the deputy directors, senior statisticians, and statisticians.

Because of the coronavirus disease (COVID-19) pandemic, the price collection for the household consumption survey was conducted from February 2021 to January 2022.

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

To compile the consumer price index (CPI), open market retail prices of food and nonfood items are collected weekly, monthly, and quarterly from 10 selected price collection centers in Colombo City and its suburbs. In the other 24 districts, the price collection program is implemented in their main cities. For the ICP household consumption price surveys, four markets within Colombo City limits (Grandpass, Narahenpita Special Economic Center, Pettah, and Wellawatta) and 40 other cities representing urban and rural areas of 25 districts were covered from February 2021 to January 2022. Out of the 464 CPI items, prices for 146 items (exact match) were used for the ICP.

The DCS staff also implemented a special housing rental survey to meet the ICP housing rental price data requirements. The team extrapolated housing volume indicators from the 2012 Census of Population and Housing and other actual housing rental information from the 2019 Household Income and Expenditure Survey (HIES) using a backward calculated midyear population series based on the 2012 census. For the ICP government compensation survey, administrative documents such as salary revision circulars and guidelines covering all government occupations were the primary source. Further clarifications were made during observation visits to the relevant institutions.

III. Survey Framework

The outlets were purposively selected within the 44 price collection centers (24 urban and 20 rural) for the household consumption survey. The survey covered supermarkets, open markets, covered markets, mobile shops, street vendors, pharmacies, private doctors' clinics, private hospitals, private outlets for therapeutic appliances and equipment, and other service providers. Prices for food items were collected monthly. Prices for health and education were collected semiannually. All other nonfood items were collected quarterly.

Special surveys for machinery and equipment and construction were conducted in carefully selected purposive samples of institutions and outlets within Colombo city limits only. Price surveys were conducted during the second and third quarters of 2021. A special survey for housing rental was conducted for the ICP in 2021, covering samples from the main city of each district, as well as locations within a 10-kilometer radius. Government compensation data was also collected in the first and second quarters of 2022.

Experience in the 2021 International Comparison Program Implementation



IV. Gross Domestic Product Expenditure Values

The National Accounts Division of the DCS releases the GDP annually using three approaches. The compiled GDP figure from the production approach estimates is treated as the controlled figure for the expenditure and income approach estimates.

- (i) The ICEH was reported according to the classification of individual consumption according to purpose. For the base year, the primary data sources for household final consumption expenditure were the HIES and the use side of the supply and use tables. When compiling expenditure values for the following years, changes in the availability (calculated as domestic output plus imports less exports) were used to extrapolate the data for the previous year. Details from the 2019 HIES findings were used to disaggregate basic heading estimates. The main aggregate and the components of individual consumption expenditure by nonprofit institutions serving households were not reported separately in the official national accounts. A separate estimate for net purchases abroad was provided.
- (ii) The government's final consumption expenditure was reported according to the classification of the functions of the government. The data for this expenditure were based on the information from annual budget estimates from the state accounts.
- (iii) GFCF is disseminated following the asset classification. Estimates were disaggregated into the required basic headings using data from the annual survey of industries, capital expenditure data from administrative reports, import statistics, and the annual survey of construction industries.
- (iv) Estimates for the balance of exports and imports were derived using balance of payments statistics from Central Bank reports and imports and exports of goods data from Sri Lanka Customs.
- (v) The change in inventories was used to balance the items using the expenditure approach.
- (vi) The 2019 HIES findings were available for 2021 ICP benchmarking with minimal disruption because of the COVID-19 pandemic, while other relevant administrative records were available as usual.

For the ICP, the DCS ICP team constructed a concordance among ICP components (basic headings) with central product classification and HIES items.

Compilation challenges resulting from the COVID-19 pandemic and the measures taken to address these issues:

- (i) The National Accounts Division staff conducted a special study for selected activities, including the hotel industry, private hospitals, real estate companies, and the retail trade section, using the financial statements of listed companies.
- (ii) Simultaneously, information for businesses—such as other personal services, professional services, and real estate businesses—was collected by telephone.
- (iii) District-level data collection on mobile trading was done during the lockdown period.
- (iv) The DCS conducted an additional survey to assess the impact of COVID-19 on the small and medium-sized enterprises sector.
- (v) It was difficult to record government spending on health (COVID-19 prevention) measures because state accounts (government financial accounts) are reported on a cash basis, not on an accrual basis. However, the DCS ICP team held discussions with health ministry officials to create a more realistic picture of irregular expenses because of COVID-19.
- (vi) Some adjustments were also made to the data on quarantine center services to reach more realistic estimates (extra hours worked by health staff and outstanding bills).
- (vii) Donations by local donors and foreign agencies spent on COVID-19 prevention and recovery measures were not appropriately captured then. To reach realistic estimates, discussions were held with the relevant ministries.

Experience in the 2021 International Comparison Program Implementation



V. Data Validation and Quality Control

Raw prices with a coefficient of variation greater than 30%, and minimum-to-maximum ratios between 20% and 30%, and less than 20%, were reviewed at the district level through the ICP Asia Pacific Software Suite (ICP APSS) and validated according to guidelines provided during data validation workshops. The DCS ICP team also communicated with the Asian Development Bank (ADB) to explain the reasons for the high coefficients of variation for some products.

The trends of the collected prices for the ICP were compared with similar products or subgroups in the CPI price collection program. The DCS ICP team reviewed prices outside a specific range for data entry errors or other discrepancies, such as deviations in product specifications or packaging size, and implemented corrective measures to improve the data quality.

VI. International Comparison Program Price Collection Tools

Data were entered at all district offices using the ICP APSS, which ADB newly introduced. This new ICP APSS mitigated problems from the 2017 ICP APSS.

VII. Challenges in the International Comparison Program Implementation

The collection of ICP prices in January 2021 was challenging because of the spread of the second wave of the COVID-19 pandemic across the economy. As a result, the ICP implementation began in February 2021.

By the middle of May 2021, the third wave of the COVID-19 pandemic spread rapidly, and Sri Lanka was placed under complete lockdown. Data collection through personal visits was challenging because of the pandemic situation. Continuous price collection was challenging with public service institutions working with minimal staff and many employees working from home. Some district offices were temporarily closed because of COVID-19 infections among price collectors, some of whom were quarantined.

The following measures had to be taken to face those challenges.

- (i) DCS price collecting officers collected price data by phone from open outlets that previously provided data through personal visits.
- (ii) During the curfew period, prices of some essential food items were obtained from door-to-door mobile vendors, while prices of other essential food items were obtained from general stores open on 1 or 2 days of the curfew week.
- (iii) Other data sources were considered, such as online prices from supermarket official websites.
- (iv) DCS price collecting officers regularly collected price data by personal visits from October 2021.
- (v) Since many construction sites were closed during the pandemic, price data were obtained from construction carried out by government agencies.
- (vi) Officers were deployed on weekends and public holidays to ensure continuous price collection.

Sri Lanka faced a significant economic crisis because of the COVID-19 pandemic, which prompted the government to suspend the import of vehicles. As a result, items under the transport of the household consumption survey and the items under the road transport equipment of machinery and equipment were not available in the market. The economic crisis also led to a significant increase in the prices of goods, which tripled in some cases. This rapid inflation created challenges in maintaining up-to-date and accurate price records, as prices changed frequently and unpredictably.

Experience in the 2021 International Comparison Program Implementation



VIII. Lessons Learned and Future Directions

The ICP's structured product descriptions, data validation procedures, and data processing methods were applied to CPI surveys to improve the CPI product list and data validations. To further improve data quality in the next ICP rounds, the DCS plans to arrange two semiannual data validation workshops for feedback from district offices. With support from ADB, the DCS also intends to integrate similar methods to the ICP for calculating provincial (subnational) level PPPs into CPI activities.

Prepared by the Department of Census and Statistics (M.T.T.T. de Silva, P.H. Walpita, J. Sathiyakumaran, and S.T.T. Warapitiya); edited by the ADB ICP team and Melanie Kelleher.

Annex 2: List of Members of Core International Comparison Program Team (Department of Census and Statistics)

Name	Title	Responsibility
M.D.S. Senanayaka	Director	National Coordinator (Until August 2021)
M.T.T.T. de Silva	Deputy Director	National Coordinator (From September 2021)
P.H. Walpita	Statistician	Deputy National Coordinator
Ishanthi Kulathilaka	Senior Statistician	Supervision of compilation of Gross Domestic Product data
Mangalika Kumari	Statistical Officer	Compilation of Gross Domestic Product data
W.A.P.S. Perera	Statistician	Housing Rental - supervision of price collection and validation of data; Extrapolation of Housing Volume indicators; Supervision of Household Consumption price collection
T. N. Rajapaksha	Statistician	Household Consumption and Construction - supervision of price collection and validation of data
R.A.T.S. Ratnayaka	Statistician	Government Compensation - supervision of price collection and validation of data

Experience in the 2021 International Comparison Program Implementation



Annex 2: List of Members of Core International Comparison Program Team (Department of Census and Statistics)

Name	Title	Responsibility
J. Sathiyakumaran	Statistician	Supervision of compilation of Gross Domestic Product data
P.Y.M. Senevirathne	Statistician	Household Consumption - supervision of price collection and validation of data
S.T.T. Warapitiya	Statistical Officer	Compilation of Gross Domestic Product data
M.A.P. Wickrama	Statistician	Household Consumption - supervision of price collection and validation of data
Dammika Yasapala	Statistician	Household Consumption and Machinery and Equipment - supervision of price collection and validation of data