

## Experience in the 2021 International Comparison Program Implementation



### I. Administrative Set-Up

The Price Statistics Section of the Pakistan Bureau of Statistics (PBS) implemented the 2021 ICP. The director of the Price Statistics Section was nominated as national coordinator, and the chief statistical officer as deputy national coordinator. The PBS ICP team comprised three officers from the Price Statistics Section and one from the National Accounts Wing. Having a dedicated team for the 2021 ICP activities was successful despite replacing the deputy national coordinator at the beginning of the project. The core team of the national coordinator and officers from the Price Statistics Section and the National Accounts Wing remained intact throughout the project.

The 2021 ICP was initially planned in 2020 by the Asian Development Bank (ADB) but was postponed to 2021 because of the worldwide effects of the coronavirus disease (COVID-19) pandemic. During the multiple waves of COVID-19, the Government of Pakistan implemented a 50% work-from-home policy. The PBS ICP team actively participated in a series of 19 virtual workshops launched by ADB to conduct 2021 ICP surveys. The project-based activities of the 2021 ICP—such as price collection for the household questionnaire—were severely delayed because of the finalization of the liquidation of funds for the previous round, COVID-19, and some procedural and administrative reasons. According to the regional timetable, price data collection for household consumption was initially scheduled for January to December 2021. However, because of international lockdown measures, the price collection period was further extended to cover a 12-month cycle by ADB.

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

The PBS ICP team collected ICP data using all available reliable data sources. However, collecting prices onsite could not be started because of COVID-19 and other administrative issues. The PBS extended its cooperation with ADB by providing consumer price index (CPI) urban and rural prices for the period beginning 2017 for ICP items that overlapped with CPI items from January to December 2021 and for use of detailed CPI indices to facilitate the extrapolation/backcasting process.

In 2022, ADB proposed an alternative strategy in response to implementation concerns regarding the ICP in Pakistan, which was delayed because of unresolved PBS bank account issues for transfer of funds. Following ADB's recommendation, specialized surveys were conducted for machinery and equipment and construction in provincial capital cities during the last quarter of 2022 with prices collected for 2021. However, only fast-evolving, transport equipment, and other durable items were priced for household surveys. ADB suggested methodology was used to fill data gaps and CPI prices were utilized to map, extrapolate, and backcast the remaining household items. The strategy was to ensure the participation of Pakistan by utilizing the remaining time and resources effectively, considering that the ICP results were scheduled for release by December 2023.

The PBS ICP team used Accountant General Pakistan Revenues for government employee compensation, and the Pakistan Social and Living Standards Measurement Survey and Population Census 2017—both conducted by the PBS—for housing volume indicators. The PBS ICP team collected data from real estate agents in capital cities for housing rental data. The same editing procedures and computer systems were used for the ICP and the CPI.



### III. Survey Framework

The initial survey framework for the 2021 ICP planned to collect ICP prices for household products from 24 urban and seven rural areas. However, for various reasons including regular lock downs due to COVID-19, the price collection for the selected items of various ICP modules was limited to select provincial capital cities only. The PBS ICP team treated the whole city as one market to ensure coverage and availability of rare items. Rental data covered urban areas only. Prices for machinery and equipment and construction were collected once from four provincial capital cities through a dedicated survey conducted by CPI staff. Government compensation data for occupations in the ICP survey and other related indicators were collected from the Accountant General Pakistan Revenues.

### IV. Gross Domestic Product Expenditure Values

The PBS ICP team reported GDP expenditure values for 140 basic headings. Some basic headings were not available because they were not relevant to the economy (e.g., eight basic headings under pork, spirits, and wine) and for which a breakdown of data was not available (e.g. two basic headings under nonprofit institutions serving households, four under consumption expenditure by the government, and net purchases abroad).

The national accounts aggregates on the expenditure side of Pakistan's GDP were compiled on a financial year basis, from 1 July to 30 June each year (such as 2020–2021, 2021–2022). These aggregates were converted into calendar year values by taking the average of corresponding financial years following similar procedure as adopted in previous ICP cycles. GDP expenditure values at the basic heading level were estimated—to the extent possible for basic headings—according to the 2021 ICP classification, from various surveys and administrative data sources. Data on 140 basic headings were submitted from 2017 to 2021.

The ICEH was derived residually in the national accounts estimates. Hence, any statistical discrepancy was captured under this aggregate. This was further disaggregated into category-level estimates using information from the Household Integrated Economic Surveys (HIES) 2015/2016 and 2018/2019. The basic headings level estimates were derived from the category level estimates through interpolation and/or extrapolation using these two benchmark HIES.

Individual consumption expenditure by nonprofit institutions serving households was required for five basic headings: housing, health, recreation and culture, education, and social protection and other services. However, data was available only for health, education, and social protection and other services.

The expenditure on basic headings relating to individual and collective consumption expenditure by government (based on budget documents of federal, provincial, district and local government), gross fixed capital formation (based on an annual survey of establishments), changes in inventories (derived as a fixed proportion) and exports and imports of goods and services (obtained from the State Bank of Pakistan) were estimated directly using data from national accounts.

Acquisitions less disposals of valuables—which were not available for the 2017 ICP—were incorporated in the 2021 ICP because of its inclusion in the expenditure side of the GDP in the 2015/2016 re-basing, which was adopted in January 2022.



Compiling GDP expenditure data for the 2021 ICP was challenging because of the widespread effects of COVID-19 on data collection and the postponement of regular surveys like the HIES 2020/2021. To fill data gaps in household consumption expenditure for 2020 and 2021, HIES weights for 2018/2019 were used. The significant delay and low response rates were also noted when receiving budget documents from the provincial and district governments and private sector enterprises for annual gross fixed capital formation surveys. Repeated reminders had to be issued, along with increased reliance on internet access to download annual reports of companies. Imputation and adjustment for non-response were made based on recommendations from an expert group comprising officials from the PBS, the State Bank of Pakistan, the Ministry of Finance, and the Ministry of Planning.

### V. Data Validation and Quality Control

For the 2021 ICP, CPI data collectors were engaged for the ICP price collection, and price collectors underwent virtual training before price collection activities. Before reporting prices to the central office, the chief statistical officer and the PBS field office statistical officer vetted the prices. The prices were then entered into the ICP Asia Pacific Software Suite (ICP APSS) and checked by comparing the prices within cities. Any identified outliers were reverted to the concerned offices for verification. Additionally, some prices were verified by telephone and from websites.

Regional workshops organized by ADB were very helpful in helping the PBS ICP team understand ICP concepts. These workshops enabled PBS ICP staff to address data inconsistencies compared to other regional economies. These workshops provided an opportunity to discuss and share experiences of the CPI mechanism with other participating economies, along with ICP activities.

### VI. International Comparison Program Price Collection Tools

The PBS field staff used paper questionnaires to collect prices for various ICP modules such as machinery and equipment, construction, fast-evolving household consumption items, transport equipment, and other durable items. The PBS adopted the ICP APSS for data entry, editing, and data submission to ADB. Throughout the process, the ADB ICP team provided support in case of software issues.

### VII. Challenges in the International Comparison Program Implementation

The PBS ICP team from the Price Statistics Section accomplished the data collection, compilation, editing, and validation for the 2021 ICP and submitted the results to ADB. The data shared by the PBS ICP team were included and compared with data from other economies in Asia and the Pacific by the ADB ICP team. However, the financial aspects of the 2021 ICP cycle could not be resolved due to internal procedural considerations. The success of the project implementation was attributed to the effective cooperation between the PBS ICP team and the ADB ICP team. Continued and strong collaboration will support policymakers in exploring new applications of PPP.

### VIII. Lessons Learned and Future Directions

Despite initial uncertainty for various reasons, including the COVID-19 pandemic and a lack of funds because of the closure of the PBS bank account— Pakistan's participation in the 2021 ICP was successfully accomplished. Thanks to the support and guidance from the ADB ICP team and cooperation from the PBS ICP team, these challenges were effectively managed.



The PBS values its participation in ICP activities and has gained substantial knowledge and learned from the experiences of the other participating economies during the regional workshops. During the 2024/2025 rebasing, the PBS will explore opportunities to integrate the CPI and ICP baskets by following the classification of individual consumption according to purpose.

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

Name	Title	Responsibility
Bahrawar Jan	Deputy Director General	Price supervisor
Naseer Ahmad	Director	National Coordinator: Liaison between the Pakistan Bureau of Statistics and ADB, and overall responsible for the implementation of the project in Pakistan
Ahtasham Gul	Chief Statistical Officer	Deputy National Coordinator: Responsible for the completion of all 2021 ICP activities.
Adnan Shams	Statistical Officer	Household, Machinery and Equipment, Construction
Muhammad Mazhar	Statistical Officer	Field Coordinator
Muhammad Umer	Statistical Assistant	Government Compensation, Housing Volume
Liaqat Ali	Chief Statistical Officer	National Accounts, Gross Domestic Product