



I. Administrative Set-Up

ICP activities in Mongolia were conducted by the Price Division of the Economic Statistics Department and the National Accounts Division of the Integrated Statistics Department of the National Statistics Office of Mongolia (NSOM) in 2021. There was no structural change in price collection activities because of the coronavirus disease (COVID-19) pandemic.

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

About 45 price collectors for the consumer price index (CPI), located in the capital city, and 21 *aimags* (administrative units) were responsible for ICP price collection.

The same editing procedures and computer system were used for the ICP and the CPI.

The NSOM ICP team plans to integrate CPI and ICP price survey collection and processes by using the prices from the CPI for the same products and services.

III. Survey Framework

The NSOM facilitated the 2021 ICP cycle by translating the product catalogue into Mongolian and training the 45 price collectors in the ICP's structured product descriptions. A separate survey questionnaire was prepared for the ICP, which was sourced from existing CPI or other outlets. Price data were entered into the ICP Asia Pacific Software Suite (ICP APSS) quarterly and sent to the NSOM headquarters via e-mail.

For the household consumption survey, outlets in urban and rural areas were selected using target sampling to cover the entire economy of Mongolia. One-stage stratified sampling was adopted, in which the outlet was the sampling unit and the price quotation was the statistical unit. There were 2,714 outlets selected for price collection, the same as in the 2017 ICP cycle. Prices for items under the categories "food and nonalcoholic beverages" and "alcoholic beverages, tobacco, and narcotics" were collected monthly, while prices for the rest of the nonfood categories were collected quarterly.

The NSOM and municipal statistics department officers conducted price surveys for construction and machinery and equipment items in the main districts of the capital city. Training was organized to ensure officers were familiar with the correct items based on structured product descriptions.

Officers responsible for housing rental prices in the municipality statistics department collected prices for the housing rental survey in the districts, while those responsible for ICP collected prices in *aimags*. Data were also supplemented by prices collected from real estate agencies and online sources.

For government compensation survey—the data on the number of employees at different levels of working years' experience—were obtained from the Civil Service Council of Mongolia. The NSOM used the position classification of public administration, public service, and public special service, which was determined by the Government of Mongolia in 2018. This classification includes the list of all positions, definitions, and their corresponding grades. Five-year seniority was used to determine the annual salary in each occupation. Data on compensation for government occupations and other related indicators were collected from the Ministry of Finance and the Ministry of Labor and Social Protection of Mongolia.



IV. Gross Domestic Product Expenditure Values

For the 2021 ICP cycle, the GDP expenditure values were estimated for most of the 155 basic headings according to the 2021 ICP classification. Household consumption and net expenditures abroad were derived through direct estimation based on household socioeconomic surveys, foreign trade statistics, and other relevant data sources. Estimates for nonprofit institutions serving households were based on annual data.

Government consumption estimates were based on general government budget statistics. Direct estimation was used with the consumption of fixed capital reflected in the value added of the government utilizing results from the supply and use tables.

Gross capital formation estimates were sourced from annual surveys of enterprises and financial reports. Direct estimation was also used, with changes in inventories revalued by the holding gain or loss method. Exports and imports of goods and services were based on balance of payments data and foreign trade statistics.

V. Data Validation and Quality Control

The NSOM conducted two training sessions for the price collectors to ensure that the same items with correct specifications were surveyed during price collection. The prices collected in the *aimags* and the capital city were submitted to the NSOM for further validation. Statistical methods—such as minimum-to-maximum ratio and coefficient of variation—were used to check or validate individual price quotations and to improve the national average prices. Although there was no significant deviation in the prices, findings during the regional data validation workshops organized by the Asian Development Bank (ADB) indicated that price fluctuations were higher for some items than other participating economies.

The regional validation workshops proved beneficial in comparing prices across economies. This platform facilitated the validation of price differences because of actual price differences between economies or incorrect item specifications. By comparing prices with others, economies were also able to indicate the availability of the specification or to change or split items, or to gain knowledge of the specification, size, and quality of products, if needed.

VI. International Comparison Program Price Collection Tools

The ICP APSS provided standardized templates that streamlined data entry for enumerators. The modules included simplified data input, automated checks for outliers and inconsistencies, and report generation for analysis and comparison, which helped identify errors and outliers. Additionally, the price collection tool within the ICP APSS was user-friendly for inputting the prices for machinery and equipment items.

VII. Challenges in the International Comparison Program Implementation

Because of COVID-19 restrictions, the NSOM ICP team faced challenges in data collection. Enumerators had to rely on the internet and phone calls for price collection because of difficulties conducting field visits. Despite the pandemic, there were no extensions for the price collection period, and human resource issues were minimal. Collecting price data posed challenges, such as limited supply due to lockdowns and item availability. For construction, finding products that matched all given definitions was a major challenge, and while some products matched the descriptions, their prices varied due to brand differences. In the case of machinery and equipment, finding brand-new items was particularly difficult, as most items were second-hand.



VIII. Lessons Learned and Future Directions

The NSOM ICP team realized the importance of having plans and guidelines in place for challenges such as COVID-19 to minimize risks. Significant efforts were made to improve the CPI surveys by incorporating the structured product descriptions from the ICP. The NSOM ICP team used the ICP basket to define the CPI basket for the 2022 rebase. The NSOM ICP team plans to further integrate the CPI and the ICP by using CPI prices for the same ICP items in the next cycle.

The 2021 ICP provided invaluable experiences and lessons to the Price Statistics Division of the Economic Statistics Department of the NSOM. The 2021 ICP strengthened the statistical capacity in compiling price statistics by exchanging useful knowledge among the participants during the international workshops organized by ADB.

Prepared by National Statistics Office of Mongolia (Batsukh Delgertsogt, Munkh-Orgil Galbadrakh, and Oyunjargal Mangalsuren); edited by the ADB ICP Team and Melanie Kelleher.



**Annex 2: List of Members of Core International Comparison Program Team
(National Statistics Office of Mongolia)**

Name	Title	Responsibility
Erdenesan Eldev-Ochir	Director, Integrated Statistics Department	National Coordinator 2020 to Aug 2022.
Oyunjargal Mangalsuren	Director, Economic Statistics Department	National Coordinator Aug 2022 to present.
Bayarmaa Baatarsuren	Head, National Accounts Division	Deputy National Coordinator 2020 to Aug 2022.
Tegshjargal Tsagaan	Head, National Accounts Division	Deputy National Coordinator Aug 2022 to present.
Munkhzul Davaasuren	Senior Statistician, Price Statistics Division	Household consumption, machinery equipment, construction, government compensation, housing rental/housing volume
Batsukh Delgertsogt	Statistician, Price Statistics Division	Household consumption, machinery equipment, housing rental/housing volume
Munkh-Orgil Galbadrakh	Statistician, Price Statistics Division	Household consumption, machinery equipment
Jigjidsuren Toiv	Statistician, Price Statistics Division	Construction
Munkhtsetseg Munkhjargal	Statistician, National Accounts Division	National Accounts
Lkham Narantsogt	Statistician, National Accounts Division	National Accounts