



I. Administrative Set-Up

In the People's Republic of China, the ICP is implemented under the organization and guidance of the National Statistical Society of China (NSSC), which has the main vision of strengthening statistical capability and international cooperation. The national ICP office—set in the International Statistical Information Center under the National Bureau of Statistics of China (NBS)—is responsible for the survey design, organization and implementation, data validation and aggregation, professional workshop, and operational support, etc. In 31 provinces and municipalities, the ICP offices at the provincial level are set up to collect prices and carry out specific survey activities. The NSSC ICP team extended household consumption price collection from 2021 to the first quarter (Q1) of 2022 because of the coronavirus disease (COVID-19) pandemic.

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

Existing infrastructure—including the consumer price index (CPI) survey, household survey, and national accounts—was used in the 2021 ICP cycle. The splitting of basic heading expenditures was done using consumption data from the household survey and expenditure data from the national accounts.

Price data for household consumption, rental housing, machinery and equipment, construction, and government compensation were obtained from the specific surveys launched by the national ICP office. A separate government budget was allocated to carry out ICP activities.

Provincial CPI, producer price index, and salary survey teams and price collectors collected price data for the ICP survey under the supervision of the national ICP office. Some of the CPI pricing outlets were included in the ICP outlets. The advantages of using the CPI and producer price index survey teams were obvious: it was efficient, cost effective, and could secure better data quality. However, there were still some disadvantages. The components of the CPI and ICP were quite different, resulting in low overlaps of outlets and items (less than 20%) between the two surveys. This increased the burden for the CPI team to a certain degree. Different computer systems were used for the ICP and CPI.

III. Survey Framework

There were 31 cities selected as survey regions for the 2021 ICP cycle price surveys. These cities were selected from 31 provincial regions (including 27 provinces and 4 municipalities) according to economic development, population, and capacity of the survey team, among other issues. The coverage was as follows:

- (i) each of 27 provinces selected the capital city, and each city selected four urban areas and two rural areas; and
- (ii) four municipalities (Beijing, Chongqing, Shanghai, and Tianjin) each selected four urban and two rural areas.

The survey framework represented 100% of the national population located in the 31 regions. Urban areas, rural areas, and all types of outlets were included. The number of outlets was 15,632.

The frequency of price collection of categories depended on the seasonal nature of the items within the category or class. Prices for meat, fish and seafood, fruit, and vegetables were priced monthly, while other classes within the category food and nonalcoholic beverages and items under alcoholic beverages, tobacco and narcotics, clothing and footwear, and restaurants and hotels were priced quarterly. Others were priced semiannually.



A high percentage of all items was collected for most household categories. However, the collection rates for health and communication categories were relatively low. The collection rate of pharmaceutical products was low, especially for originator products. Items under the category of communication were either outdated or mostly not applicable; therefore, the collection rate was also relatively low. Great efforts in the household price consumption survey were made for the success of the 2021 ICP.

For non-household price surveys, the number of samples was satisfactory. Data were collected in the machinery and equipment price survey, the construction price survey, the housing rental survey and the government compensation survey. All basic headings in the non-household surveys were covered. These surveys provided enough price information for non-household products. The housing rental survey had national coverage and was conducted in June and December 2021. The machinery and equipment and construction price surveys also had national coverage and were implemented in the middle of 2021. The government compensation survey was implemented in Q2 of 2022 and represented the national average compensation in 2021 for government services.

IV. Gross Domestic Product Expenditure Values

GDP by expenditure approach follows the System of National Accounts 2008. To split GDP expenditure into basic headings, existing expenditure data of major categories for 2021 were employed as the control numbers. The household survey data in 2021, financial data, input-output table, and total investment in fixed assets in the whole economy were used to estimate the expenditure of basic headings. The GDP submission provided 140 basic headings out of 155.

The GDP expenditure values for the main aggregate and components of individual consumption expenditure by nonprofit institutions serving households were subsumed in the government final consumption expenditure, and separate estimates were not available. The GDP expenditure value estimate for net purchases abroad was also not separately estimated. Since the released official GDP value in the PRC is based on the production approach, the statistical discrepancy between the production and the expenditure approaches was evenly allocated to all 140 basic headings.

V. Data Validation and Quality Control

Before the inception of each ICP survey, the ICP national office usually held a training workshop for the staff in provincial ICP offices, and the provincial ICP offices were responsible for organizing training activities for the field staff.

Two-stage validation was employed in the data validation process for the 2021 ICP. At the first stage, the provincial ICP offices validated the price data after collection and were responsible for the quality of the prices collected. The data were then submitted to the ICP national office. At the second stage, the ICP national office would put the data collected from 31 provincial regions together, and parameters such as the minimum-to-maximum ratio and coefficient of variation were used for data validation. If the prices were problematic, the ICP national office requested a re-check by the provincial offices. Thus, data validation was an iterative process.

To improve and ensure data quality, a price validation workshop for each survey was held before the prices were submitted to the Asian Development Bank (ADB). Experts from the ICP national office, some departments, and universities participated in the workshops. The measure was very effective.

The ICP national office actively attended regional data validation workshops organized by ADB. The experience was very useful for improving the overall quality of price data of the PRC.



VI. International Comparison Program Price Collection Tools

The ICP Asia Pacific Software Suite developed by ADB was not used for price collection in the PRC. The PRC designed specific software for ICP data collection.

VII. Challenges in the International Comparison Program Implementation

The 2021 ICP cycle was quite challenging because COVID-19 impacted data collection through face-to-face surveys. Changes related to the COVID-19 pandemic included the following areas:

- (i) Price collection for the household consumption survey was extended from 2021 to Q1 of 2022.
- (ii) The number of cities selected for price surveys was reduced from 84 in the 2017 ICP cycle to 31 in the 2021 ICP cycle.
- (iii) COVID-19 impacted data collection, causing drops in the number of collected prices and outlets. Some items under passenger transport by sea and inland waterway had few quotations.

In addition to COVID-19-related issues, challenges were also encountered in the price collection. The price collectors were unfamiliar with some of the machinery and equipment items in the Asia and the Pacific catalogue which is not applicable to China, making it difficult to price the correct items and evaluate the data accurately. Manufacturers localized some specifications of imported products during the price collection for machinery and equipment, causing difficulties in price collection. Some items in the catalogue for Asia and the Pacific are not the mainstream consumer products in China. For example, Panasonic air conditioners and Honda motorcycles are not currently mainstream consumer products in China and are difficult to find in the Chinese market.

VIII. Lessons Learned and Future Directions

The ICP in the PRC is still a research and exploratory international cooperation program. The NSSC are strengthening research on ICP methodology and its implementation.

An effort to apply ICP's advanced methods is in progress. As much as possible, statisticians in provincial regions tried to integrate the CPI and ICP outlets and items. More than 100 subnational items were added to the list of household price surveys in the PRC during the 2021 ICP cycle. The measure might strengthen the data comparability and representativeness of subnational PPP calculation in the future. Moreover, more data from regular statistics were employed in the 2021 ICP cycle compared with previous rounds.

The NBS hopes that ADB strengthens the training for economies so that the statisticians can better understand the ICP. The training courses could invite ICP experts and include frontiers from data production to data application, such as a "hybrid" approach for dwelling services in Asia, data quality control methods, productivity adjustment, subnational PPP calculation, and economic activity analysis, etc., especially the public release of the final measurement methods and procedures. Economies will benefit from this training, and the region will ultimately benefit from the improved data quality.

Although limitations existed in data and method, the ICP activities were very beneficial. During the 2021 ICP cycle, different data sources and institutions were integrated to ensure the smooth implementation of ICP activities. Participation in the 2021 ICP and its implementation contributed to enhanced knowledge and statistical capability, which will significantly help other routine statistical activities.

People's Republic of China

**Experience in the 2021 International
Comparison Program
Implementation**



**Annex 2: List of Members of Core International Comparison Program Team
(National Statistical Society of China)**

Name	Title	Responsibility
YANG Jialiang	Active Director	National Coordinator
HU Xuemei	Principal Program Officer	Deputy National Coordinator Rental Housing Survey and Government Compensation Survey
CHEN Zhe	Engineer	Construction Price Survey
ZHANG Wei	Principal Program Officer	Household Consumer Price Survey
XIONG Kaiyuan	Senior Program Officer	Machine and Equipment Price Survey