



Technical Assistance Report

Project Number: 50233-001
Regional—Research and Development Technical Assistance (R-RDTA)
November 2016

2017 International Comparison Program for Asia and the Pacific

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
DME	–	developing member economy
GDP	–	gross domestic product
GFCF	–	gross fixed capital formation
ICP	–	International Comparison Program
ICP-APSS	–	ICP Asia and the Pacific Software Suite
NIA	–	national implementing agency
PPP	–	purchasing power parity
RAB	–	Regional Advisory Board
RIA	–	regional implementing agency
TA	–	technical assistance
UNSC	–	United Nations Statistical Commission

NOTE

In this report, “\$” refers to US dollars.

Vice-President	B. Susantono, Knowledge Management and Sustainable Development
Chief Economist and	J. Zhuang, Officer-in-Charge, Economic Research and Regional
Director General	Cooperation Department (ERCD)
Director	R. Hasan, Development Economics and Indicators Division, ERCD
Team leader	K. Joshi, Principal Statistician, ERCD
Team members	E. Capilit, Economics and Statistics Officer, ERCD
	O. Gagni, Operations Assistant, ERCD
	A. Martinez, Jr., Statistician, ERCD

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

CONTENTS

	Page
RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE	
I. INTRODUCTION	1
II. ISSUES	1
III. THE RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE	2
A. Impact and Outcome	2
B. Methodology and Key Activities	2
C. Cost and Financing	4
D. Implementation Arrangements	5
IV. THE PRESIDENT'S DECISION	5
APPENDIXES	
1. Design and Monitoring Framework	6
2. Cost Estimates and Financing Plan	9
3. Outline Terms of Reference for Consultants	10
4. Outline of the Final Report	14

RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 50233-001	
Project Name	2017 International Comparison Program for Asia and the Pacific	Department /Division	ERCDC/ERDI
Country	REG	Executing Agency	Asian Development Bank
2. Sector		ADB Financing (\$ million)	
✓ Public sector management	Economic affairs management		1.00
		Total	1.00
3. Strategic Agenda		Climate Change Information	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Low
Regional integration (RCI)	Pillar 4: Other regional public goods		
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Client relations, network, and partnership development to partnership driver of change	No gender elements (NGE)	✓
Knowledge solutions (KNS)	Organizational development Application and use of new knowledge solutions in key operational areas		
Partnerships (PAR)	Knowledge sharing activities Implementation International finance institutions (IFI) Regional organizations United Nations organization		
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	No	Regional	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG1, SDG17		
6. TA Category:	A		
7. Safeguard Categorization	Not Applicable		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		1.00	
Research and development technical assistance: Technical Assistance Special Fund		1.00	
Cofinancing		0.00	
None		0.00	
Counterpart		0.00	
None		0.00	
Total		1.00	
9. Effective Development Cooperation			
Use of country procurement systems	No		
Use of country public financial management systems	No		

I. INTRODUCTION

1. The International Comparison Program (ICP), the world's largest global statistical initiative implemented under the guidance of the United Nations Statistical Commission (UNSC), aims to compute measures of gross domestic product (GDP) and its components (household consumption expenditure, government consumption expenditure, consumption expenditure of nonprofit institutions serving households, gross fixed capital formation (GFCF), and imports and exports) based on purchasing power parity (PPP). These measures allow more meaningful cross-country comparisons, as they correct for distortions induced by differences in the price levels between countries.

2. The PPP-based estimates of GDP and its components allow direct cross-country comparisons of indicators of well-being, such as GDP per capita; or health, education, and housing expenditures per capita. Similarly, PPPs for household consumption have been the main inputs for deriving the international poverty lines (such as \$1.25 per day in 2005 PPP, or \$1.90 per day in 2011 PPP) used for computing internationally comparable estimates of extreme poverty. In particular, the PPPs for household consumption from the last three benchmark ICPs have been used to derive the international poverty line and update global poverty headcounts.

3. From a small research project in 1968 at the University of Pennsylvania, the ICP has grown into a global statistical operation; 146 economies participated in the 2005 ICP and 199 economies participated in the 2011 ICP. The World Bank functions as the global coordinator of the ICP while the Asian Development Bank (ADB) served as the regional implementing agency (RIA) of the ICP in Asia and the Pacific since the 2005 ICP, with financing provided through ADB's technical assistance (TA) program.¹ The impact, outcome, outputs, and activities under the TA are provided in Appendix 1.²

II. ISSUES

4. Until now, the ICP has been implemented for irregular benchmark years, with the last three rounds conducted in 1993, 2005, and 2011. Extrapolation techniques were used for estimating the PPPs for non-benchmark years. However, extrapolating PPPs has been problematic when benchmark years are spaced far apart, as the approach implicitly assumes that internationally comparable price indexes evolve identically to the national price indexes used for extrapolation. Comparability problems also arise on account of methodological changes in computing PPPs across ICP benchmark years. Tackling these issues requires more frequent ICP benchmark rounds and a relatively consistent methodology for generating PPPs.

5. In response to increasing demand from stakeholders to make PPPs available in a more frequent, timely, and consistent manner, the UNSC endorsed the ICP global comparison to become a permanent element of the global statistical work program during its 47th session held in March 2016. The UNSC also endorsed a shortened interval between ICP benchmark rounds as recommended by the Friends of the Chair group on the evaluation of the 2011 round of the

¹ For the 2005 and 2011 benchmark ICP, the following agencies were the regional coordinating agencies: the African Development Bank for Africa, ADB for Asia and the Pacific, the Interstate Statistical Committee of the Commonwealth of Independent States for the Commonwealth of Independent States, the Economic Commission for Latin America and the Caribbean for Latin America and the Caribbean, and the Economic Commission for West Asia for West Asia. The Statistical Office of the European Communities is responsible for the ICP activities in European countries, and the Organisation for Economic Co-operation and Development for non-European countries of Organisation for Economic Co-operation and Development member countries. They will remain as coordinating agencies for the ICP 2017 round as well.

² The TA first appeared in the business opportunities section of ADB's website on 9 August 2016.

ICP. In particular, the next benchmark round is proposed to be conducted in 2017, with subsequent benchmark rounds to be conducted every 3 years.³ These improvements are expected to address the main issues encountered in the previous ICP benchmark rounds.

6. The expanded geographic coverage (from 146 to 199 countries), methodological improvements, and strengthened capacity of national statistical systems in compiling price statistics and national accounts brought higher acceptability of the 2011 ICP round among countries compared with earlier benchmark rounds. However, outstanding methodological and administrative issues still remain as challenges to be addressed in future ICP rounds.

7. Addressing methodological challenges will remain an integral part of the research agenda of future ICP rounds. Examples of these challenges include country-specific limitations of housing expenditures (rental) and government compensation data, comparison of prices of comparison-resistant services (such as education and health), expansion of the overlap between the ICP and consumer price index baskets in order to reduce the burden on countries to collect price data, and the need for a more consistent and reliable breakdown of GDP expenditure for basic headings under household and non-household sectors. Resolving these challenges will require greater alignment of ICP activities with national statistical programs and the statistics capacity building efforts of RIAs of the ICP, including ADB.

III. THE RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE

A. Impact and Outcome

8. The impact of the 2017 ICP for Asia and the Pacific will be the enhanced utilization of comparable macroeconomic statistics in policy making and research. The outcome will be improved comparability of macroeconomic aggregates for the economies in Asia and the Pacific. Potential performance targets include (i) the collection of prices for at least 30% of the ICP items within each basic heading by each participating economy, and (ii) the availability of a PPP and GDP expenditure database for 2017 for all participating economies.⁴

B. Methodology and Key Activities

9. This TA intends to support the next round of the ICP in Asia and the Pacific by coordinating all activities related to the collection of prices and the calculation of PPPs and related aggregates for participating economies. It is expected that 22 developing member economies (DMEs) that were part of ICP 2011 will also be part of the next ICP round in 2017.⁵ To estimate the PPPs, the ICP requires undertaking (i) price collection surveys of a large number of household and non-household items that are comparable based on structured product descriptions across participating economies, and (ii) a breakdown of the national GDP

³ United Nations, Economic and Social Council. 2016. *Statistical Commission: Report on the Forty-Seventh Session (8–11 March 2016)*. <http://unstats.un.org/unsd/statcom/47th-session/documents/Report-on-the-47th-session-of-the-statistical-commission-E.pdf>.

⁴ Basic headings are the lowest level of aggregation of items in the GDP breakdown for which expenditure data are available. For example, prices will be collected for about 21 varieties of rice, and the expenditures across all rice varieties will be aggregated under the basic heading “rice.”

⁵ There were 23 participating economies in ICP 2011: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; the People’s Republic of China; Fiji; Hong Kong, China; India; Indonesia; the Lao People’s Democratic Republic; Macau, China; Malaysia; the Maldives; Mongolia; Myanmar; Nepal; Pakistan; the Philippines; Singapore; Sri Lanka; Taipei,China; Thailand; and Viet Nam. An informal communication was sent to the chief statisticians of these economies to seek their expressions of interest in participating in the TA. Nineteen economies have already expressed their interest in participating in the 2017 ICP round, while Macau, China (the only non-member economy) has expressed inability to join the 2017 ICP round. Assistance to Brunei Darussalam; Hong Kong, China; Singapore; and Taipei,China will be provided on a reimbursable basis.

into 155 basic headings as per the ICP classification of goods and services. The TA outputs are (i) ICP survey tools are produced, (ii) ICP knowledge products delivered, and (iii) statistical capacity of participating staff of national statistics offices on prices and national accounts statistics is further strengthened.

10. The UNSC also recommended gradually adopting a flexible rolling benchmark approach for estimating the PPPs, with price collection surveys of household products spread over a cycle of 3 years. However, the rolling survey approach will require good quality and comparable disaggregated price indexes for extrapolation. Therefore, for regions with less scope for extrapolation, flexibility has been provided to implement the 2017 ICP as a regular benchmark round. Asia and the Pacific and most other developing regions will be implementing the 2017 ICP as a regular benchmark survey. The UNSC has also recommended aligning the ICP and consumer price index surveys more closely to (i) reduce the burden on countries, and (ii) link the ICP activities to enhance statistical capacity for monitoring the Sustainable Development Goals.

11. To achieve the desired outcome, the TA will follow three major activities: (i) setup of the governance framework; (ii) pre-survey preparations; and (iii) data collection and validation, PPP computation, and output dissemination.

12. **Setup of the governance framework.** Based on the successful governance framework of the 2011 ICP round, the following arrangements will be made:

- (i) **Partnership with the participating DMEs.** ADB will continue its partnership with DMEs by outlining the roles of both the national statistics offices (as NIAs) and ADB (as RIA and member of the interagency coordination group) through the framework of partnership with the NIAs, as was done in the 2011 ICP round.
- (ii) **Regional Advisory Board.** ADB will establish a Regional Advisory Board (RAB) comprising selected heads of NIAs and development partners. As the policy making body for implementing the ICP in Asia and the Pacific, RAB would regularly review the implementation of the TA in participating DMEs and provide advice for improving TA processes and outputs.
- (iii) **Global ICP Unit.** ADB will collaborate with the Global ICP Unit at the World Bank for (a) coherent and integrated implementation of work related to the ICP across Asia and the Pacific, and (b) conformity of the standard concepts and methods of this global exercise.
- (iv) **Governing board and interagency coordination group.** At the global level, a governing board comprising 11 selected countries (including 2 countries from Asia and the Pacific) and 5 development partners will be established by the United Nations Statistics Division, which functions as the Secretariat to the UNSC. The governing board will be a strategic body that tackles strategy, funding, political support, and outreach issues, and also endorses the policies and protocols to which regional and global PPP calculation will adhere. ADB will be a member of the ICP governing board on a rotating basis. ADB will also be a member of the interagency coordination group comprising all RIAs that will be jointly responsible for determining data collection, validation, calculation and dissemination work plans, and capacity building activities.

13. **Pre-survey preparations.** These cover (i) updating of the ICP product catalogs, (ii) the formulation of ICP guidelines and operations materials, and (iii) the conduct of regional inception and preparatory workshops.

14. Product catalogs will be developed for household and non-household sectors through the collective efforts of participating economies, ADB, and the Global ICP Unit. Asia and the Pacific product catalogs will include (i) regional lists reflecting the intercountry diversity of

consumption patterns within Asia and the Pacific, and (ii) the global core lists of household and non-household products that will be used to link the regional PPPs with the other regions. Appropriate sampling designs necessary to collect nationally representative data will be prepared and finalized by each economy in close consultation with ADB prior to price collection.

15. **Data collection and validation, PPP computation, and output dissemination.** DMEs will conduct price surveys in accordance with the NIAs' approved sampling design and price collection methods. DMEs in Asia and the Pacific will be required to submit pre-validated prices, including quality parameters like coefficients of variation of prices and the number of price quotations every quarter to ADB. They will also be required to submit GDP expenditures for the 155 basic headings. Participating economies will use the ICP Asia and the Pacific Software Suite—a tool for data entry, data validation, and data submission. While the participating DMEs have experience in implementing ICP activities, the lack of timely implementation of the survey schedule or turnover of trained staff may affect the TA project's schedule of activities.⁶

16. Intra and intercountry data review and validation will be conducted periodically to ensure comparability and reliability of information. Workshops will be conducted to develop and sustain each NIA's technical knowledge of the ICP concepts, methods, and tools. GDP expenditures will be validated following international standards of national accounts statistics. The validated prices and GDP expenditure data will be used to calculate PPPs for GDP and its major aggregates and the required levels of aggregation. Regional PPP calculations will follow, to the extent possible, the recommended methodology across regions and in consultation with the Global ICP Unit at the World Bank. Preliminary and final PPPs and PPP-based indicators estimated by ADB will be analyzed and discussed with the NIAs, World Bank experts, and RAB members, as deemed necessary. Preliminary and final regional PPPs, and other information agreed to be shared for the estimation of the global PPPs will be submitted to the Global ICP Unit of the World Bank for the preparation of the 2017 ICP global report.

17. The TA will use several avenues to disseminate good practices and lessons: (i) regional workshops where DMEs share experiences and discuss issues related to data validation and quality, (ii) articles in the ICP newsletter regularly published by the World Bank, (iii) regional coordinators' meetings organized by the World Bank, (iv) working papers, and (v) the ICP web page on the ADB website.

18. The regional results for Asia and the Pacific will be presented in a concluding workshop. The final regional report, which will be titled "2017 International Comparison Program for Asia and the Pacific: Purchasing Power Parities and Real Expenditures," will be produced and disseminated in print and online on ADB's website, and on the websites of other regional and international organizations.⁷ Advocacy work and related research on ICP will be conducted to advance the participating DMEs' capacities and enhance the usefulness and relevance of project outputs.

C. Cost and Financing

19. The TA is estimated to cost \$1,000,000, which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V). Appendix 2 presents the cost estimates and financing plan.

⁶ The GDP expenditure breakdown includes a component on gross fixed capital formation (GFCF) summarized by type of assets. To improve the accuracy of GFCF estimates, the participating economies will be encouraged to provide GFCF estimates by type of assets for the following groups: general government, public corporations, private corporations, and households. A set of technical guidelines on GFCF estimation will be prepared.

⁷ Appendix 4 provides the outline of the final report.

D. Implementation Arrangements

20. ADB will be the executing agency and will serve as the implementing agency of the ICP program in Asia and the Pacific. ADB's Development Economics and Indicators Division of the Economic Research and Regional Cooperation Department will be responsible for the overall management of regional data collection, data validation, data analysis, calculation of PPPs, and maintenance of ICP data and the ICP web page on ADB's website.

21. As in the previous ICP rounds, the national statistics offices in the DMEs will be the NIAs to implement the ICP at the national level, conduct price surveys and data collection, undertake intra-country price data validations and quality assessment, and prepare GDP expenditure values and participate in data validation workshops for finalizing the data for estimating the regional PPPs. DME governments will sign letters of no objection to confirm their participation in the 2017 ICP round.

22. Each participating economy will be required to identify a national coordinator, a deputy national coordinator, and an ICP country team that will be responsible for implementing activities identified in the regional program. Periodic reviews of survey progress will be undertaken by the ADB project team, and necessary interventions in the form of technical and operational advice will be provided to the participating economies on an ongoing basis. Quarterly regional data review and validation workshops with project staff of all NIAs will be undertaken to review data collection and validation issues. These implementation arrangements were used in the 2005 and 2011 ICP benchmark rounds and resulted in improved data quality and comparability. The participating economies have also gained sufficient experience in carrying out data collection surveys and compiling other data needed for calculation of the PPPs.

23. The TA will be implemented from November 2016 to December 2019 and finance 41 person-months of consulting services comprising 4 person-months of international consultant inputs (in areas of sampling design, PPP methodology, national accounts statistics, and report writing), and 37 person-months of national consultant inputs (as a statistician or economist, data specialist, and manuscript editor). All consultants will be selected on an individual basis and engaged by ADB in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). Lump-sum payments and output-based contracts will be considered for consulting services in line with Midterm Review of Strategy 2020 Action Plan Nos. 2.9.2 and 2.10.2, where applicable⁸ The outline terms of reference for consultants are in Appendix 3. The procurement of equipment and the handover of procured computer software and hardware to the governments of participating DMEs upon completion of the TA will follow ADB's Procurement Guidelines (2015, as amended from time to time). Equipment purchased will comply with ADB guidelines on accountability of assets purchased under the TA, and disposal will follow the procedures as per relevant project administration instructions. Disbursements under the TA will be done in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

IV. THE PRESIDENT'S DECISION

24. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$1,000,000 on a grant basis for the 2017 International Comparison Program for Asia and the Pacific, and hereby reports this action to the Board.

⁸ ADB. 2014. *Midterm Review of Strategy 2020: Action Plan*. Manila.

DESIGN AND MONITORING FRAMEWORK

Impact the TA is Aligned with Utilization of comparable macroeconomic statistics in policy making and research enhanced (project defined)			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
<p>Outcome Comparability of macroeconomic aggregates for the economies in Asia and the Pacific improved</p>	<p>By 2019</p> <p>a. All participating economies collect at least 30% of the ICP items within each basic heading for the 2017 ICP benchmark year (2011 ICP baseline: 18 economies [78.2%])</p> <p>b. PPP and GDP expenditure database for 2017 for 155 basic headings will be available for all participating economies (2011 ICP baseline: 15 economies [65.2%])</p>	<p>a. Workshop documents; TA reports titled: “2017 International Comparison Program for Asia and the Pacific: Purchasing Power Parities and Real Expenditures”</p> <p>b. Country ICP data submission</p>	<p>Weak capacity of some national implementing agencies to conduct high-quality data collection may impact comparability in Asia and the Pacific.</p>
<p>Outputs</p> <p>1. ICP survey tools produced</p> <p>2. ICP knowledge products delivered</p>	<p>By 2018</p> <p>1a. ICP product catalogs with structured product descriptions for price surveys in the household and non-household sectors (2011 ICP baseline: same as target)</p> <p>1b. Guidelines for implementing the ICP across Asia and the Pacific and at the country level (2011 ICP baseline: same as target)</p> <p>1c. Updated ICP-APSS with enhanced features (2011 ICP baseline: same as target)</p> <p>By 2019</p> <p>2a. Validated quarterly and annual ICP item prices and PPP data for all participating</p>	<p>1a. ICP product catalogs; progress reports and comments from participating economies</p> <p>1b. Progress reports and comments from participating economies</p> <p>1c. Use of ICP-APSS by participating economies in project implementation</p> <p>2a. Validated price data for PPP computation for basic headings and sub-aggregates</p>	<p>Other national priorities and/or frequent turnover of trained staff in national statistics offices may disrupt data collection schedule.</p>

<p>3. Statistical capacity of participating staff of national statistics offices on prices and national accounts statistics is further strengthened</p>	<p>economies (2011 ICP baseline: same as target)</p> <p>2b. Comparable GDP expenditure values for 155 basic headings for all economies (2011 ICP baseline: 142 basic headings)</p> <p>2c. Publication of final report titled “2017 International Comparison Program for Asia and the Pacific: Purchasing Power Parities and Real Expenditures” (2011 ICP baseline: 1 publication)</p> <p>2d. ICP 2017 database finalized (2011 ICP baseline: same as target)</p> <p>2e. 2 working papers on ICP-related research topics published (2011 ICP baseline: 1 working paper on ICP related research topic)</p> <p>By 2019</p> <p>3a. At least 1 training session on ICP, price statistics, national accounts statistics concepts, and methods conducted during 2017 ICP regional data validation workshops (2011 ICP baseline: not applicable)</p>	<p>2b. Validated gross domestic expenditure weights and PPPs by basic heading</p> <p>2c. Print and online publication of the final ICP report</p> <p>2d. ICP web page</p> <p>2e. Print and online ADB Economics Working Paper Series</p> <p>3a. Regional and in-country training highlights, training materials, or documents; back-to-office reports</p>	<p>Subject-specific experts may be limited or unavailable to serve as consultants and resource persons in Asia and the Pacific</p>
---	---	---	--

<p>Key Activities with Milestones</p> <p>1. Output 1: ICP survey tools produced (Nov 2016–Dec 2019)</p> <p>1.1. Building and continuation of partnerships with DME, and collaboration with the Global ICP Unit at the World Bank for coherent and integrated implementation of the ICP work at all levels (Oct 2016–Dec 2019)</p> <p>1.2. Development and/or updating of the ICP product catalogs (Nov 2016–Oct 2018)</p> <p>1.3. Formulation and implementation of guidelines and operations materials, including sampling designs for ICP surveys (Nov 2016–Aug 2018)</p> <p>1.4. Updating and maintenance of the ICP databases and information, including systems development and/or enhancement (Nov 2016–Dec 2019)</p> <p>2. Output 2: ICP knowledge products delivered</p> <p>2.1. Data collection, validation, and PPP computation (Apr 2017–Mar 2019)</p> <p>2.2. Estimation and validation of GDP expenditure values at the required level of disaggregation (Jun 2017–Jun 2019)</p> <p>2.3. Preparation and publication of the final report titled “2017 International Comparison Program for Asia and the Pacific: Purchasing Power Parities and Real Expenditures” highlighting regional PPP results and dissemination (May 2019–Oct 2019)</p> <p>3. Output 3: Statistical capacity of participating staff of national statistics offices on prices and national accounts statistics further strengthened</p> <p>3.1. Regional and in-country validation workshops and training to sustain and/or further strengthen the statistical capacity of staff of participating national statistics offices on ICP and ICP-related research agenda (Dec 2016 –Dec 2019)</p> <p>3.2. Provision of online and hands-on backstopping technical and administrative support on ICP and other related research topics (Nov 2016–Mar 2019)</p>	
<p>Inputs</p> <p>Asian Development Bank: \$1,000,000 (TASF V)</p>	

GDP = gross domestic product, ICP = International Comparison Program, ICP-APSS = ICP-Asia and the Pacific Software Suite, PPP = purchasing power parity, TA = technical assistance.
Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	60.0
ii. National consultants	90.0
b. International and local travel ^b	30.0
2. Equipment ^c	10.0
3. Workshops, seminars, and conferences ^d	320.0
4. Surveys ^e	420.0
5. Miscellaneous administration and support costs ^f	20.0
6. Contingencies	50.0
Total^g	1,000.0

^a Financed by the Technical Assistance Special Fund (TASF-V) of the Asian Development Bank (ADB).

^b Includes airfare, incidentals, and per diem.

^c Includes purchase of laptops and other computer hardware. The procurement of any equipment will be done in accordance with ADB's Procurement Guidelines. Handover of procured computer software and hardware to the governments of participating developing member economies (DMEs) upon completion of the technical assistance (TA) will follow ADB's Procurement Guidelines (2015, as amended from time to time).

^d Includes (i) travel and related expenses of resource persons, including ADB staff as resource persons; (ii) participants' travel cost and per diem; (iii) conduct of workshops, meetings, or training sessions; (iv) relevant costs, including representation expenses; and (v) other related costs.

^e Includes conduct of price surveys and data collection, data processing, documentation, expanded list of eligible expenditures like bank charges, and related costs by DMEs.

^f Includes software procurement, communications, report preparation and dissemination activities, printing, expanded list of eligible expenditures like bank charges, and other related costs.

^g The total costs of the project, including undertaking research and capacity building and preparatory activities for the next International Comparison Program (ICP) round, are estimated at \$2,500,000. For 2016, the Economic Research and Regional Cooperation Department (ERCD) management has earmarked \$1,000,000. For 2017, ERCD management has endorsed the project as a corporate priority TA project, and the balance of \$1,500,000 needed to implement the full range of ICP activities has been incorporated in the pipeline of the ERCD through its work program and budget framework, 2017–2019 under TASF-V.

Source: ADB estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. **Consultant for sampling** (international, 1 person-month, intermittent). The consultant must be a statistician with extensive experience in designing sample surveys, particularly price surveys. Previous International Comparison Program (ICP) experience is preferred.
2. The specific responsibilities of the consultant will include the following:
 - (i) prepare guidelines for sampling design and ask developing member economies (DMEs) to prepare their sampling designs for ICP price surveys,
 - (ii) review and evaluate sampling designs and provide appropriate steps to be taken, and
 - (iii) serve as a resource person and prepare technical documentation of the proceedings on the sampling training workshop that may be organized.
3. The expected outputs of the consultant are (i) guidelines for the sampling design for participating DMEs, and a draft and final report evaluating the sampling designs of the DMEs and providing appropriate recommendations; and (ii) presentations, workshop materials, and technical documentation of the proceedings of the workshops.
4. **Consultant for purchasing power parity computation methodology** (international, 1 person-month, intermittent). The consultant should be an economist or statistician with extensive working experience with the ICP, with particular emphasis on purchasing power parity (PPP) computation.
5. The specific responsibilities of the consultant will include the following:
 - (i) undertake technical evaluation of data submissions by DMEs to establish consistency of concepts used in price collection,
 - (ii) participate in data validation workshop technical assistance (TA) meetings to assist the project team in determining the quality of data inputs for PPP computation,
 - (iii) determine the accuracy of product identification in the DMEs and establish that correct product specifications were followed in identifying the products priced,
 - (iv) perform the required statistical analysis to determine if the desired price parity is established based on data submissions of DMEs,
 - (v) recommend practical and technical solutions or suggest appropriate courses of action to be taken by the DMEs or the Development Economics and Indicators Division of the Economic Research and Regional Cooperation Department to address issues and concerns regarding data submissions,
 - (vi) recommend the appropriate methodology for PPP computation, and
 - (vii) perform other related tasks necessary in PPP computation.
6. The expected outputs of the consultant are (i) a draft and final report evaluating the quality of ICP data submitted by DMEs based on established international standards and using statistical techniques; and (ii) technical documentation including the rationale for recommending certain methods for implementation in Asia and the Pacific, workshop proceedings, and presentations, among others.
7. **Consultant for national accounts** (international, 1 person-month, intermittent). The consultant should be an economist or statistician with extensive working experience in economic statistics, with particular emphasis on national accounts compilation methods.

8. The specific responsibilities of the consultant will include the following:
- (i) provide training on the 2008 System of National Accounts¹;
 - (ii) ensure consistency with the national accounts comparisons between Asia and the Pacific and other geographic areas in the 2017 ICP;
 - (iii) develop methods for establishing a uniform disaggregation of the gross domestic expenditure categories into various basic headings, including the reliability of weights at the basic heading level, and assist DMEs in deriving the required weights by basic heading;
 - (iv) establish appropriate expenditure categories for individual and collective government final consumption expenditure;
 - (v) adapt the expenditure classification established by the Global ICP Unit for global comparisons to best suit circumstances in Asia and the Pacific, ensuring consistency with other ICP areas;
 - (vi) prepare guidelines for estimating components of gross fixed capital formation by type of assets and by institutional sectors; and
 - (vii) assist the Development Economics and Indicators Division of the Economic Research and Regional Cooperation Department in conducting related workshops and preparing meeting reports.
9. The expected outputs of the consultant are
- (i) draft and final report evaluating the quality of national accounts data submitted by DMEs, including compliance with the 2008 System of National Accounts recommendations and guidelines for estimating components of gross fixed capital formation;
 - (ii) summary of national accounts quality assurance framework for country submissions; and
 - (iii) technical documents for the workshops, which may include background documents, PowerPoint presentations, and documentation of workshop proceedings.
10. **Consultant for preparation of draft report of the International Comparison Program for Asia and the Pacific** (international, 1 person-month, intermittent). The consultant should be an economist or statistician with extensive ICP work experience and a proven track record in data analysis of PPP-related information and technical report writing.
11. The specific responsibilities of the consultant will include the following:
- (i) perform required statistical analysis for the ICP regional report titled “2017 International Comparison Program for Asia and the Pacific: Purchasing Power Parities and Real Expenditures” and prepare a report on data inconsistencies that may be encountered;
 - (ii) serve as the lead writer for the ICP regional report referred in para. 11(i);
 - (iii) prepare a report outline, and prepare draft and final report of the ICP regional report referred in para. 11(i) for approval of appropriate authorities; and
 - (iv) perform other related tasks that may be necessary in the publication of the ICP regional report referred in para. 11(i)

¹ The System of National Accounts 2008 (2008 SNA) is the latest version of the international statistical standard for the national accounts, adopted by the United Nations Statistical Commission (UNSC).

12. The expected output of the consultant is the draft and final ICP Asia and the Pacific regional report.

13. **Manuscript editor** (national, 1 person-month, intermittent). The consultant should have extensive experience in editing economic and statistical publications, and should preferably be familiar with ICP-related work.

14. The specific responsibilities of the editor will include the following:
- (i) conduct data consistency checks of the manuscript to ensure data integrity and internal consistency;
 - (ii) liaise with the typesetter to ensure that all editorial comments are incorporated in the typeset manuscript for final printing;
 - (iii) edit in conformity with the Asian Development Bank's editorial style and usage (including identifying and resolving issues regarding politically and legally sensitive material);
 - (iv) prepare the table of contents, definition of terms, and list of acronyms; and
 - (v) review the typeset manuscript for digital printing.

15. The expected output of the consultant is the final manuscript for publication.

16. **Economist or statistician** (national, 24 person-months, continuous). The consultant should be an economist or statistician with preferably a Master's degree in a related discipline, should have extensive experience working in the areas of national accounts and price statistics, and should preferably have previous ICP work-related experience. The responsibilities of the consultant, who should be a resident of the Philippines, will include the following:

- (i) assist the project officer in implementing the TA;
- (ii) assist in the development of household and non-household product lists and catalogs and technical guidelines;
- (iii) request consumer price index lists of DMEs and assist in identifying common commodities in the consumer price index to set up pricing lists for household final consumption expenditures;
- (iv) collect price data and/or assist in breaking down the national accounts data from participating DMEs into the desired 155 basic heading levels;
- (v) assist in data editing and validation of ICP price and/or national accounts data;
- (vi) assist in preparing communications and coordinating with national implementing agencies;
- (vii) determine the availability of national accounts data for participating DMEs by examining the details of their national accounts estimates, and identify supplementary data that could be used to provide the details required;
- (viii) assist in the preparation of the national accounts metadata of participating economies;
- (ix) assist in the calculation of preliminary and final PPP results;
- (x) draft technical documentation of activities under the TA;
- (xi) provide administrative and technical support to the project officer, Economic Research and Regional Cooperation Department staff, and the international consultants engaged under the TA;
- (xii) assist in organizing TA technical meetings and/or workshops and preparing meeting and/or workshop documents; and
- (xiii) perform other tasks as needed.

17. The expected outputs of the consultant are (i) product catalogs, guidelines, data reviews, and validation reports; and (ii) metadata documentation, documents and reports (as needed), workshop highlights, presentation materials, and preliminary PPP estimates.

18. **Data specialist** (national, 12 person-months, intermittent). The consultant should have working knowledge of economics and/or statistics and have a strong programming background, with particular emphasis in database management, including statistical databases and applications. The responsibilities of the consultant, who should be a resident of the Philippines, will include the following:

- (i) review the ICP process commencing from product list development to basic data analysis (computation of average, coefficients of variations, minimum, maximum, and minimum-maximum ratio);
- (ii) review and enhance the ICP Asia and the Pacific Software Suite (ICP-APSS) for data processing and data validation protocols for data quality control, and add additional features as necessary;
- (iii) ensure that outputs of the updated version of the ICP-APSS include variables, product specifications, and calculations to meet the requirements of the work;
- (iv) provide technical support to Economic Research and Regional Cooperation Department staff and participating economies on the use of the ICP-APSS;
- (v) provide clear algorithms and documentation (including instruction manuals) for the programs developed; and
- (vi) perform other tasks as needed.

19. The expected outputs of the consultant are (i) an updated ICP-APSS and related instruction materials; (ii) documentation of the data workflow and programs created; and (iii) draft reports (as needed), workshop highlights, and presentation materials.

OUTLINE OF THE FINAL REPORT

2017 International Comparison Program for Asia and the Pacific: Purchasing Power Parities and Real Expenditures

- A. General Background
- B. Main Results and Analysis
- C. Governance and Methodology
- D. Economy Experiences
- E. Detailed Tables
- F. Appendixes
- G. Glossary of Terms
- H. References