

# *Asian Development Bank*

RETA 6482 – Improving Price Collection and  
Updating PPP Estimates for Selected DMCs

## *Inception Workshop*

19-23 January 2009  
Bangkok, Thailand



# Outline of Presentation

Choice of currency converter

- Why not Exchange rates

- Why Purchasing Power Parities

The International Comparison Program (ICP)

- What is ICP

- Is ICP necessary

- ICP 2005 – achievements

RETA 6482 - 2009 Updates for Asia and the Pacific

- Objectives

- Data requirements

Sub-national (Intra-country) PPP

Governance & execution of RETA 6482

Work plan of RETA 6482



# International Comparison of GDP

Convert to same currency using Exchange Rates

OR

Convert to same currency using Purchasing Power Parities



# Why not Exchange rates

- Ex $\Delta$  rates will convert GDPs to a common currency
- Ex $\Delta$  rates are easily understood being determined by the demand for and supply of currencies
- Ex $\Delta$  rates cover all countries, readily available and timely

But



# Why not Exchange rates ?

Ex $\Delta$  rate converted GDPs are not consistent over time

Ex $\Delta$  rates are determined by SS and DD of currencies for internationally traded goods & services

- many goods & services cannot be traded eg. buildings, govt. services, personnel services

Factors such as interest rates, volume of trade, financial flows etc. can have significant impact on SS and DD of currencies causing ex $\Delta$  rates to fluctuate

Ex $\Delta$  rate fluctuations can make it appear that countries get "richer" or "poorer" even though no change in volume of production



# Why not Exchange rates ?

- Ex $\Delta$  rate converted GDP remains valued at national prices
- Ex $\Delta$  rate converted GDPs overstate the size of economies with relatively high price levels and understate the size of economies with relatively low levels
  - Positive correlation between income levels and price levels - richer the economy the higher the price level
  - The gap between “rich” and “poor” would appear larger than it actually is



# Why PPPs

- PPPs reflect actual purchasing power of currencies
- PPPs are currency converters and price deflators – during process of conversion, GDP are revalued at a uniform price level
- PPP converted GDP reflect only volume differences between countries
  - “Volume” refers to real values
    - Nominal values are adjusted for price levels so that the same quantities – or volumes - of goods and services can be compared between countries



# What is a PPP?

- Price ratios formed on price observations over space
  - With CPI: price ratios calculated for the
    - same product
    - over time
    - in the same country
  - With PPP: price ratios calculated for the
    - same product
    - in the same period
    - over space



# How are PPPs used

- 1993 System of National Accounts calls for real comparisons between countries to be done using PPPs
- The World Bank uses PPPs to establish international poverty lines and compare standards of living
- IMF and World Bank report size of economy and aggregate growth rates in PPP terms
- EU allocates structural funds to member states based on PPP converted aggregates
- UNDP includes PPP-based Gross National Income in the Human Development Index



# Why we need new estimates of PPPs

- Benchmark PPPs will be extrapolated using based on GDP growth rates and GDP deflators or CPI
- Increase in participation of “new” countries
- Size and structure of economies have changed
- New PPPs will allow recalibration of estimates of size of economies and poverty rates



# The International Comparison Program

- Established in 1968 to carry out multilateral price comparisons and compute PPPs
- Began as a joint venture of the UN and University of Pennsylvania, supported by the Ford Foundation and the World Bank
- Since 1993 the World Bank has coordinated the global price collection for non-OECD countries
- In 2002 a new governance structure for the ICP was established with the World Bank as the global program manager



# What is ICP?

Global survey of prices of items

- comparable across countries
- representative within

Global review of expenditures on GDP

- same coverage (eg. Illegal activities; informal producers; production for own consumption)
- same concepts (SNA 68; SNA 93)
  - Allocation FISIM
  - Military equipment
  - Software
  - Mineral Exploration
- review of weights – required to aggregate PPPs



- ICP is necessary:

- To compute internationally comparable price levels (PPPs)
- To derive economic aggregates in real terms ie PPP adjusted economic aggregates
- To provide more precise measures of :
  - Relative economic development
  - Relative size of markets
  - Relative purchasing power of currencies



# Comparative Exchange Rates & Purchasing Power Parity of Selected Economies, 2005

Economy	Exchange rate (LCU/HK\$)	PPP (Hong Kong, China = 1.00)
Hong Kong, China	1.00	1.00
Singapore	0.21	0.19
Taipei, China	4.14	3.41
Malaysia	0.49	0.31
PRC	1.05	0.60
Indonesia	1,247.82	690.58
Thailand	5.17	2.80
Philippines	7.08	3.83
India	5.67	2.58
Pakistan	7.65	3.35
Viet Nam	2,039.12	821.17
Lao, PDR	1,370.03	522.48

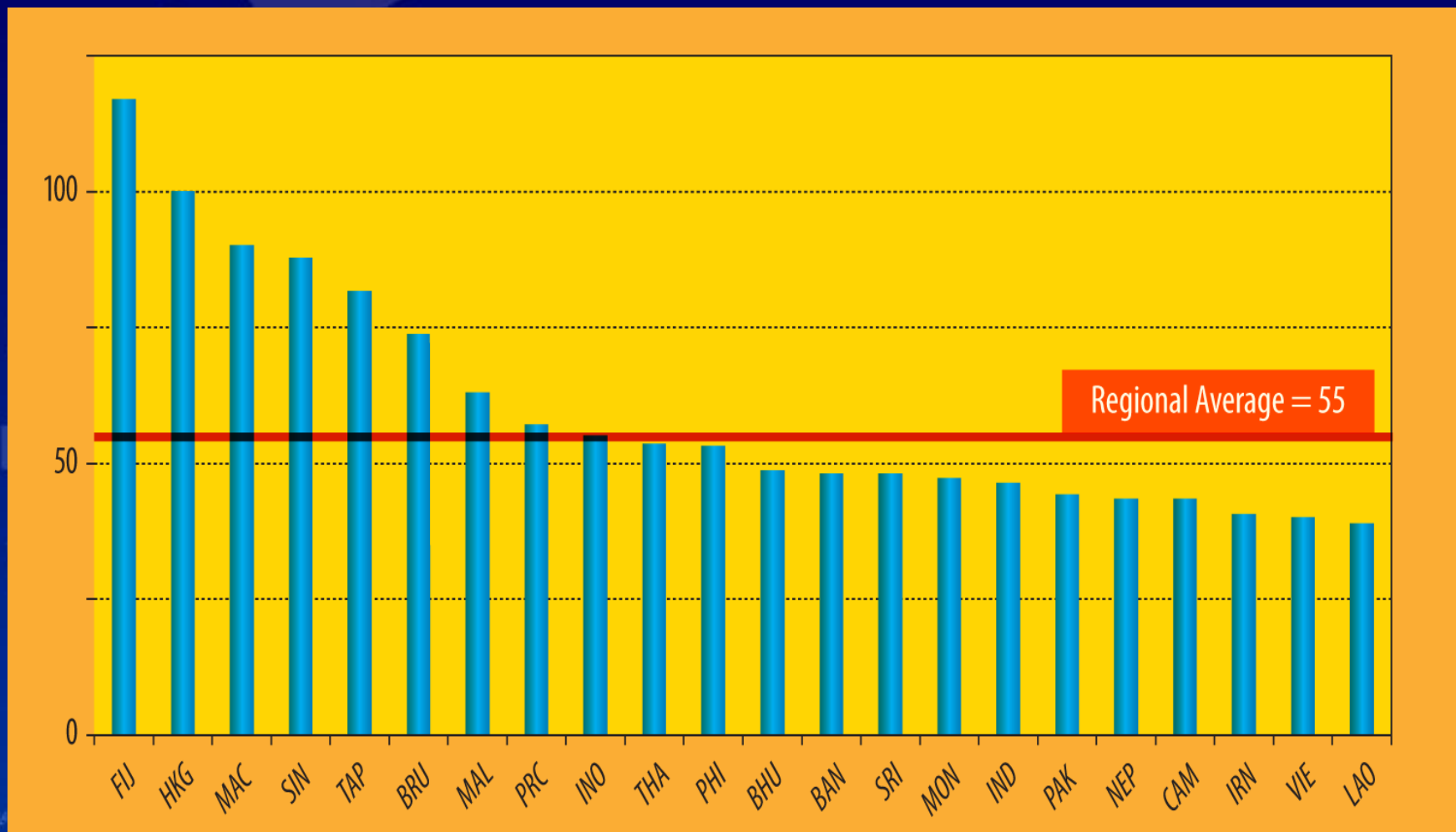


# Price Level Indices of Selected Economies, 2005

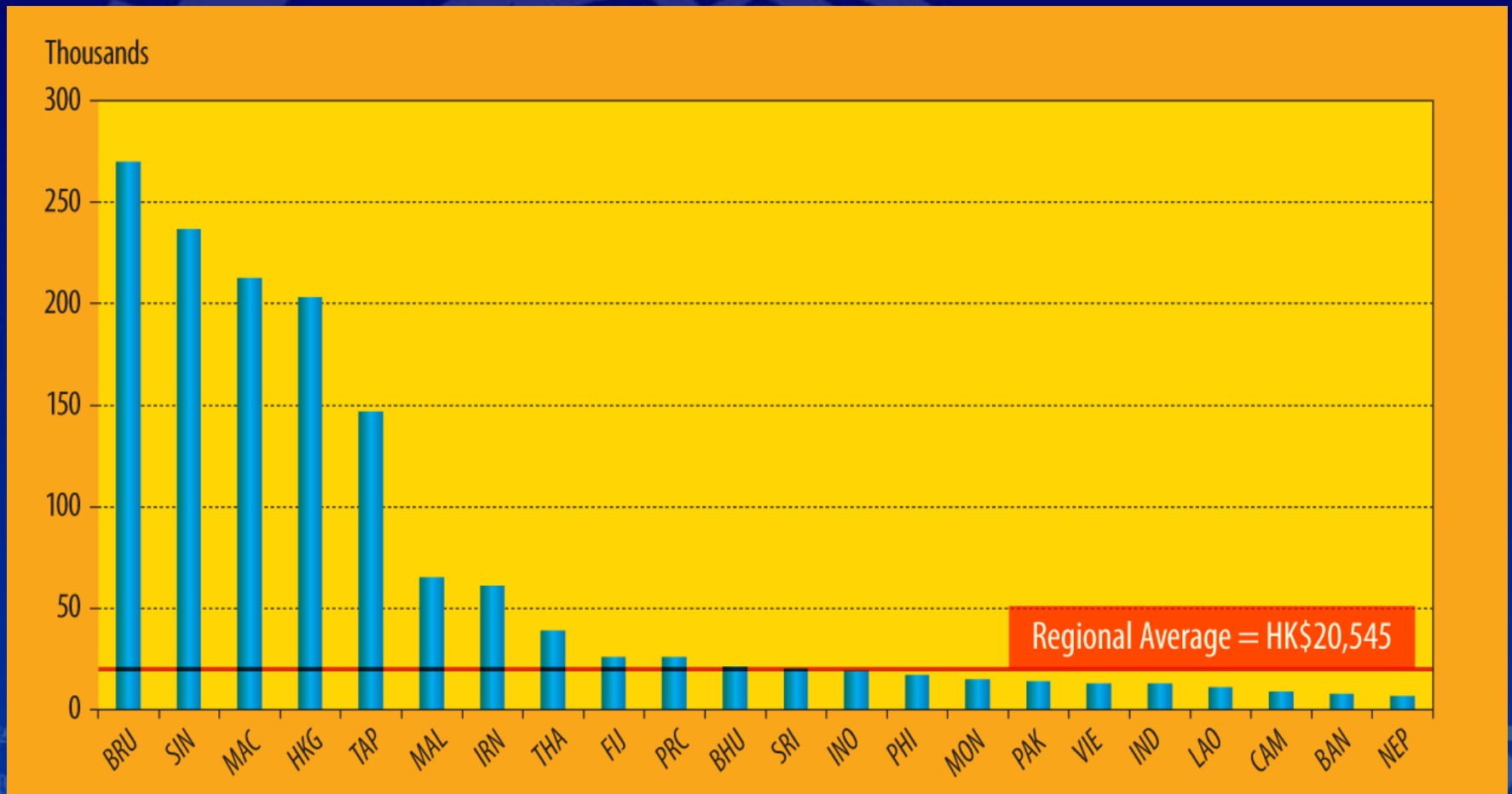
Economy	PLI (Hong Kong, China = 100)
Hong Kong, China	100
Singapore	88
Taipei, China	82
Malaysia	63
PRC	57
Indonesia	55
Thailand	54
Philippines	54
India	46
Pakistan	44
Viet Nam	40
Lao, PDR	38



# Relative Living Costs (Price Level Indices, 2005, Hong Kong, China = 100)

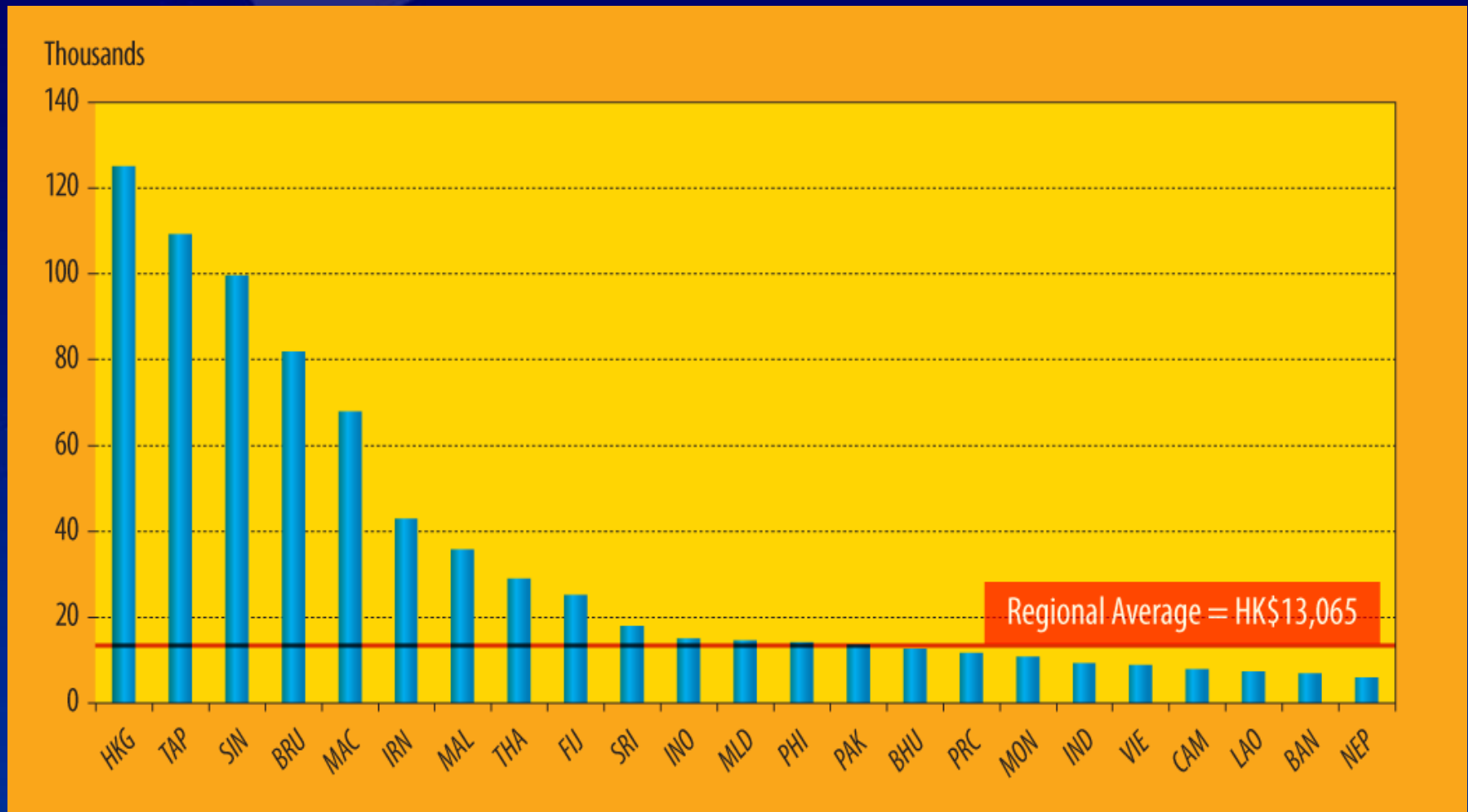


# Divergence between Rich & Poor Economies (Per Capita PPP- adjusted GDP, 2005, HK\$)



# Economic Well-Being

(Per Capita PPP-Adjusted Actual Final Consumption of Households, 2005, HK\$)



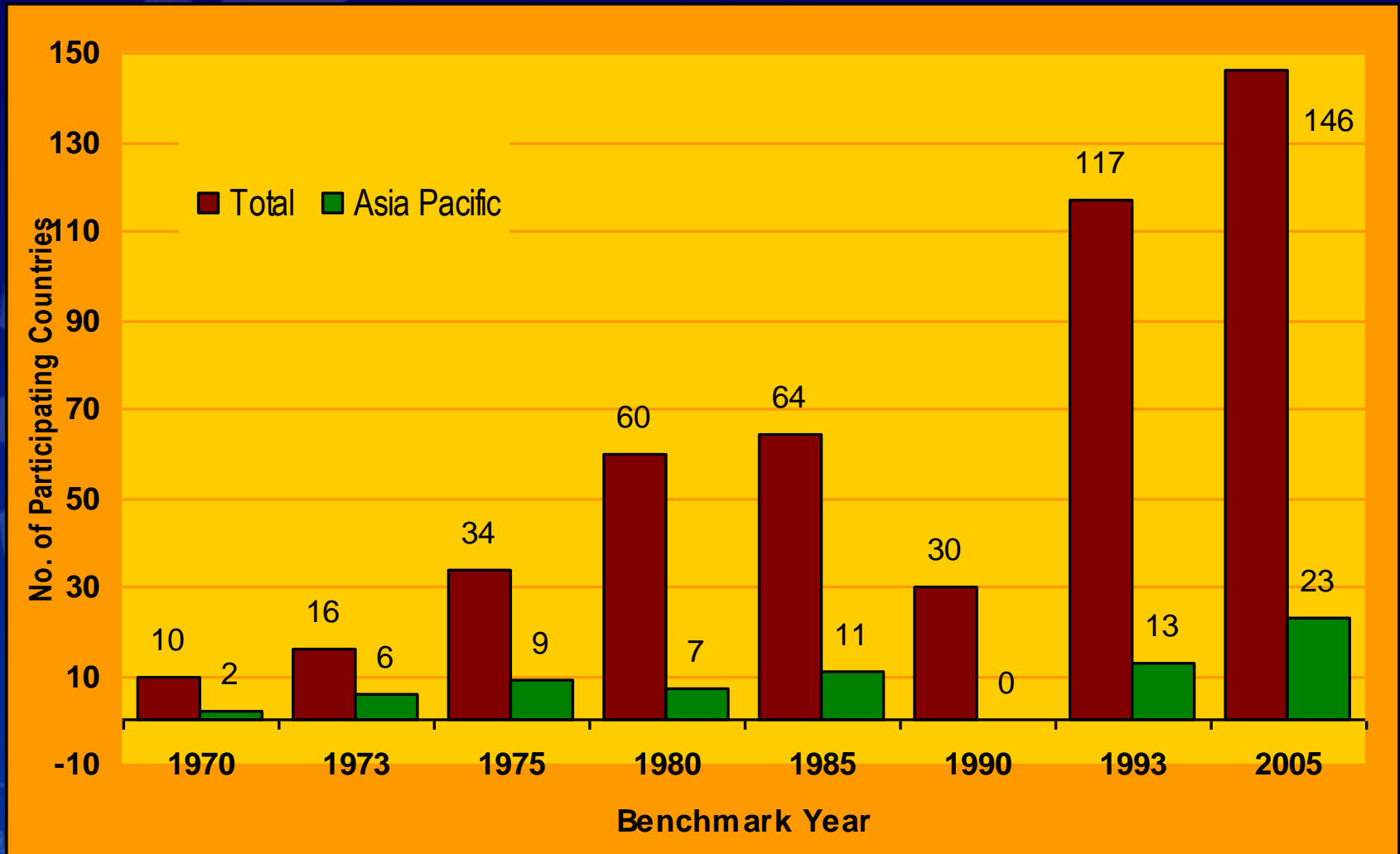
# ICP 2005: What has been achieved

## Global level

- The 2005 PPPs are derived from a global program of prices surveys using similar methods in 146 countries which priced 700 or more consumption items from regional markets
- 18 countries priced 1000+ items from global basket for linking regional PPPs to global level
- Many countries were included for the first time in 2005, including People's Republic of China.
- India participated for the first time since 1985.
- New tools and data collection methodology have improved data quality



# Historical ICP Participation (Global and Asia Pacific)



# ICP 2005: What has been achieved

## National level

- Enhanced capacity building, both institutional and technical
  - Training of price statisticians and national accountants
  - Introduction of new concepts (representativity; comparability)
  - Assisting NSOs in conducting surveys for price collection
  - For some economies work has been extended to cover all GDP components representing new areas for NSOs
  - Introduced quality improvements for household consumption estimates
  - Contributed to the improvement in the quality, comparability and consistency of economic data
  - Established synergy between price data & national accounts statistics



# ICP – CPI Harmonization workshop

Among major issues raised were:

- Integration of ICP and CPI products
- Advocacy: Lack of use of PPP at national level for decision making
- Representativity: current ICP basket is not representative of the national commodity basket
- Cost burden on national budgets
- NSO resources are tied up in ICP activities



# RETA 6482 - PPP updating to 2009

- ADB Regional Technical Assistance initiative
- Not a global programme
- Does not have the governance structure of the ICP 2005
- Not part of ICP 2011
- However we breaking new grounds
  - reduced number of products
  - price collection at capital cities
  - alternative pricing for machinery and equipment

Perhaps this could be a model for the next round ☺



# Objectives of RETA 6482 - PPP updating to 2009

- To address some of the issues raised during ICP-CPI 2005 harmonization workshop
  - Integration
  - Advocacy in using CPI information for intra-country PPP compilation
- To provide regional price and volume comparisons of GDP and its component expenditures for 2009
- To mainstream ICP with national statistical work by integrating it as far as possible with the national accounts and price collection programs



(Cont'd)

- To support the harmonization of ICP with data collection systems for the CPI and other prices
- To establish the ICP as a continuing program
- To retain and strengthen capability of implementing agencies



## RETA 6482 – PPP Updating to 2009

The update exercise will comprise the same national accounts aggregates as the 2005 ICP:

- Household consumption
- Capital formation
- Government consumption



# RETA 6482 – Data Requirements

However data requirements very much reduced

- Household consumption
  - Pricing : limited to 269 products as against 656 (41%)
  - Frequency: quarterly as against monthly
  - Coverage: capital cities as against national



# Data Requirements for Household Consumption

Household consumption categories	No. of Products	
	2005	2009
Food and non-alcoholic beverages	211	84
Alcoholic beverages and tobacco	19	9
Clothing and footwear	71	26
Housing and utilities	14	10
Furnishing and household equipment	82	29
Health	70	25
Transportation	48	23
Communication	14	8
Recreation and Culture	61	25
Education	6	6
Restaurants	21	8
Misc goods and services	39	16
<b>Total HH Consumption</b>	<b>656</b>	<b>269</b>
		<b>41%</b>

# Data Requirements for Household Consumption

	Core Products in 2009	% of 2005 (Household Consumption Products)
Bangladesh	215	33
Bhutan	165	25
Brunei Darussalam	192	29
PRC	215	33
Fiji	192	29
Honk Kong, China	225	34
Indonesia	245	37
India	233	36
Cambodia	214	33
Lao PDR	175	27
Sri Lanka	232	35
Maldives	166	25
Mongolia	226	34
Malaysia	245	37
Nepal	217	33
Pakistan	244	37
Philippines	239	36
Singapore	211	32
Thailand	233	36
Taipei, China	235	36
Vietnam	243	37
Total for region	269	41

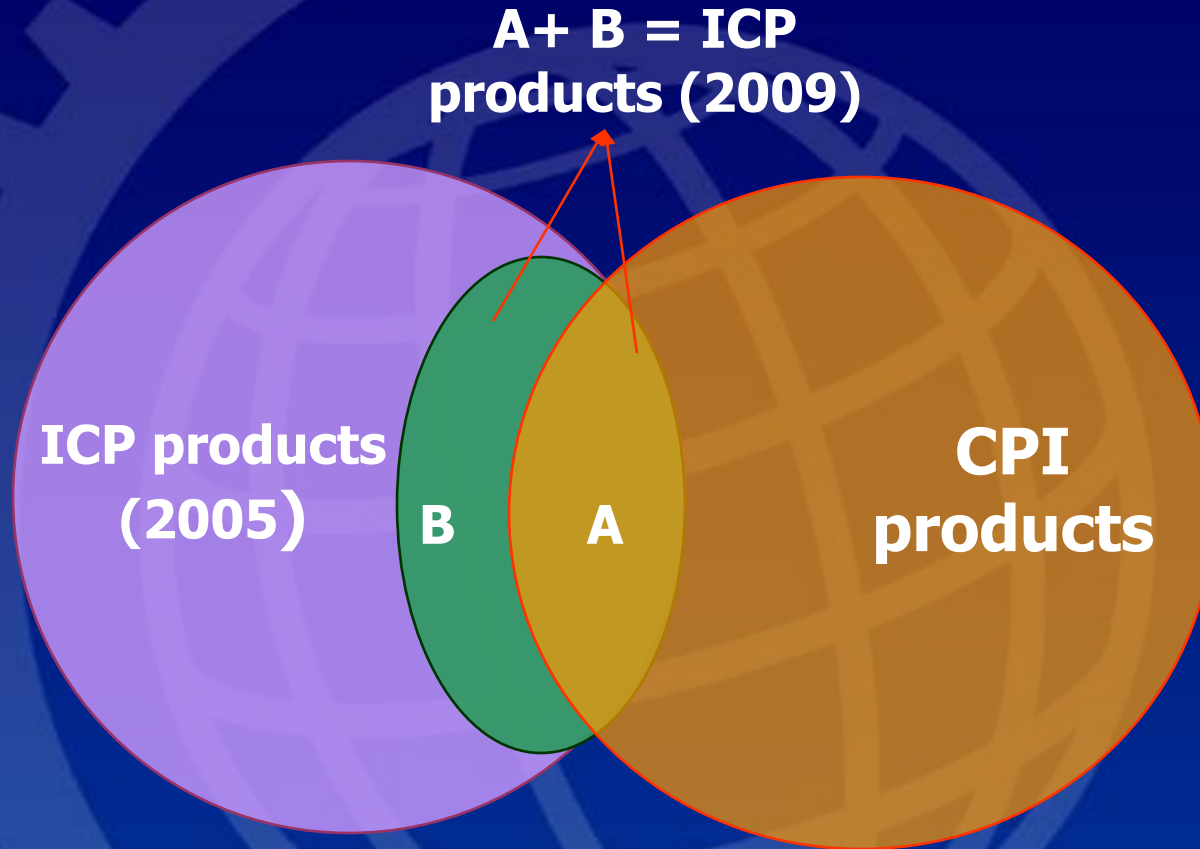
# Core Household Consumption Product List 2009 India

Household consumption categories	No. of Products		
	2005	2009	India
Food and non-alcoholic beverages	211	84	64
Alcoholic beverages and tobacco	19	9	5
Clothing and footwear	71	26	24
Housing and utilities	14	10	10
Furnishing and household equipment	82	29	28
Health	70	25	23
Transportation	48	23	20
Communication	14	8	4
Recreation and Culture	61	25	25
Education	6	6	6
Restaurants	21	8	8
Misc goods and services	39	16	16
<b>Total HH Consumption</b>	<b>656</b>	<b>269</b>	<b>233</b>
			<b>36%</b>

# Core Household Consumption Product List 2009 - Peoples Republic of China

Household consumption categories	No. of Products		
	2005	2009	PRC
Food and non-alcoholic beverages	211	84	70
Alcoholic beverages and tobacco	19	9	8
Clothing and footwear	71	26	17
Housing and utilities	14	10	7
Furnishing and household equipme	82	29	21
Health	70	25	21
Transportation	48	23	21
Communication	14	8	6
Recreation and Culture	61	25	19
Education	6	6	6
Restaurants	21	8	7
Misc goods and services	39	16	12
<b>Total HH Consumption</b>	<b>656</b>	<b>269</b>	<b>215</b>
			<b>33%</b>

# Core list pricing of household consumption 2009 update



**A = ICP products overlap with CPI products**

**B = ICP products outside of CPI**

# RETA 6482 – Data Requirements

- Capital formation
  - Construction:
    - Pricing: 11 products as against 33
    - Frequency: single price collection
  - Machinery and equipment :
    - No pricing required: Investigating alternative pricing methods, e.g. exchange rate
- Government consumption
  - Same product list as in 2005 ICP
  - Single “price” collection



# RETA 6482 - Data submission

- Do not propose to use the Toolpack
- A update spreadsheet would be used instead.
- Details on data entry and diagnostic functions of the update worksheet will be discussed on day four.



# Outcome of Workshop

- Focus of this workshop would be on Household Consumption component of GDP
- The other components of GDP will be dealt with at the next workshop
- At the end of this workshop we hope to have established the framework of partnership and an agreed time frame for the various milestones of the RETA implementation
- At the end of the RETA we hope to have PPPs for year 2009 for the Asia Pacific region



# Sub-national or intra country PPPs



# Intra-country / sub-national PPP

**CPI**  
Index constructed  
at national level  
(annual or quarterly)

**CPI**  
Price change for  
capital cities &  
regions (annual or  
quarterly)

Provides  
measurement of  
price movements  
over time

CPI inputs can be used for PPP calculation

**PPP**  
Spatial Price  
comparison across  
regions within country

Provides  
measurement of  
price level  
differences in  
different regions



# Sub-national PPPs

- Individual Countries can construct their own sub-national PPPs

## Requirements

Similar to regional or global PPP requirements

- Prices of representative and comparable products across regions
- Weights of products by region
- Aggregation methodology: CPD and GK/EKS



## Sub-national PPPs

- Demonstrate computation of sub-national PPPs for the Philippines
- Based on CPI price data



# Governance and Execution of RETA 6482

- Partnership-based program between ADB and national Implementing Agencies
- Collective commitment and joint efforts of all stakeholders
- Framework of Partnership:
  - to establish the general framework to guide the program of work between ADB & the NSOs
  - enumerates activities & responsibilities required for the update activities



# Roles & Responsibilities of National Implementing Agencies

- Identify a national ICP coordinator as focal point for communication
- Participate in workshops
- Prepare a comprehensive plan of action
- Transmit price data according to basic principles in Framework of Partnership
- Submit GDP expenditure estimates for 155 basic headings (tentative)
- Assist in resolving queries arising from data analysis
- Account for funds received



# RETA 6482 - Timeline

[RETA6482\\_Workplan.xls](#)



Thank you!

