

Regional Technical Assistance (RETA) 6483 - Adopting the Supply and Use Framework Towards 1993 System of National Accounts Compliance in Selected Developing Member Countries

INCEPTION WORKSHOP

**Department of Statistics
Putrajaya, Kuala Lumpur, Malaysia
10 – 13 February 2009**

Statement of Purpose and Objective

1. The Inception Workshop under RETA 6483 was organized by ADB and co-hosted by the Department of Statistics, Malaysia. It was held at the Department of Statistics Malaysia at Putrajaya. Twenty three participants from 20 developing member countries participated in the workshop (Attachment 1).
2. The purpose of the RETA is to help selected developing member countries to improve the range of their national accounts statistics. The specific objectives of the workshop were (i) Discussion on the objectives of ADB RETA on SNA; (ii) Update current status of selected ADBs developing member countries on the implementation of 1993 SNA on the basis of the Minimum Requirement Data Sets (MRDS); (iii) Review of concepts, methodologies and recommendations of the 1993 SNA and the 2008 SNA; (iv) Familiarize with the Supply and Use Framework of the 1993 SN
3. A; (v) Special focus on estimating imputed rents for owner occupied dwellings; (vi) Country presentation on status of compilation of the MRDS and SUT; (vii) Data sources, data gaps and possible strategies to address data gaps in the compilation of SUT; and (viii.) Presentation of Work Plan for the implementation of RETA 6483. Attachment 2 presents the detailed Agenda of the Workshop.

Implementation of the 1993 System of National Account

4. The Asian Development Bank provided a brief background of the 1993 System of National Accounts including its history and milestones; and some important updates on recommendation of the 2008 SNA. The three dimensions for SNA compliance were explained and these include: conceptual compliance; scope of implementation and; data quality. Emphasis was on the conceptual compliance and scope of implementation. Conceptual compliance is assessed by the extent to which countries have applied the new concepts and definitions of the 1993 SNA. Scope of implementation is measured by the *minimum requirement data sets* (MRDS) comprising seven recommended tables.
5. Current status of 1993 SNA compliance in selected DMCs based on UN country data and ERDI's questionnaire were presented. It was established that while most of the 20 participating countries are compiling the seven tables of the MRDS, only 12 countries compile *Value added components by industry at current prices and numbers employed* and 15 compile *Rest of the World Accounts (up to net lending)*
6. Conceptual compliance is assessed by the extent to which countries have applied the new concepts and definitions of the 1993 SNA, namely:
 - a. Is government defense expenditure on fixed assets that can be used for civilian purposes included in GCF?

- b. Is consumption of fixed capital included on all government fixed assets (roads, dams and breakwaters and other forms of construction except structures)?
 - c. Is all mineral exploration (successful and unsuccessful) capitalized?
 - d. Is expenditure on computer software included in Gross Capital Formation (GCF) and is expenditure on software development included in output?
 - e. Is expenditure on entertainment, literary or artistic originals included in GCF and expenditure on their development included in output?
 - f. Is the net acquisition of valuables included in GCF?
 - g. Are Financial Intermediation Services Indirectly Measured (FISIM) allocated to intermediate consumption and final consumption?
7. Preliminary assessment confirmed that most of the participating countries have made progress with the conceptual compliance, but few have implemented all of these new definitions. Items e. and f. have proved difficult for most of the 20 countries and several are still working on item g. namely the distribution of FISIM between final and intermediate consumption.
8. The most common impediments to the full implementation of the 1993 SNA were identified as (i) Data inadequacy; (ii) Lack of knowledge and expertise; (iii) Insufficient and high turnover of trained staff and ; (iv) Lack of support from governments.

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8. It was reiterated that the ADB RETA 6483 is being implemented to bring participating DMCs to a satisfactory level of conceptual compliance and to expand the scope of implementation of the 1993 SNA by adopting the Supply and Use framework. The SNA 93 recommends that national accounts estimates be compiled in a supply and use framework as it allows for a balanced GDP (P) and GDP (E) estimates. It was also stressed that the RETA is an ADB research initiative and not a global programme.
9. *Clarifications and Agreement*
- 9.1 *Commitment to implement activities of RETA 6483* – The participants reaffirmed their willingness to participate in RETA 6483 towards increasing the level of conceptual compliance and accelerate the implementation of the 1993 SNA. The participants expressed strong support on pursuing activities that will further enhance the statistical capacity of staff in the compilation of national accounts. Twenty (20) out of twenty-one (21) DMCs invited for the RETA formally communicated their commitment to the RETA prior to the workshop.
 - 9.2 *Governance and operation of activities of RETA 6483* – A framework of partnership between ADB and the National Implementing Agencies (NIAs) stipulating the role and responsibilities of both parties will be drafted. Final draft will be forwarded to countries towards the 2nd week of March 2009.
 - 9.3 *Results of the RETA 6483* – Participants were informed that the final output of the project is a publication of the Supply and Use Tables (SUTs) and the MRDS. However, it was reiterated that the results will be presented as a research initiative and not as a new set of GDP estimates replacing the official estimates published by each country.

Compilation of the System of National Accounts – Country Practices

10. All participants made country presentations on their current status of national accounts compilation and status of compliance with the 1993 SNA. Their presentations focused on the following: (i) scope and coverage (MRDS tables compiled); (ii) conceptual compliance

(SNA 68; SNA93) (iii) classifications used (ISIC; CPC) (iv) level of disaggregation ; (iv) basic data sources; (vii) issues in meeting the 1993 SNA recommendations; and (viii) future direction

11. Issues and Clarifications

11.1 *Estimation methodology* - It was noted that some countries have particular problems with the estimation of Household Final Consumption Expenditure (HFCE) and in some countries the only source are household budget surveys carried out at intervals of three or more years. Given that HFCE usually accounts for 60% or more of GDP this is a serious problem. It was explained that most industrialized countries base their HFCE estimates on quarterly or monthly surveys of retail sales and such surveys could be a way of improving estimates of HFCE in the Asia Pacific region.

11.2 *Data sources* - Another problem common to many countries is that their regular statistical surveys and administrative data covers only the formal sector; the informal sector, which is very large in most Asia Pacific countries, is only surveyed sporadically by living standards surveys or only indirectly via labour force surveys. It was recommended that a two-stage sampling is one method for improving coverage of the informal sector - a household labour force or expenditure survey is used to identify households with informal activities and these households are then sampled in a follow up survey collecting more information about these informal activities including kind of activity, gross output, intermediate consumption, wages and salaries paid, and numbers of employees and family workers.

11.3 *Staff capacity* - Most countries also identified staff shortages as a major constraint for their work on national accounts. Staffs who have acquired the necessary skills in national accounts often move to better paying jobs in central banks, ministries of finance or in the private sector.

Supply and Use Framework of the 1993 System of National Accounts

12. The ADB presented the Supply and Use basic framework, including data requirements and data sources.

12.1 *Distinction between market & non-market* – Domestic output at basic prices, Trade and transport margins, Taxes and subsidies on products, and Intermediate consumption at purchasers prices – have to be first broken down between “market” and “non-market” producers and then cross classified by both ISIC and CPC. Non-market producers are government, private non-profit institutions serving households and households producing goods for their own consumption. All three types of non-market producers are only involved in a limited number of kinds of activity but market producers are involved in many different activities and present the main problems for SUT compilers.

12.2 *Classification System Recommended* – Participating countries should observe uniform international standard classification system based on the 1993 SNA recommendations. Commodity classification should be made using at least Central Product Classification (CPC 1) while breakdown by kind of activities should be based on International Standard Industry Classification (ISIC 3). Also classification of expenditure should be by purpose.

12.3 *Level of disaggregation* - There is no single “ideal” degree of detail and each country must decide on the appropriate level of detail depending on its data sources. As a general rule, countries usually use as much detail as possible in compiling their SUTs but collapse their classifications to a much smaller number of items for publication

purposes. Almost always countries compile their SUTs using more product detail than industry detail – i.e. more rows than columns.

13. Issues and Clarifications

13.1 *Discrepancy between SUT level and existing unbalanced GDP (P) and GDP (E) level* - Several countries noted that by using the SUT for this purpose one or other, or both, of their published GDP (P) and GDP (E) would be shown to be wrong. ADB acknowledged that this was indeed likely to happen but argued that the unique, balanced, GDP estimate obtained from the SUT would be a better estimate than either of the existing, unbalanced, GDP(P) and GDP(E) estimates. Most of the industrialized countries in Europe and North America are now deriving their national accounts estimates from supply and use tables and ADB's developing member countries are now being invited to modernize their estimation methods in the same way.

13.2 *Data sources:* Economic census collect detailed information on the kinds of goods and services produced so this information can be used to compile the commodity (CPC) by industry (ISIC) matrix for gross output of domestic producers at basic prices. Most economic censuses also collect some information on intermediate consumption but may not cover all items of intermediate consumption and other sources will have to be used. In looking for other sources, the following points should be borne in mind:

- Intermediate consumption covers goods and services from imports as well as domestic production. What is needed is the total value (at purchasers prices) of intermediate consumption regardless of origin.
- Production functions – i.e. the percentage breakdown of intermediate consumption – are quite similar between establishments/enterprises producing the same commodity. This means that information on the details of intermediate consumption needs to be collected from only a small number of establishments/enterprises in a given kind of activity and the average pattern of intermediate consumption can then be applied to all establishments/enterprises in that kind of activity.
- Production functions do not usually change greatly from year to year. This means that information about production functions that was collected 2 or 3 years ago can still be used.
- Production functions tend to be similar from one country to another. This means that if one country has detailed information on the production functions for a given kind of activity, that information can be borrowed by other countries in the region. In many cases the same multinational companies will be producing the same goods and services in several countries using essentially the same production techniques and the same patterns of intermediate consumption. Production of textiles, clothing, footwear, motor vehicles and electronic consumer goods are examples of industries for which it may be quite legitimate to borrow another country's estimates of intermediate consumption.
- It will often be possible to obtain information on the production function for a particular kind of activity without carrying out enterprise surveys. Trade associations, product engineers, commercial accountants and experts from within government may be able to supply the information.

- 13.3 *Control Totals*: It is particularly important to use as many “control totals” as possible. Control totals are figures that are believed to be accurate and may refer to commodities or industries. Control totals may be available at a very detailed level – for example you may have accurate information on imports of wine and if wine is not produced in your country you will know that this is an accurate figure for the total supply which will need to be split between wine going into the retail sector for sale to households and wine being used as intermediate consumption by the hotel and restaurant industry. Or control totals may be available at a more aggregated level – for example you may have an accurate figure for total sales of electricity to establishments/enterprises and this will need to be split among all the many purchasers of electricity.
14. Participants from Malaysia and India described their own practical experience in compiling SUTs with special attention to the cross classification of gross output and intermediate consumption.
15. *Agreements*
- 15.1 The countries agreed to provide ADB with the following:
- *Input Output or Supply and Use Tables* - Soft copy of national input output tables for the latest period, preferably in excel format.
 - *Gross output matrix* - Gross output at basic prices, with a distinction between market and non-market output the latter including information broken down to own-final use and non market output.
 - *Intermediate Consumption Matrix* – Intermediate consumption at purchaser’s price broken down by the same industries and products as for gross output.
 - *Other matrices* – Other tables and matrices will be requested only after we conduct our data review/assessment workshop tentatively scheduled in July of this year.

Estimating Imputed Rents for Owner Occupied Dwellings

16. A presentation on the estimation of imputed rents for owner occupied dwelling was made by the ADB international consultant. Rents for dwellings are a large component of Household Final Consumption Expenditure in all countries but they are difficult to estimate because in many countries by far the largest part of rents is for owner-occupiers and has to be imputed. Two methods can be used:
- 16.1 The standard procedure - assumes that the rents that would be paid by owner occupiers are the same as the rents actually paid for similar dwellings. But the standard procedure cannot always be applied. There are cases where so few dwellings are rented that rents actually paid cannot be regarded as typical. For example, in some countries, most of the dwellings available for rent are occupied by foreigners or by employees of government or large public establishments/enterprises at rents which cannot be regarded as representative, while in other countries, dwellings may only be available for rent in the capital city or other principal urban areas. Cases/Instances when the standard procedure should not be used were also discussed and can be found in the ICP Handbook prepared by the World Bank.
- 16.2 The user cost approach - the user cost approach consists of estimating each of the costs that owners of dwellings would need to take into account in fixing a market rent if they decided to rent their dwellings to other people rather than living in them

themselves. These costs are: Intermediate consumption (Repairs and maintenance; Insurance service charges); Land and property taxes; Consumption of fixed capital and; Net operating surplus. In applying this approach, the main problems are caused by the last two items since they are both calculated as percentages of the current market value of the capital stock of dwellings. The standard procedure for estimating the stock of capital is the perpetual inventory method (PIM). However, the PIM requires long time series of capital stocks, prices of capital assets and average service lives of assets. Most countries however, do not have the means to derive capital stock estimates so it is necessary to use an alternative method as follows:

- Draw up a classification of dwellings which distinguishes between the main types of owner occupied dwellings
- Obtain information on stock of dwellings – may be obtained from a recent population and housing census
- Obtain average prices of a new dwelling by type.
- The stock of each type of dwelling is then valued at half of the new price for each type of dwelling.
- Once estimate of current market value of stock of dwelling is obtained, consumption of fixed capital is obtained by multiplying the stock by a depreciation rate. Countries in Europe, which use the user cost approach, calculate the depreciation rate as $1.6/L$, where L is the expected life of dwellings. If expected life of dwelling is 70 years, then the depreciation rate will be $1.6/70 = 0.023$ and consumption of fixed capital will be $V*0.023$, where V is the current market value of the stock of dwellings.
- Operating surplus is estimated using the current market value of stock of dwelling. Countries, using the user cost approach, calculate the operating surplus at 2.5% of the current market value of the dwelling stock.

17. *Issues and Clarifications*

- If stock of dwelling is not stable from year to year, using half of the price of a new dwelling will be too low –if stock is growing – or too high if stock is declining. Adjustments need to be made. (Please refer to attachment 3 for the worksheet and more explanation on estimating the current market price of the stock of dwellings in countries that cannot apply the perpetual inventory method.
- Consumption of fixed capital is not calculated in respect of land but if value of dwelling stock is calculated using price of new dwelling this price includes the cost of land as well as the structure. Adjustment need to be made.
- In some countries in the Asia Pacific region, many houses are constructed by owners using traditional materials. These dwelling should be separately identified, because their expected service lives are usually much shorter than for dwellings constructed from modern construction materials

Work Plan, Deliverables and Timeliness

18. The work plan, deliverable and timelines for implementation of the activities under the RETA were discussed. The immediate actions in the work plan until the **first workshop (scheduled for July 2009)** are:

18.1 For Participating Countries

- i) To submit to ADB the soft copy of national input output tables and/or SUT for the latest period, preferably in excel format as soon as possible.

- ii) To fill-up the gross output and intermediate consumption matrices using the Excel worksheets provided by ADB and submit the filled-up matrices by the first week of July 2009. The following should be noted:
 - a. Gross output at basic prices should be broken down between market and non-market output, with the latter broken down to government, private non-profit institutions serving households and households producing goods for own consumption.
 - b. Intermediate consumption at purchaser's price broken down by the same industries and products as for gross output (i.e. the same classifications and level of detail should be used for both gross output and intermediate consumption)
 - c. The commodity classification should be made using CPC Version 1.1
 - d. The breakdown by kind of activities should be based on ISIC rev 3
 - e. Countries are free to decide for themselves on the level of detail for both commodities and kinds of activity.
 - f. The matrices should be completed for the year 2005 or a year close to 2005 for which countries have results of an economic census or other industrial survey.
 - g. The matrices submitted to ADB for discussion at the next workshop should be in "worksheet format" – i.e. they may contain more detail than countries will eventually decide to release for publication purposes.
- iii) Submit Country Work plan aligned with the Regional Work plan by March 20 2009.
- iv) Estimate the current market value of the stock of dwellings (Attachment 3) for a recent year, if time permits. This activity is optional.

18.2 For ADB

- a. To consolidate materials and organize the review workshop scheduled for the end of July 2009.
- b. To draft a framework of partnership between ADB and the National Implementing Agencies stipulating the role and responsibilities of both parties will be drafted. Final draft will be forwarded to countries towards the 2nd week of March 2009.
- c. To prepare present the Complete Regional work plan beyond March 2010 at the July 2009 workshop.

Attachments:

1. *List of participants*
2. *Inception Agenda*
3. *Worksheet for estimating the stock of dwellings in countries that cannot apply the PIM*
4. *Regional Work plan 2 years*
5. *Deliverables*