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Implementation of the 1993 SNA in ASEAN

Standards, Catch-Up, and ASEAN-Help-ASEAN Programs

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Preface

The ASEAN-U.S. Technical Assistance and Training Facility Phase II (“the Facility”) is a task order under the five-year U.S. State Department/U.S. Agency for International Development ASEAN Development Vision to Advance National Cooperation for Economic Integration (“ADVANCE”) indefinite quantity contract. Both ADVANCE and the Facility are designed to promote the goals of the U.S. ASEAN Cooperation Plan (ACP), the ASEAN-U.S. Enhanced Partnership Plan of Action, and the Trade and Investment Framework Arrangement while supporting ASEAN’s own vision, encapsulated in the Vientiane Action Program (VAP), to create an outward-looking, stable, peaceful and prosperous ASEAN community. Accordingly, the ASEAN-U.S. Facility endeavors to

- Strengthen the ASEAN Secretariat with respect to regional economic integration, transnational issues, and regional security;
- Enhance ASEAN economic integration and cooperation; and
- Improve regional responses to transnational issues.

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Contents

Executive Summary	vii
Introduction	1
1. Standards for National Accounts	3
SNA Overview	3
Implementing Standards in National Accounts Statistics	8
Recommendations	13
2. Catch-up and ASEAN-Help-ASEAN Programs	15
Technical Assistance Requirements	15
Milestone 4	17
ASEAN-Help-ASEAN program	17
Recommendations	20
Appendix. Terms of Reference for AEGES	22
Illustrations	
Tables	
Table 1. SNA Implementation Milestones	5
Table 2. Status of Current National Accounts Implementation in ASEAN	7
Table 3. Classes of Nonfinancial Produced Assets According to the Revised 1993 SNA	8
Table 4. Staffing of National Accountants in ASEAN, 2004	12
Table 5. Technical Assistance Requirements	16
Table 6. Status of National Accounts Development and Areas of Possible Cooperation	17
Figures	
Figure 1. Conditions for National Accounts Development	10
Figure 2. Data Collection by Census and Survey as Background for a Master Plan of Statistical Development	11

Executive Summary

The System of National Accounts (SNA) includes not only national accounts in terms of production and income by economic activity and institutional sector, but also the balance of payments (BOP) and the general government statistics (GFS). Implementation of the SNA in ASEAN member states is hampered not only by unfamiliarity with concepts and methodology but also by a lack of basic statistics. Improving the collection of basic statistics is important to improving national accounting. Also important is cooperation among agencies. Some statistics may be compiled separately from production and income accounts and by different statistical agencies. Implementation of the SNA therefore requires cooperation among statisticians in all areas of national accounting within each country.

The recommendations in this report should be discussed among member states so that agreement can be reached and action can be pursued on implementing the SNA throughout ASEAN.

The proposed ASEAN Advisory Expert Group on SNA should be renamed the ASEAN Advisory Group on Economic Statistics (AEGES), which reflects an agreement of the ASEAN Heads of Statistical Offices Meeting (AHSOM) to adopt SNA, along with labor statistics, as the framework for regional cooperation and development in economic statistics.

The ASEAN-Help-ASEAN program should be expanded to cover all important aspects of economic statistics in the framework of the SNA. At the regional level, the ASEAN-Help-ASEAN program should provide help to all member states, new as well as founding member states. Sharing experience in the application of concepts and the collection and use of data is important not only to countries that need to catch up but also to countries with more advanced systems of national accounting. Brunei Darussalam, Cambodia, Lao PDR and Myanmar should receive special technical assistance to reach the solid minimum standards on national accounting (see recommendations on targets for implementing SNA below).

To stimulate regional cooperation and sharing of experiences, regional economic statisticians from all ASEAN member states should meet on a regular basis (at least once a year). An annual meeting would facilitate the ASEAN-Help-ASEAN program and provide a forum for sharing experiences with other ASEAN statisticians as well as international experts. The logistics, including the financing, of hosting, participating in, and financing these meetings must be discussed and decided on.

The setting up of an ASEAN Secretariat data bank of regional experts on national accounts and related statistical areas is recommended. Procedures for proposing and vetting experts must be determined.

The in-country training of other member states' national accountants on a short-term basis, with the guest statisticians assigned actual work duties is also recommended to facilitate learning and experience sharing. Modalities of funding have to be determined.

To focus the ASEAN-Help-ASEAN and Catch-up programs, countries should have a national master plan for statistical development. Furthermore, targets should be set for implementation milestones for all member states according to their stage of statistics keeping:

- For all ASEAN member states, minimum solid standards, which are statistics crucial for monitoring the functioning of an economy both domestically and internationally:
 - Milestone 1 and Milestone 2, which, to strengthen the statistical foundation of national accounts, have been expanded to include
 - GDP by economic activity and final expenditure in current and constant prices
 - Gross national income (GNI), gross disposable income (GDI), final consumption, saving, and net lending and net borrowing for the total economy
 - Balance of payments
 - Supply-and-use tables that allow for double deflation method
 - Quarterly GDP by economic activity and final expenditure
- For more advanced countries, Milestone 4—Institutional sector accounts, including capital finance accounts.

Timeliness in compiling statistics is critical:

- Quarterly accounts statistics should be available one quarter after the reference quarter; and
- Annual national accounts statistics should be available six months after the reference year.

The minimum number of staff members needed for compiling each part of the national accounts system—national accounts, balance of payments, and general government finance statistics—should be determined.

The ASEAN Secretariat should encourage the implementation of the 1993 SNA by requesting statistics from member states on saving, net lending and borrowing of the general government sector, the saving and net lending/net borrowing of the public sector, in addition to the same indicators for the total economy.

Because inadequate domestic funding for data collection and staffing of national accountants is the main reason for member states' inability to improve national accounts, funding for these purposes through ASEAN should be pursued and a common, ASEAN fund for statistical development set up. Nevertheless, these recommendations on standards and the Catch-up and ASEAN-Help-ASEAN programs can be followed only if ASEAN member states are willing to provide financial support from their own resources.

Introduction

With the 2015 deadline to establish an ASEAN Economic Community (AEC) approaching, ASEAN leaders have increasingly emphasized the monitoring of economic performance and development in ASEAN Member States and the ASEAN region as a whole, and the AEC Blueprint calls for the development and maintenance of statistical indicators for monitoring economic performance and development. As ASEANtracks, the database of indicators, is being finalized, attention has shifted to improving Member States' ability to produce the statistics required to populate the database.

The ASEAN Heads of Statistical Offices Meeting (AHSOM) agreed in 2006 to adopt the 1993 System of National Accounts (SNA), along with labor statistics, as the general framework for the development of economic statistics in the region and to pursue cooperation on implementing the SNA. The SNA sets the international statistical standard for measuring market economies. Published jointly by the United Nations, the Commission of the European Communities, the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), and the World Bank, the SNA is the most comprehensive of all statistical frameworks. It includes indicators such as gross domestic product (GDP) and gross national product (GNP), widely used in many socioeconomic development indicators.

At its December 2007 meeting, the AHSOM agreed to endorse

- The creation of an ASEAN Advisory Expert Group on SNA to discuss and answer implementation questions and provide technical guidance to statisticians;
- The creation of an ASEAN-Help-ASEAN program to fill gaps in the implementation of SNA 1993, whereby ASEAN Member States that have successfully implemented the SNA 1993 assist those that are struggling;
- IMF-Facility workshop recommendations to create the ASEAN SNA Catch-up program for Cambodia, Lao PDR, and Vietnam (CLV) that would identify minimum national accounts targets and assist CLV in reaching them.

To make the decisions of the AHSOM operational, the ASEAN Secretariat requested that the Facility formulate recommendations on the minimum targets in national accounting for all ASEAN Member States and for those under the Catch-up program.

This report has two parts. The first makes recommendations on the standards for national accounts that ASEAN Member States might wish to adopt; these recommendations are based on the written review of the status of national accounts and basic statistics in ASEAN member states, and on information obtained during visits to Indonesia, Thailand, Cambodia, Lao PDR, and the Philippines. The second part discusses the ASEAN-Help-ASEAN program and the ASEAN Catch-up program. These programs are part of a framework of regular cooperation to

improve national accounts development in the region, which includes the ASEAN Advisory Expert Group on SNA and other regular activities.

1. Standards for National Accounts

SNA OVERVIEW

The SNA provides a detailed, comprehensive record of the economic activities of a country. It tracks the interaction of economic agents and groups of agents in domestic markets and of the domestic economy and the rest of the world. Economic agents in the domestic economy are classified by economic activity, sector (for example, general government, financial and nonfinancial corporation, unincorporated enterprise, and nonprofit institution), and ownership (for example public, national private, foreign controlled).

Economic statistics such as national accounts provide indicators for monitoring an economy and its subcomponents and for informed, rational policymaking and decision-making by political and business leaders and households. Compilation of these accounts at the national level results in important economic indicators: value added, gross domestic product (GDP), gross national income (GNI), gross disposable income, gross savings, gross capital formation, net lending and borrowing, total financial and fixed assets, total liabilities, and net worth (or net wealth).

The SNA is a sequence of interconnected flow accounts in a given period of time, as well as balance sheets recording the values of assets and liabilities held by institutional units or sectors at the beginning and the end of the period. Each flow account relates to a particular kind of activity such as production, or the generation, distribution, redistribution, or use of income. The U.N. Statistical Commission describes the stages of implementation of the SNA in terms of milestones (see Table 1).

Milestone 1. The most basic account of the SNA is the goods and services account, which records the supply of goods and services from domestic production and the rest of the world and the use of goods and services in production, final consumption, gross capital formation, and exports. The compilation of this account and its related parts provides the most important national accounts aggregates, besides value added by industrial activities.

The standards required to make the indicators of Milestone 1 reliable and useful, however, have never been defined fully. The description of milestones provides neither a clear indication of quality and comprehensiveness of basic statistics that support its compilation nor a clear indication of their currency for monitoring the performance of the economy, which might lead to better and more timely formulation and implementation of economic policies in response to economic crises. The milestones were developed by the Inter-Secretariat Working Group on National Accounts and approved by the United Nations Statistical Commission for

monitoring the implementation of the 1993 SNA throughout the world with a degree of flexibility for easy classification. It thus ignores the quality issue.

Milestone 1.A compiles GDP as the sum of value added by industries. Value added by industries is derived from the value-added ratios of the benchmark year, given the value of output obtained by surveys. But as these benchmark ratios change according to technological and other economic conditions, this simple method is not as reliable as a more comprehensive balancing of supply and use of goods and services based on the use of supply-and-use tables. With Milestone 1.A alone, the quality of the indicators is suspect.

Milestone 1.B includes GDP by final expenditure. In this case, there is a certain control imposed in balancing the total use and total supply of goods and services. The quality of the statistic is higher if a limited worksheet is used to balance the supply and use of some important goods and services.

Milestone 1.C. Milestone 1.C sets a solid foundation for statistical development in any country. Supply-and-use tables, double deflation method, and statistics collected as designed by the national master plan produce superior statistics. The commodity-flow technique used here in balancing products in great detail guarantees the consistency of derived national accounts indicators at both current and constant prices. It also avoids the crude and static use of benchmark ratios as in Milestone 1.A and Milestone 1.B, but it does not require the development of an input-output table with associated Leontief-inverse, which may take more time and cost more to develop. ***Milestone 1.C is recommended as the foundation for solid national accounts development.*** This standard, which has been reached by at least half of ASEAN Member States, may be compromised because of inadequate government financial support for statistics. The fallback is Milestone 1.B.

If a country needs to know only GDP and GDP growth in constant prices, it stops at Milestone 1. GDP, however, is not enough to analyze the performance of an economy because it is only the income generated by the domestic economy. It does not include the income received from abroad. To analyze the sources of income and how income is used, either for final expenditure, saving, or investment, as well as the net result in net borrowing and net lending with respect to the rest of the world, Milestone 2 is required.

Milestone 2. The extra information required in Milestone 2 is the balance of payments. Data on current transactions with the rest of the world allows for the derivation of GNI and thus gross disposable income, saving, and net lending and borrowing to and from the rest of the world. These statistics are crucial for monitoring the functioning of the economy both domestically and internationally. Milestone 1.C and Milestone 2 together set the minimum solid standards for national accounts statistics.

If policymakers need to explore the performance of the government and households or compare state-owned enterprises and privately owned firms, or national- and foreign-controlled corporations in addition to what can be accomplished at milestones 1 and 2, Milestones 3, 4, and 5, which require the implementation of institutional sector accounts, are needed. Milestone 3 focuses only on the government sector. Milestone 4 stops at capital-finance accounts and Milestone 5 completes all current accounts including finance accounts that record the sources and uses of funds, as well as the financial instruments that are used in transactions by the economy at home and with respect to the rest of the world.

Table 1
SNA Implementation Milestones

Phase	Basic Data Required for Quality Evaluation	Surveys and/or SNA Indicators Needed
MILESTONE 0: PRE-SNA		
	Benchmark census of population and household units (every 10 years)	<ul style="list-style-type: none"> • Household income and expenditure survey • Mixed household-enterprise surveys for capturing value added for small and micro household enterprises
	Benchmark economic censuses every 5 years of production units, output, and production costs. (Sectors covered should include agriculture; mining; electricity; construction; manufacturing; transport; professional, business, and personal services; government and other social services)	Benchmark ratios
	<ul style="list-style-type: none"> • Updated registers of production units: corporations and establishments by activities and size of employment and sales (list-based) • Land use 	<ul style="list-style-type: none"> • Basis for enterprise survey • Basis for yield cut survey to estimate crop output
MILESTONE 1. BASIC ANNUAL INDICATORS OF GDP		
<ul style="list-style-type: none"> • M1.A Low level. GDP by industry at current and constant prices • M1.B High level. Final expenditures on GDP at current and constant prices 	<ul style="list-style-type: none"> • Sample survey of production data of corporations, household enterprises • Retail sale surveys • Foreign trade statistics • Government finance statistics transaction accounts • Price indices (consumer and producer) 	<ul style="list-style-type: none"> • Value added estimation in current and constant prices • Private gross capital formation • Indicators for final household consumption • Export of goods and services • Import of goods and services • Output of government general services and government final consumption of goods and services • Government gross capital formation • Value added in constant prices
M1.C Solid level. Solid foundation for milestone 1 in benchmark year	Survey of detailed production costs	<ul style="list-style-type: none"> • Supply-and-use tables in current and constant prices—double deflation method • Supply-and-use tables allow for more solid estimation of gross capital formation and household final consumption • Capital stock of total economy
M1.E Extra. Up-to-date monitoring of the economy	Monthly surveys of production, price, retail sales, foreign trade, government expenditure statistics	Quarterly national accounts
MILESTONE 2. GDP AND GNI		
<ul style="list-style-type: none"> • Gross national income and other primary indicators (annual and quarterly) • External account of primary incomes and current transfers • Capital and financial accounts for the rest of the world 	Balance of payments	Rest of the world account

Phase	Basic Data Required for Quality Evaluation	Surveys and/or SNA Indicators Needed
MILESTONE 3. INSTITUTIONAL SECTOR ACCOUNTS: FIRST STEPS		
<ul style="list-style-type: none"> • Production accounts for all institutional sectors • Accounts for general government sector, including capital and finance accounts (generation of income, allocation of primary income, secondary distribution income, use of income, and capital and financial accounts) 	<ul style="list-style-type: none"> • Full government finance statistics • Classification of value added by institutional units 	<ul style="list-style-type: none"> • Cross-classification of transactions in government finance statistics with SNA categories • Cross-classification of value added by activities with value added by institutional units
MILESTONE 4. INSTITUTIONAL SECTOR ACCOUNTS: INTERMEDIATE STEPS		
Accounts for all institutional sectors, including capital accounts (generation of income, allocation of primary income, secondary distribution of income, use of income, capital accounts)	<ul style="list-style-type: none"> • Full government finance statistics • Full information on income statements of corporations, particularly pension funds and financial corporations 	All institutional sector accounts up to and including capital accounts
MILESTONE 5. INSTITUTIONAL SECTOR ACCOUNTS: FINAL STEPS—LAST OF THE TRANSACTION ACCOUNTS		
Financial accounts for all institutional sectors other than general government	<ul style="list-style-type: none"> • Full government finance statistics • Full information on income statements and balance sheets of corporations, particularly pension funds and financial corporations 	<ul style="list-style-type: none"> • Full information of government finance statistics • Full information on income statements and balance sheets of corporations, particularly pension funds and financial corporations
MILESTONE 6. OTHER FLOWS, ACCOUNTS AND BALANCE SHEETS		
<ul style="list-style-type: none"> • Other changes in asset accounts for all institutional sectors • Balance sheets 	<ul style="list-style-type: none"> • Full information on government finance statistics • Full information on income statements and balance sheets of corporations, particularly pension funds and financial corporations • Long time series on gross capital formation by economic activity, institutional sector, and kind of capital goods 	<ul style="list-style-type: none"> • Financial assets valuation • Capital stocks for fixed assets

Milestone 4. Milestone 4 has been reached by all developed countries, almost every country in Europe, and many in Latin America. In ASEAN, it has been reached by the Philippines and has been implemented irregularly by Malaysia and Vietnam. For more than half of ASEAN Member States—Indonesia, Malaysia, Singapore, Thailand, and Vietnam—Milestone 4 is within reach. The main constraints to reaching this milestone in ASEAN seem to be the lack of demand by users due to a lack of knowledge about the analytical usefulness of the SNA, weak political will to use evidence-based policy advice, and the inadequate availability and quality of basic statistics needed for the compilation of the SNA. The constraints, however, are related: Demand for more detailed statistical indicators would ensure political and financial support for statistics in general. Milestone 4 may be chosen as the standard for ASEAN Member States that have a higher level statistical development.

Milestone 5. Many developed countries have also reached level 5. In ASEAN, Thailand has compiled accounts for all institutional sectors except the corporate (financial and nonfinancial sectors). In addition, Thailand has compiled annual flows of funds and capital stocks. In a

sense, the Thai system is the most advanced, except that these accounts have been compiled separately and are not fully integrated; discrepancies therefore may not be fully known and corrected. This is why Thailand cannot supply data to the U.N. Statistics Division in the form that may enable it to reach Milestone 5. Thailand is still struggling with the SNA integrated framework. (See table 2 for a classification of current national accounts implementation in ASEAN.)

Milestone 6 completes the SNA. Only a few countries in the world have completed Milestone 6. Capital stock, an important part of Milestone 6, can be constructed at Milestone 1 given a long time series on gross fixed capital formation classified by types of assets, which is a requisite for productivity analysis.

Table 2
Status of Current National Accounts Implementation in ASEAN

Milestone	Member State(s)
BASIC DATA AVAILABILITY	
With regular program of censuses/registers, periodic, annual and monthly surveys	Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam
With population census and ad hoc surveys	Brunei Darussalam, Cambodia, and Lao PDR
Without population census since 1983 and no information on regular economic surveys	Myanmar
SCOPE OF IMPLEMENTATION	
Milestone 0	Myanmar
Milestone 1.A Only GDP by industry	Lao PDR, Brunei Darussalam
Milestone 1.B GDP by industries and final expenditures	Cambodia
Milestone 1.C Supply and use tables Balance of payments/rest of the world account Quarterly accounts GDP by industry GDP by final expenditure	Indonesia, Malaysia, Thailand, Philippines Singapore and Vietnam Cambodia, Indonesia, Malaysia, Thailand, Philippines Singapore and *Vietnam (*treated as confidential) Indonesia, Malaysia, Philippines Singapore, Thailand and *Vietnam (*only for government use and limited release) Brunei Darussalam, Indonesia, Malaysia, Philippines, Thailand and Singapore
Milestone 2 GNI Disposable income, saving, net lending/net borrowing	Indonesia, Malaysia, Philippines Singapore, Thailand, and Vietnam Indonesia, Malaysia, Philippines, Singapore, and Thailand
Milestone 3 Production accounts for all institutional sectors All accounts up to and including capital finance account of the government sector	Malaysia, Thailand, and Philippines Malaysia, Thailand, and Philippines
Milestone 4 All accounts up to and including capital finance account of all institutional sectors	Philippines, Thailand (only household, government sector and rest of the world accounts), and Indonesia (institutional sector accounts are available only every 5 years).

For many countries advancing toward Milestone 4 and higher, the following intermediate stages of implementation may apply:

- **Compilation of the government sector account** (preferably the public sector account that includes both the government sector and the state-owned corporations sector) to enable an in-depth evaluation of the fiscal role of the government. This analysis of the public sector will be promoted in the revised 1993 SNA. No country in ASEAN implements the public sector account, which includes both the government sector account and the state enterprises sector account.
- **Compilation of detailed data on gross fixed capital formation to calculate capital stock and analyze productivity.** This is a new area of focus in the revised SNA. Singapore and Indonesia have attempted to compile capital stock, and Thailand has published annual data of net capital stock up to 2006. To expand ASEAN statistics in this area, it may be necessary to promote the collection of detailed gross fixed capital formation in a detailed structure according to the revised 1993 SNA (see table 3), although standards may not be set.

Table 3

Classes of Nonfinancial Produced Assets According to the Revised 1993 SNA

Fixed assets	Inventories
Dwellings	Materials and supplies
Other buildings and structures	Work in progress
Non-residential buildings	Work in progress on cultivated biological resources
Other structures	Other work in progress
Land improvements	Finished goods
Machinery and equipment	Military inventories
Transport equipment	Goods for resale
ICT equipment	Valuables
Other machinery and equipment	Precious metals and stones
Weapons systems	Antiques and other art objects
Cultivated biological resources	Other valuables
Animal resources yielding repeat products.	
Tree, crop and plant resources yielding repeat products	
Costs of ownership transfer on non-produced assets	
Intellectual property products	
Research and development	
Mineral exploration and evaluation	
Computer software and databases	
Computer software	
Databases	
Entertainment, literary or artistic originals	
Other intellectual property products	

IMPLEMENTING STANDARDS IN NATIONAL ACCOUNTS STATISTICS

Unless a country is financially capable of implementing a full system of national accounts of high quality, for most countries, a tradeoff has to be made between timeliness, quality, and comprehensiveness. To be useful for decision making, however, national accounts must meet minimum standards, particularly of quality and timeliness.

Timeliness measures promptness in collecting data after events take place. Statistical timeliness helps decision makers detect the problems that require prompt attention more quickly. Timeliness in compiling and releasing main national accounts aggregates such as GDP, quarterly account GDP and GDP growth, gross capital formation, exports, imports and final consumption, monthly consumer price index, quarterly balance of payments, and monthly money growth statistics allows policymakers to make better and timely decisions. Timeliness is important not only for monitoring economic performance but also for regional and international comparison. Timeliness is measured by (1) the existence of quarterly national accounts and (2) the lag between the release date and the reference date. For the purpose of ASEAN statistical compilation and comparison, standards for a lag between reference date and the release date of quarterly and annual data may be needed.

Comprehensiveness of the scope of SNA implementation may vary from the basic to the complete. The more extensive is the scope, the more extensive is the analysis possible. For example, an analysis of the behavior of households and corporations in production, the use of fixed assets, investment in financial assets, and raising funds for investment is not possible without the accounts of institutional sectors and the financial accounts.

A national account system is considered good if the country

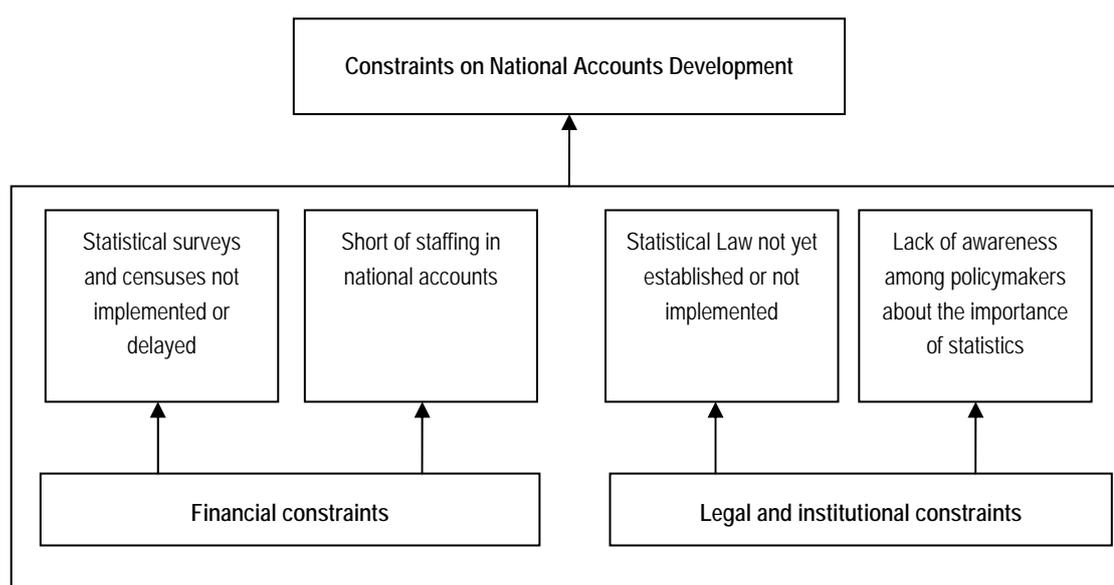
- Follows the definitions, concepts, methods of estimation, and the classification system of the 1993 SNA;
- Has a national plan for statistics that includes regular 5- to 10-year cycles, each cycle beginning normally with the development of sampling frames for statistical areas—conventional censuses or regularly updated registers of business and household units—integrated into the statistical system to which sampling techniques can be applied for more frequent data collection;
- Collects basic monthly and annual statistics on the basis of scientifically designed sample surveys by using as frames conventional censuses or regularly updated registers of business and household units;

In setting minimum standards for national accounting, it is necessary to evaluate if the standards are achievable and how. Three conditions are required to meet the statistical standards of Milestone 1.C and Milestone 2, which are considered fundamental to national accounts:

1. A national master plan and program for basic data collection
2. Minimum number of staff for national accounts compilation
3. Statistical law and legal mandates (see Figure 1).

Although statistical law is not discussed in detail in this report, it is important because it provides legal authority to statistical agencies to collect and demand statistics from economic units, nonprofit institutions, and government units. A national statistical plan approved and mandated by government authorities will have a better chance to obtain adequate financing for statistical works.

Figure 1
Conditions for National Accounts Development



National Master Plan and Programs for Basic Data Collection

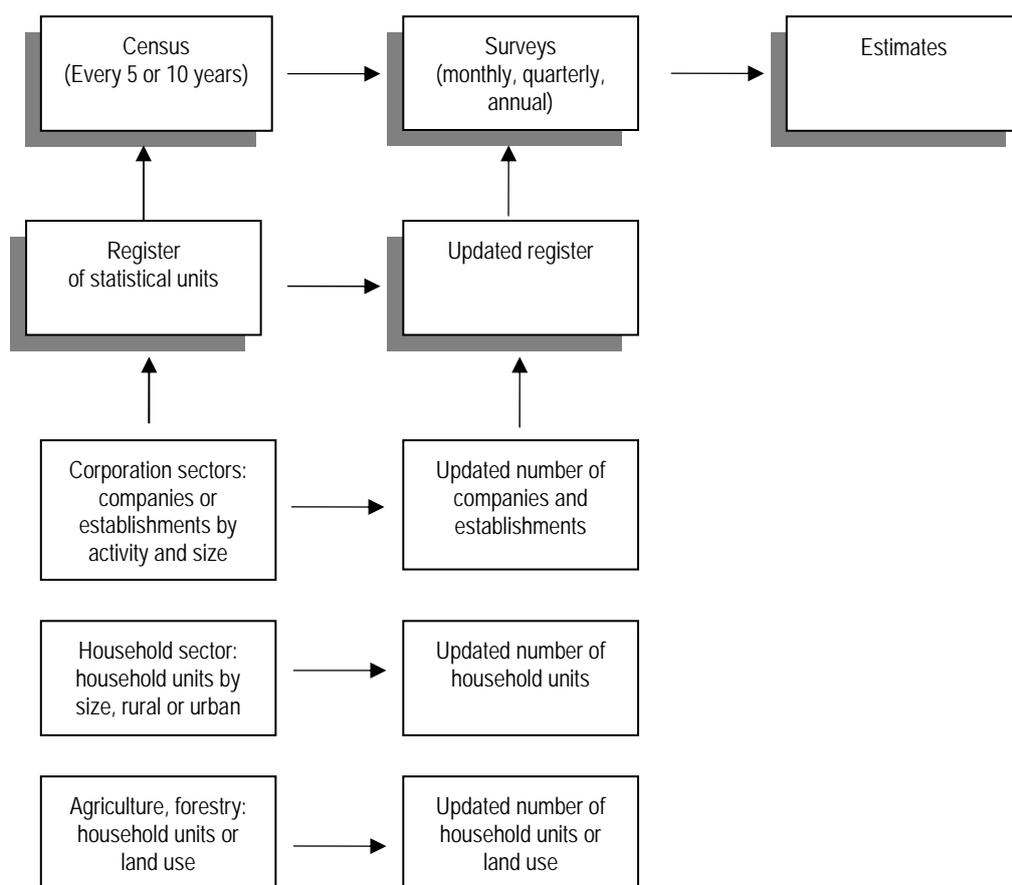
Without basic statistics collected on a regular basis and on the basis of an internationally accepted methodology that guarantees comprehensiveness, consistency, conceptual comparability, and reliability, the quality of national accounts statistics cannot be guaranteed. Thus a national master plan for statistics should have three components: development of administrative and financial data and data on other producers. A plan for improving national accounts requires a plan for improving basic statistics.

Development of administrative data. The public sector, which includes state enterprises and general government services, normally makes up a significant part of GDP. Data on public sector activities can be easily obtainable if laws are passed to guarantee their availability for statistical use. Close cooperation between statistical agencies and other government agencies with respect to forms and contents of data reporting helps in collecting up-to-date and appropriate data for national accounting purposes.

Development of financial data. Financial enterprises, particularly banks and insurance and pension funds, are usually closely regulated and limited in number. Close cooperation between statistical agencies and regulatory agencies with respect to forms and contents of data reporting helps in collecting up-to-date and appropriate data for national accounting purposes.

Development of data on other producers: Other producers are usually numerous; therefore statistical tools for data collection must be developed and implemented within a master plan. The plan must map out clearly 10-year cycles of population and household census, and either 5-year cycles of economic censuses or regularly updated registers of businesses that are to be used as sampling frames for annual, quarterly, or monthly economic surveys (see Figure 2).

Figure 2
Data Collection by Census and Survey as Background for a Master Plan of Statistical Development



The development of a master plan for statistics helps focus the government on budgeting and also helps statistical agencies in planning and coordinating their work programs. For instance, a decision to expand the scope of the national accounts system in any country cannot be implemented successfully, even if funding and staffing are adequate, if there is no plan for basic data collection, which involves many independent agencies, from the national statistical office to the central bank, the ministry of finance, other line ministries, the exchange commission, and pension and insurance regulatory authorities.

Staffing of National Accounts Department

The staffing of national accounts departments in U.N. member states varies from 5 to 250 staff, according to a U.N. Statistics Division (UNSD) survey in 2004. The higher figure normally is found in countries where national accounts, the balance of payments, and regional accounts are compiled by the same department. A country with a large national accounts staff is not necessarily a country with a large population. For example, a small country has a staff of 100 and a reputation for excellence, while a country with a very large population has a staff of no more than 40 and therefore can implement only a small part of the SNA.

Staff size depends on three factors: (1) population size, (2) scope of the national accounts system, (3) technical capability of staff members. Scope also depends on whether the balance of payments is prepared by the national accounts department or not. In most ASEAN countries, the balance of payments and the government finance accounts are not prepared by the office that prepares national accounts (see table 4). Thus this type of segmented

organization may reduce the efficiency or synergy of national accounts compilation, because the balance of payments and the government finance statistics are part of the system of national accounts. In the United States, Canada, Australia, the United Kingdom, and the Netherlands, the compilation of all SNA accounts in one office makes the use of manpower, research on methodology, and knowledge transfer across three areas of national accounting more efficient.

Table 4
Staffing of National Accountants in ASEAN, 2004

ASEAN Member State	National Accounts			Balance of Payments	Government Account	2004 Population (million)
	Total	Professional	Support			
Brunei Darussalam	13	3	10	12	n. a.	0.4
Cambodia	12	2	10	15	3	14.1
Indonesia ^a	80	80		50	n. a.	219.9
Lao PDR	9	9		4	3	5.7
Malaysia	36	15	21	n. a.	n. a.	24.4
Myanmar						49.5
Philippines	35	34	1	38 ^b	5	80.0
Singapore	61	40	21	12	n. a.	4.2
Thailand	38 ^c			40	5	62.8
Vietnam ^c	23	23	0	n. a.	n. a.	81.4

Notes Figures include only national accounts and not balance of payments and are based on the UNSD survey in 2004 and visits to a number of ASEAN countries in 2008. Data on other countries were not made available to the UNSD, and not yet available to the consultant.

^aIf national accountants at the regional and provincial levels are counted, the total number of staff is 1,151, including an additional 231 staff at the regional levels and 920 at the municipal levels.

^bNot including six people working on flows of funds at the Central Bank

^cIncluding five people working on flows of funds and four on regional accounts

^dIf national accountants at the provincial level are counted, the number of staff may reach 400-500.

In addition to the segmentation at the national level, the organization of the statistical office at the provincial level such as in Indonesia, Thailand, Vietnam, Cambodia, and Lao PDR, where regional domestic products (RDP) are regionally compiled, also creates problems. First, the organization increases the number of staff working with national accounts substantially. Second, it creates a problem for harmonizing RDPs and GDP. Allowing local governments to compile RDP encourages regional competition, politicizing the statistic and making RDP incompatible with national aggregates. Generally, the sum of RDPs has a much higher rate of growth than the rate of growth of GDP prepared by the central office. In countries where all aspects of national accounts are compiled in one place, the compilation of GDP and RDPs is generally also centralized in one office, which makes the implementation of the SNA more efficient.

Given the different forms of organization adopted in each country in compiling various aspects of the SNA and the difficulty of reorganization, making precise recommendations on the numbers of staff required or devising a rule for calculating the optimum number of staff is not possible. The information on staffing in ASEAN countries in table 4, however, seems to indicate a minimum number of staff in national accounts to achieve minimum standards (Milestone 1.C and Milestone 2). This does not count the staff members needed for the compilation of the balance of payments and government finance statistics. The minimum

number of professional staff (those with at least a four-year college degree) for national accounts seems to be about 20 for countries with a population size of 5 million to 10 million, and the minimum number to allow a country to reach Milestone 4 is at least 30. Fifty or 60 staff members may be the minimum required for the completion of the whole system—also incorporating the balance of payments and the government finance statistics compiled elsewhere and including the estimation of capital stocks.

For countries where national accounts, balance of payments, government finance statistics, and financial statistics are compiled by different agencies, it is recommended that these agencies coordinate closely to guarantee the full integration of data in terms of both concepts and forms of data to be collected and produced. Formation of an interagency committee consisting of all concerned agencies to promote data integration should be encouraged.

RECOMMENDATIONS

For the improvement of national accounts in particular and economic statistics in general in a country, national initiative is the most important factor. However, international assistance is also important, as is regional assistance. The following recommendations, however, focus only on a framework for regional cooperation, with AHSOM as the decision-making body supported by an advisory group on economic statistics to propose minimum targets, catch-up, ASEAN-help-ASEAN and other programs, by the means of regular forums and other venues. These recommendations should be discussed among member states so that agreement can be reached and action can be pursued on implementing the SNA throughout ASEAN:

- The ASEAN-Help-ASEAN program should be expanded to cover all important aspects of economic statistics included in the SNA.
- The earlier proposed ASEAN Advisory Expert Group on SNA should be renamed the ASEAN Advisory Group on Economic Statistics (AEGES) and should advise AHSOM on technical issues on national accounting and basic economic statistics and the technical aspects of ASEAN-Help-ASEAN program.
- Two sets of standards should be set for ASEAN member states according to their level of readiness to prepare national accounts statistics:
 - Minimum solid standards, or Milestone 1.C and Milestone 2, which include
 - GDP by economic activity and final expenditures in current and constant prices
 - GNI, gross disposable income, final consumption, saving and net lending/net borrowing for the total economy
 - Balance of payments
 - Supply-and-use tables that allow for double deflation method
 - Quarterly GDP by economic activity and final expenditures.
 - Quarterly accounts statistics available one quarter after the reference quarter.
 - Annual national accounts statistics available six months after the reference year.
 - Milestone 4 for statistically advanced member states.

- Member states should prepare the full set of accounts for the general government sector and the public sector.
- Member states should systematically collect data on gross capital formation for the calculation of capital stocks that can be used for productivity analysis.
- Minimum numbers of staff members should be established for compiling each part of the national accounts system:
 - GDP by industrial activities
 - GDP by final expenditure
 - Balance of payments
 - Elaboration of gross fixed capital formation in detail
 - Supply-and-use tables
 - Preparation of the full sequence of accounts for the government sector
 - Institutional accounts up to and including capital-finance accounts

2. Catch-up and ASEAN-Help-ASEAN Programs

The inclusion of cooperation through project funding of international and regional agencies such as the UN and ADB, and regional cooperation in national accounting is not new in ASEAN. But improving regional cooperation on statistical capabilities will require establishing a common fund for national accounts development, or, alternatively, creative ways of operation, if such a fund is not feasible. In any case, regional cooperation can take place only with strong political will from leaders, which must be materialized in adequate funding in some form or another.

Here we discuss the countries and the statistical areas that need technical assistance to reach the minimum standards recommended in Section 1 as well as the objectives of the ASEAN-Help-ASEAN program and possible venues of cooperation.

TECHNICAL ASSISTANCE REQUIREMENTS

The strengths and weaknesses of ASEAN national accounts statistics—availability of basic statistics and the scope of national accounts implemented—were summarized in Table 2. Table 5 identifies the countries, the areas that need technical assistance, and the programs of assistance proposed. Technical assistance programs will help countries reach the minimum solid standards on national accounts for ASEAN only if government authorities are willing to fund adequate staffing not only for national accounts but also for regular basic data collection.

A master plan for statistical development that covers cycles of 5-year to 10-year censuses and annual and monthly data collection under the national plan for economic development may be the best tools to mobilize government support for adequate annual budgeting to meet the statistical development needs. In addition it may be easier for international organizations and other developed countries to recognize the country's needs if it has a master plan.

Four countries have less than the minimum solid standards: Brunei Darussalam, Cambodia, Lao PDR, and Myanmar. Cambodia, Lao PDR, and Myanmar are newer member states; the fourth newer member state, Vietnam, has already reached the minimum solid standards.

Table 5
Technical Assistance Requirements

Technical Assistance Required	Required Inputs	Possible Sources of Assistance
MYANMAR		
<p>A fully integrated approach to address issues in all areas, beginning with a master plan for statistical development and separate project components</p> <p>A full-pledged project of technical assistance on basic data collection:</p> <ul style="list-style-type: none"> • Formulation of a national plan • Training on methodology • Pilot implementation <p>A full-pledged project of technical assistance on SNA methodology and a pilot implementation to reach Milestone 1.C and Milestone 2.</p> <p>Training and pilot implementation of government finance statistics.</p> <p>Training and pilot implementation of balance of payments.</p>	<ul style="list-style-type: none"> • Funding • Adequate staffing of national accounts • Concurrent implementation of a basic data collection project to determine availability of basic data for national account compilation 	<p>UNSD for workshop/training on basic statistics</p>
LAO PDR		
<p>A full-pledged project of technical assistance on basic data collection</p> <ul style="list-style-type: none"> • Formulation of a master plan • Training on methodology • Pilot implementation 	<p>Adequate staffing of surveying statisticians</p>	<ul style="list-style-type: none"> • ADB • UNSD for workshop/training on basic statistics)
<p>A full-pledged project of technical assistance on SNA methodology and pilot implementation to reach Milestone 1.C and Milestone 2:</p> <ul style="list-style-type: none"> • Supply-and-use tables compilation • Double deflation technique • Balance of payment • Quarterly national accounts 	<ul style="list-style-type: none"> • Adequate staffing of national accounts 	
BRUNEI DARUSSALAM		
<p>A full-pledged project of technical assistance on SNA methodology and pilot implementation to reach Milestone 1.C and Milestone 2:</p> <ul style="list-style-type: none"> • Supply-and-use tables compilation • Double deflation technique • Balance of payment • Quarterly national accounts 	<ul style="list-style-type: none"> • Availability of basic data • Adequate staffing of national accounts 	
CAMBODIA		
<p>A full-pledged project of technical assistance on basic data collection:</p> <ul style="list-style-type: none"> • Formulation of a master plan • Training on methodology • Pilot implementation 	<p>Adequate staffing of surveying statisticians</p>	<ul style="list-style-type: none"> • ADB • UNSD for workshop/training on basic statistics
<p>SNA methodology and pilot implementation to reach Milestone 1.C and Milestone 2:</p> <ul style="list-style-type: none"> • Supply and use tables compilation • Double deflation technique • Balance of payment • Quarterly national accounts 	<ul style="list-style-type: none"> • Availability of basic data • Adequate staffing of national accounts 	

MILESTONE 4

Four ASEAN member states—Malaysia, the Philippines, Thailand, and Vietnam—have successfully piloted Milestone 4, but only the Philippines and Thailand have made it into a regular program of national accounts, and Thailand has done so only partially. The other ASEAN member states appear to have sufficient basic data to implement Milestone 4 but lack the staff necessary and demand from users. The ASEAN Secretariat may encourage the implementation of Milestone 4 by requesting data on saving and net lending and borrowing of the general government sector, and even better, the saving and net lending and net borrowing of the public sector, in addition to the same indicators for the total economy.

Table 6

Status of National Accounts Development and Areas of Possible Cooperation

Areas for cooperation	Philippines	Thailand	Indonesia	Malaysia	Vietnam**	Singapore
MILESTONE 4						
General government sectors	√	√	√	√		
Household sector and nonprofit institutions serving households	√	√	*	*		
Nonprofit institutions serving households	√		*	*		
Financial financial sector	√		√	*		
Nonfinancial sector	√		*	*		
Rest of the world	√	√	√	√	**	√
MILESTONE 5						
Flow of funds			√			
Others						
Capital stock		√				√
Monthly retail trade surveys	***				√	√
SAM			√			

√ indicates annual publication

*indicates the non-regular sectors. Malaysia has compiled and published the full institutional sector accounts irregularly (even disaggregated into 14 sectors). Indonesia has compiled institutional sector accounts only every five years.

**Compiled institutional sector accounts for 1995–1999 under an ADB-funded project but stopped compiling them. The rest-of-the-world sector (or balance of payments) has been compiled but never been made official.

*** Only for large department stores.

ASEAN-HELP-ASEAN PROGRAM

The ASEAN-Help-ASEAN program is intended to help implement the Catch-up program to help new members reach the minimum national accounts standards set by the ASEAN community. Expertise in national accounting can be quickly depleted in a country when few statisticians specialize in national accounting and staff mobility is the mandated policy. Under the ASEAN-Help-ASEAN program, an ASEAN member state that is strong in one area can help a member state that is weak in that area.

This program will also facilitate the sharing of experiences. For example, the coverage of small household production units is difficult in almost all countries; thus sharing best practices may help improve statistics in countries with a similar institutional setup or economic structure and practices. Another example is the possibility of sharing experiences in the use of the results of retail trade surveys for extrapolation of major components of

household goods consumed. Sharing experience in compiling capital stocks and using the compilation for multifactor productivity analysis is also worthwhile.

The ASEAN-Help-ASEAN program could use various tools to share experience, such as a website, a newsletter, technical assistance, and regular meetings of national accountants.

Website and Newsletter

An ASEAN-Help-ASEAN website could post or link to international and national methodology guides for national accounts compilation, including those published by UNSD, IMF, EU, OECD. It could also post a newsletter—which might or might not be published in printed form—for informing other member states on their master plan for basic statistics programs and national accounts development programs. The website could also offer a platform for questions and answers to share experiences on national accounts.

A website might require an editorial board (such as perhaps the SNA Advisory Group), as well as editorial support and a host and webmaster (to upload files, update links, etc.). The ASEAN Secretariat appears to be well suited for such efforts.

Technical Assistance

Venue. Technical assistance may be performed in the requesting country in response to a special request for in-depth advice on a particular statistical issue or in the providing country, which would require that the statistician receiving assistance be stationed in the providing country. In this case, the guest statisticians would be assigned work similar to that performed by host statisticians.

Handling. How are requests for assistance under the ASEAN-Help-ASEAN program to be processed? Should requests be channeled through the ASEAN Secretariat or go directly from country to country? It is suggested that the two alternatives may be acceptable although ASEAN Secretariat should be informed for monitoring purposes.

Funding. Technical assistance is possible only if funding is available. Assistance may be self-supporting or funded through a special fund. With self-supporting technical assistance, the requesting country would be responsible for financing travel costs and other costs for the technical adviser, while the responding country would provide the services free of charge.

To establish a fund for technical assistance, is it possible to raise funds for technical assistance from the region, from bilateral aid organizations such as Japan, Republic of Korea, Australia, European Union, and the United States, or from international and regional organizations such as the ADB, UNESCAP and UNDP? And is it possible for ASEAN to create a fund from the budget of the ASEAN Secretariat? The answers to these questions should be in the future agenda of the AEGES.

Pool of experts. A pool of experts in national accounts needs to be created. Experts for the ASEAN-Help-ASEAN program are expected to be selected on the basis of technical and English language skills and in special cases in another national language that requesting country and counterpart prefer and agree to. Experts should be recommended by member states' statistical agencies and vetted by AEGES. Expertise should be sought in the following topics:

- National accounts by three compilation methods: production, income, and final expenditure approaches
- Supply and use tables
- Quarterly national accounts
- Rest-of-the-world accounts and balance of payments
- Institutional sector accounts
- Deflation methods for national accounts
- Regional accounts
- Harmonization of economic classifications to monitor production specialization and regional trade
- Designing plan for developing basic statistics for national accounts with focus on statistical coordination and policy formulation.
- Specific areas of basic statistics for improving national accounting:
 - Industrial statistics
 - Retail trade survey
 - Use of balance of payments for the rest of the world accounts
 - Use of government finance statistics for national accounts
 - Survey of household production units (unincorporated enterprises) and other estimation techniques of their value added.
 - Compilation of exports and imports by using foreign trade statistics (recorded through customs)
 - Consumer price indexes
 - Producer price indexes
 - Administrative data utilization.

Regular Meetings of National Accountants

Regular meetings of national accountants may be the best way to promote SNA implementation, improve standards, and implement the Catch-up and ASEAN-Help-ASEAN programs. Annual meetings of national accountants have been important for the European Union, the OECD, and Latin American countries, not only to decide on and promote standards but also to share new technical developments and experiences.

The annual meeting of national accountants in Latin America may provide a good reference experience to ASEAN. The three-day meeting is held on a rotating basis by each state of the UN Economic Commission for Latin America and the Caribbean (ECLAC) with the administrative support of ECLAC. Member states participate at their own costs. The organizing country provides the meeting facilities, including lunch daily and simultaneous interpretation for the regional languages (English, Spanish, and Portuguese).

Using Latin America as a model, annual or biannual meetings on national accounts might also be organized in ASEAN. The leaders of statistics in the member states that were visited

during the preparation of this report (Indonesia, the Philippines, Cambodia, Thailand and Lao PDR) expressed support for annual meetings, but also concern about the financial ability of some states (for example, Cambodia and Lao PDR) to finance their own participation. Furthermore, for ASEAN, interpretation does not seem possible because of the many diverse national languages.

Precedents have been set for holding regular ASEAN meetings. All ASEAN states participate in annual meetings on foreign direct investment (FDI) convened by the ASEAN Secretariat. Member states pay their own way, except Lao PDR and Cambodia, whose statisticians have been supported indirectly through donor-funded programs. Philippine and Thai statisticians indicated that they find the regular meetings of the working group very useful in answering conceptual and practical questions in collecting statistics on FDI. In fact, the meetings on FDI can be put under the same umbrella of cooperation among ASEAN member states on statistics.

Another example of ASEAN cooperation is the annual meeting of agricultural economists under the ASEAN Food Security Information System (AFSIS) program for mutual technical assistance. This program was founded and is financed by Japan. Phase I ended in 2007, and Phase II is beginning with the creation of an early warning information system on agriculture, focusing on food security. AFSIS also funded country study tours to learn from experiences of other countries.

Leaders interviewed for this report also suggested that each annual meeting focus on a particular area relevant to the compilation of national accounts. The following areas are of interest:

- Harmonization of ISIC, CPC, and related trade statistics classification in the region for tracking regional production and trade
- Compilation of gross capital formation
- Top-down or bottom-up approach for establishing RDP.

RECOMMENDATIONS

The following recommendations should be discussed among member states so that action can be pursued on implementing the SNA throughout ASEAN:

- Member states should be encouraged to have a national master plan for statistical development.
- The ASEAN Secretariat should encourage the implementation of the 1993 SNA by requesting statistics on saving and net lending and borrowing of the general government sector, as well as figures on saving and net lending and borrowing of the public sector, in addition to the same indicators for the total economy.
- The ASEAN Secretariat's objective should be to produce a declaration from the highest-ranking regional leaders at a future ASEAN meeting on the minimum targets on national accounts at the regional level and the minimum set of economic indicators published by Member States. This should help national statistical agencies receive political and financial support at the highest national level of authority.
- The ASEAN Secretariat with the guidance of the AEGES should liaise with international organizations and countries to procure technical assistance and funding for SNA

implementation in the region particularly with respect to the implementation of the Catch-up and ASEAN-Help-ASEAN programs.

- Brunei Darussalam, Cambodia, Lao PDR and Myanmar should receive special technical assistance to reach the solid minimum standards on national accounting.
- Because inadequate funding for data collection and staffing of national accountants is the main reason for countries not being able to improve national accounts, domestic funding should be increased in all member states, and other sources of funding for SNA improvement as an ASEAN-wide initiative should be sought.
- ASEAN should set up a common fund for statistical development.
- A website should be set up and a newsletter published to promote regional cooperation in national accounting, and decisions made about who will be responsible for maintaining and editing them.
- The ASEAN Secretariat should set up a databank of regional experts on national accounts and related statistical areas proposed by countries and vetted by the ASEAN Advisory Expert Group on SNA.
- ASEAN member states with strong national accounts should give on-the-job training of other countries' national accountants on a short-term basis and assign the guest statisticians real statistical work to share their knowledge.
- Annual or biannual meetings on national accounts organized by a volunteering host country with other countries participating at their own cost would also be a good venue for sharing knowledge.

Appendix. Terms of Reference for AEGES

ROLE

The primary role of the Advisory Expert Group on Economic Statistics (AEGES) is to play an essential role in advising countries and AHSOM on technical issues of national accounting and economic statistics such as:

- recommending minimum standards for ASEAN,
- recommending creative strategies and best practices to implement the 1993 SNA in the region,
- reviewing and promoting best practices in implementing new international standards on economic statistics, including regional practices published on the website of the ASEAN Secretariat,
- reviewing and proposing new mechanism for ASEAN catch-up and ASEAN-help-ASEAN programs,
- proposing and/or vetting economic indicators to be submitted by countries to the ASEAN Secretariat for publication for the purpose of comparative analysis of economic problems in the region,
- coordinating regional studies to improve the harmonization of economic statistics in the region for comparative purposes,
- recommending issues commonly shared by member states to be discussed at each regional meeting,
- proposing agenda on regular regional meetings on economic statistics,
- proposing and vetting the nomination of regional experts in various areas of economic statistics for technical assistance within the context of the ASEAN-help-ASEAN program.
- Assisting the ASEAN Secretariat to liaise with international organizations and countries to procure technical assistance and funding for SNA implementation in the region.

A member of the AEGES is expected to bring issues of concerns to his country or the ASEAN community as a whole to the group for discussion.

Recommendations on technical problems will not have to be cleared by AHSOM, unless they have the power similar to mandates (such as minimum standards, obligations of data reporting to the ASEAN Secretariat, etc.).

COMPOSITION

- Members of the AEGES are nominated by each country. Each country may nominate at least one member. They must be at least at the Director level. International experts may also be invited to the group. Members of the group should be able to communicate in English.
- The AEGES may decide to select a chair to coordinate the work of the group,
- The ASEAN Secretariat serves as its secretariat.

ORGANIZATION

- The AEGES will hold discussions through electronic communication such as Internet teleconferencing and electronic mail. It and will also meet in person if possible.
- The AEGES will decide its technical recommendations to the AHSOM by a majority vote.