



COMPENDIUM OF SUPPLY AND USE TABLES FOR SELECTED ECONOMIES IN ASIA AND THE PACIFIC

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Foreword

Regional capacity development technical assistance (*R-CDTA*) 8838: *Updating and Constructing Supply and Use Tables for Selected Developing Member Economies* is a critical component of the ongoing data development and statistical capacity building initiatives of the Asian Development Bank (ADB). The main objective of the project was to assist participating economies in implementing the 2008 System of National Accounts (SNA) recommendations through the standard compilation of supply and use tables (SUTs). It builds on the strong foundation laid by ADB's pioneering initiative, the regional technical assistance, (RETA) 6483: *Adopting the Supply and Use Framework Towards 1993 System of National Accounts Compilation in Selected Developing Member Countries*. Its objective is to reinforce and enhance the technical capacity of the national statistical offices (NSOs) of the participating economies.

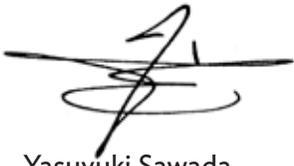
Aptly termed the SUT Project, the technical assistance utilized the supply and use framework which is an integrated statistical estimation and economic analysis model that facilitates the compilation of more reliable, consistent, and internationally comparable estimates of key economic statistics such as the gross domestic product (GDP). The improved and more detailed statistics are expected to provide a better basis for measuring economic output and growth; facilitating informed policy making; and monitoring progress toward the Sustainable Development Goals (SDGs), relating especially to poverty alleviation, economic growth, technological progress, and industrial and infrastructural development. Nineteen ADB developing member economies participated in the R-CDTA. They are: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; the People's Republic of China; Fiji; Hong Kong, China; India; Indonesia; the Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Nepal; Pakistan; Sri Lanka; Taipei, China; Thailand; and Viet Nam.

This publication outlines the relevant statistical and economic concepts, data compilation and development practices, project implementation strategies, and the results of the project. It also includes an abridged version of the SUTs of the 19 participating economies. The more detailed tables are available online through the ADB website.

The project facilitated significant progress in the realms of data development and statistical capacity building. First, the project enabled the 19 participating economies to compile their SUTs largely in compliance of the SNA 2008 recommendations. More detailed and higher quality economic statistics are now available for these economies through the facility of the SUT framework. Second, it demonstrated the ability of ADB and the participating NSOs to synthesize their resources and efforts, seamlessly integrate the project objectives into their work plans, build on the technical capacity developed and lessons learnt through other statistical capacity building initiatives including RETA 6483, and accomplish the tasks in a timely manner. Third, the SUT construction exercise is a definitive step towards improved statistical capacity in the Region.

The participating NSOs enhanced their knowledge in compiling and analyzing data within the technically rigorous supply and use framework, enabling them to produce relevant, accurate and timely economic statistics to illuminate policy issues. Finally, the participating economies are now better equipped to provide higher quality and more detailed expenditure data required for the 2017 International Comparison Program which seeks to compare the economies of all the countries across the globe.

I would like to thank all those who contributed to the success of this important statistical capacity building initiative—the consultants; resource persons; and most importantly, the national implementing agencies and other government organizations in each of the 19 participating economies for their contribution, cooperation, and hard work. I also commend the SUT project team at ADB for their concerted effort and unflagging dedication in achieving the objectives of R-CDTA 8838.

A handwritten signature in black ink, consisting of several fluid, overlapping strokes that form a stylized representation of the name Yasuyuki Sawada.

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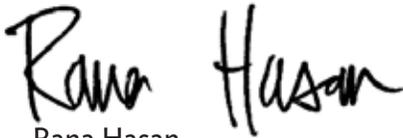
The integration of the supply and use framework into the national accounts systems in 19 participating economies in Asia and the Pacific was made possible by the respective governments and national statistical offices. The initiative was supported financially by ADB through regional capacity development technical assistance (RCDTA) 8838: Updating and Constructing Supply and Use Tables for Selected Developing Member Economies.

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Rana Hasan

Director

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Abbreviations

ADB	Asian Development Bank
AFF	agriculture, forestry, and fishery
B	baht (currency unit of Thailand)
B\$	Brunei dollar (currency unit of Brunei Darussalam)
BBS	Bangladesh Bureau of Statistics
BLSS	Bhutan Living Standards Survey
BOP	balance of payments
BPS	Badan Pusat Statistik (Statistics Indonesia), Indonesia
CBS	Central Bureau of Statistics, Nepal
CSD	Census and Statistics Department, Hong Kong, China
CFC	consumption of fixed capital
CIF	cost, insurance, and freight
CNY	yuan (currency unit of the People's Republic of China)
COE	compensation of employees
COFOG	Classification of the Functions of Government
COICOP	Classification of Individual Consumption According to Purpose
COPNI	Classification of the Purposes of Nonprofit Institutions Serving Households
CPC	Central Product Classification
CSO	Central Statistics Office, India
D	dong (currency unit of Viet Nam)
DCS	Department of Census and Statistics, Sri Lanka
DGBAS	Directorate-General of Budget, Accounting and Statistics, Taipei, China
DMC	developing member country
DNP	Department of National Planning, Maldives
DOS(M)	Department of Statistics, Malaysia
DP	domestic production
ESCAP	(United Nations) Economic and Social Commission for Asia and the Pacific
ESD	Economic Statistics Division, Fiji
FBOS	Fiji Bureau of Statistics
FISIM	financial intermediation services indirectly measured
FOB	free on board
FY	fiscal year

GO	gross output
GCE	government consumption expenditure
GDP	gross domestic product
GDP (E)	gross domestic product by expenditure approach
GDP (I)	gross domestic product by income approach
GDP (P)	gross domestic product by production approach
GFCE	government final consumption expenditure
GFCF	gross fixed capital formation
GO	gross output
GSO	General Statistics Office, Viet Nam
GST	goods and services tax
GVA	gross value added
GVAR	gross value added ratio
HES	Household Expenditure Survey
HFCE	household final consumption expenditure
HIES	household income and expenditure survey
HK\$	Hong Kong dollar (currency unit of Hong Kong, China)
HS	Harmonized (Commodity Description and Coding) System
IC	intermediate consumption
ICP	International Comparison Program
ICR	intermediate consumption ratio
IMF	International Monetary Fund
INV	inventories
IOT	Input–Output table
ISIC	International Standard Industrial Classification of All Economic Activities
JICA	Japan International Cooperation Agency
JPKE	Department of Economic Planning and Development, Brunei Darussalam
KN	kip (currency unit of the Lao People’s Democratic Republic)
KR	riel (currency unit of Cambodia)
Lao PDR	Lao People’s Democratic Republic
LCPA	Lao Classification of Products by Activity
LSB	Lao Statistics Bureau
M	imports of goods and services
MNT	togrog (currency unit of Mongolia)
MOF	Ministry of Finance
MPS	Material Product System
MRDS	Minimum Requirements Data Set
NA	national accounts
NAPD	National Accounts and Price Division, Bhutan
NBR	National Board of Revenue, Bangladesh

NBS	National Bureau of Statistics, People's Republic of China
NESDB	National Economic and Social Development Board, Thailand
NGO	nongovernmental organization
NIA	national implementing agency
NIS	National Institute of Statistics, Cambodia
NSB	National Statistics Bureau, Bhutan
NSO	national statistical or statistics office
NPISH	nonprofit institutions serving households
NRe	Nepalese rupee (currency unit of Nepal)
NT\$	NT dollar (currency unit of Taipei, China)
Nu	ngultrum (Bhutan's currency unit)
OS	operating surplus
PBS	Pakistan Bureau of Statistics
PCE	private consumption expenditure
PIM	perpetual inventory method
Pre	Pakistan rupee (currency unit of Pakistan)
PRC	People's Republic of China
R&D	research and development
RCDTA	regional capacity development technical assistance
RETA	regional technical assistance
Rf	rufiyaa (currency unit of Maldives)
RM	ringgit (currency unit of Malaysia)
Rp	rupiah (currency unit of Indonesia)
Rs	Indian rupee (currency unit of India)
SAFE	State Administration and Foreign Exchange, People's Republic of China
SLRe	Sri Lanka rupee (currency unit of Sri Lanka)
SIOT	symmetric input output table
SMI	Survey of Manufacturing Industries, Bangladesh
SITC	Standard International Trade Classification
SNA	System of National Accounts
SUT	supply and use table
TA	technical assistance
TAFIS	Treasury Accounting Financial Information System
TNA	Thailand's National Accounts
TTM	trade and transport margin
UN	United Nations
UNSD	United Nations Statistics Division
VAT	value added tax
X	export of goods and services

Executive Summary

Introduction

The United Nations System of National Accounts (1993 SNA¹ and 2008 SNA²) recommends the compilation of Supply and Use Tables (SUTs) as an essential founding step in establishing an effective statistical system in any country. SUTs are a comprehensive and self-contained accounting system specifying the economic transactions in goods and services between economies and the consequent income generated during a reference period. The tables produced provide accurate key statistics to understand and monitor the state and movements of an economy. Specifically, SUTs provide the framework for the gross domestic product (GDP) of an economy to be estimated by all the three standard approaches: production, expenditure, and income.

SUTs present an integrated framework showing the sources of supply of goods and services—produced in the domestic economy or imported—and where and how these are used, either for intermediate consumption or final use. Likewise, SUTs provide the basic framework for the construction of national and international input–output tables (IOTs).

Governance and Organization of the Supply and Use Tables Project

The Asian Development Bank (ADB) has been implementing a multipronged statistical capacity building strategy in the Asia and the Pacific region. In 2008, to assist participating economies to implement the provisions of the 1993 SNA, ADB initiated a data development and capacity building project, the Regional Technical Assistance (RETA) 6483: Adopting the Supply and Use Framework toward 1993 System of National Accounts Compliance in Selected Developing Member Countries, to assist 18 members: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; the People’s Republic of China; Fiji; Hong Kong, China; India; Indonesia; Malaysia; Maldives; Mongolia; Nepal; Singapore; Sri Lanka; Taipei, China; Thailand; and Viet Nam to construct benchmark SUTs of their respective economies for the latest possible year. The RETA which concluded in 2012 enabled the participating economies to produce SUTs either for the first time in their statistical history or after a lapse of several years.

The regional capacity development technical assistance (RCDTA) 8838: Updating and Constructing Supply and Use Tables for Selected Developing Member Economies, which commenced in December 2014, is part of the continuing efforts of ADB to support evidence-based decision making with improved and detailed information on national accounts estimates. The main objective of the project is to assist participating

¹ The System of National Accounts 1993 was adopted by the United Nations Statistical Commission as the international standard for compilation of national accounts statistics and for international reporting of comparable national accounting data.

² The System of National Accounts 2008 is the latest version of the international statistical standard for the national accounts. It is an update of 1993 SNA to address issues brought about by changes in the economic environment, advances in methodological research and the needs of users.

economies in implementing the 2008 SNA recommendations through the standard compilation of SUTs. It builds on the strong foundation laid by ADB's pioneer initiative, the RETA 6483, to reinforce and enhance the technical capacity of the national statistical offices (NSOs) of the participating economies. The participating NSOs were required to produce detailed benchmark SUTs for the most current year possible, subject to economy-specific data and technical constraints. They were also encouraged and assisted to produce the tables for as many nonbenchmark years as possible using all available relevant information and indicators, thereby facilitating the development of a database of a time-series of SUTs and IOTs. Another key outcome of the technical assistance (TA) is the development of time series international SUTs and IOTs for Asia.

Nineteen ADB developing member economies (DMEs) officially participated in the TA: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; the People's Republic of China; Fiji; Hong Kong, China; India; Indonesia; the Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Nepal; Pakistan; Sri Lanka; Taipei, China; Thailand; and Viet Nam. The Lao People's Democratic Republic and Pakistan only joined in RCDTA 8838, while Singapore only participated in RETA 6483.

ADB, as executing agency, adopted a holistic approach to implement the project plans and achieve the objectives. Key stakeholders, logistics resources, and technical factors contributing to quality data development were engaged within the scope and mandate of the project for specific and well-defined tasks. The initiated activities were preceded by comprehensive consultations, consensus building, and consent formalization with stakeholders, including concerned government departments at various levels. ADB identified governmental organizations officially mandated to collect, compile, and disseminate economic statistics as partners in implementing the project designated as national implementing agencies (NIAs), which are generally the NSOs.

Lessons Learned and Future Direction

The project successfully achieved its objectives despite limited internal and external resources and assistance. The NSOs of the participating economies accomplished the tasks and reached the high points entirely with the existing human resources they had in their national accounts domains. Further, they enhanced their knowledge and skills to effectively integrate multiple sourced data and modeled estimates within the SUT framework to produce economic statistics conforming to relevant economic and statistical concepts. The compilation of the tables enabled the NSOs to identify precisely, and, to some extent, resolve data and conceptual gaps with their existing processes for estimating key economic statistics. The TA, especially through its workshop, provided ample opportunities for NSOs at varying levels of technical capacity and with different data compilation experiences to interact, and, even to, collaborate to enhance mutual learning and development.

This compendium contains standardized versions of the respective benchmark SUTs developed by the 19 participating economies for the RETA 8838 project; and economy-specific reports specifying data sources used, statistical methods employed, compilation processes followed, issues and challenges encountered, analyses conducted and the results derived, and the future plans formulated in the context of constructing and studying SUTs. The abridged version of SUT's 22 x 13 matrices are available in this compendium, and more detailed or disaggregated tables are available online through the ADB website.

Many economies are often constrained to sidestep the construction of SUTs due to financial, human, and technical resource constraints. Despite the ready availability of statistical and analytical methods, concepts, frameworks and data, many NSOs could not institutionalize the compilation of SUTs, or even produce the tables even on experimental basis due to competing information priorities and resources requirements. Even though the construction and application of SUTs is known to crucially equip the development and sustenance

of a viable statistical system, deeply entrenched institutional frameworks, processes, arrangements, and issues preclude the integration of the production of the tables into the national accounts compilation processes in many economies.

Data used in the estimation of GDP through the three approaches at the most disaggregated level provide the necessary basis for constructing the SUTs. Although the SUTs are integral to an economy's national accounts, and many core economic statistics stem from them, ADB's intervention through the TA 8838 project bridges the data, and technical and other resource gaps through targeted assistance. Technical and logistics resources were provided to NIAs for collecting relevant and more detailed data through various vehicles, including surveys and administrative records. TA was enhanced, as required, to systematically disaggregate composite data collected to produce standard indicators such as GDP, household consumption, gross fixed capital formation, and sector output, among others. Periodic training through structured workshops and consistent direct and online expert support were provided to collect, compile, reconcile, and analyze relevant data in the standard SUT framework, and produce the tables.

NIAs demonstrated their commitment to the success of the project by designating their core national accounts and support staff as project focals. Through this initiative, besides producing detailed and quality economic information, the participating NIAs also experienced how the production of the SUTs could be seamlessly integrated into their statistical systems through reorganization of their current data development processes, largely using existing resources.

The successful completion of this project shows that SUTs can be constructed even with the limited source data available in many economies by using auxiliary and unconventional data sources. However, these should only be seen as stopgaps, and economies need to make effort to augment the existing data sources to fill data gaps in the compilation of national accounts. This requires additional resources to be allocated to NSOs to collect the requisite data.

Supply and use tables (SUTs) are collation of interrelated data sets of economic statistics which conform to specific economical and statistical conceptual and theoretical stipulations. They constitute an internationally standardized data compilation and analysis framework within which the consistency, coherence, relevance, accuracy and timeliness of economic data from various sources can be rigorously verified and established with reference to a given set of economic phenomena. SUTs are comprehensive and self-contained accounting system detailing the economically productive transactions in goods and services taking place between various actors in an economy and the consequent income generated during a reference period. Thus, the tables provide an ideal facility to rigorously and accurately produce a suite of key statistics to understand and monitor the state and evolution of an economy. For example, SUTs provide the only framework through which the gross domestic product (GDP) of an economy can be estimated by all the three standard approaches: production, expenditure and income.

The United Nation System of National Accounts (SNA1993 and SNA2008) recommends the compilation of SUTs as an essential founding step in establishing an effective statistical system in any country. However, while the theoretical basis for the centrality of the tables in SNA is well-established in the statistical community across the globe, due to financial, human and technical resource issues many countries are often constrained to side step the construction of SUTs in the production and analysis of key economic statistics. In this context it is noteworthy that many advanced economies have institutionalized the periodic compilation of SUTs

to facilitate comprehensive economic analysis and evidence based policy making. For instance, in Canada and the European Union the tables provide critical data for revenue allocation estimations and decisions related to high profile fiscal programs. In Asia emerging economies like Malaysia and Indonesia have expanded the scope and mandate of their official statistical institutions to produce more detailed and timelier SUTs to serve user requirements and to illuminate policy issues. However, as noted earlier, for several countries the lack of resources at the national level remains the major, if not the singular, impediment towards the effective compilation of SUTs.

Widespread adoption of information technology in operations and processes in the public and private sector domains and the proliferation of the digitization of transactions and documents (such as sales tax and customs records) have not only exponentially expanded the amount of relevant data available for economic analysis but also greatly increased the technical feasibility of integrating multitudes of, possibly, diverse yet related and relevant data into a standardized data compilation and analysis framework such as the SUTs. Further, the existence of volumes of transactional data with the potential for transformation into statistics conforming to national accounts and SUT concepts could vastly reduce the need for costly and time consuming data collection exercises through traditional vehicles such as surveys and censuses and the associated scale of human resources. However, many national statistical systems have not yet been able to capitalize on the technology-enabled opportunities for data development largely due to technical, institutional and organizational constraints.

Over the last several years multilateral institutions, and statistical and aid organizations from advanced economies have endeavored to guide and assist developing national statistical systems realize their full potential in data development either by selectively addressing limiting factors, such as technical and technological capacities, or by comprehensively reforming entire organizations and institutions including enabling legislative frameworks with varying degrees of success. The Asian Development Bank (ADB) has been implementing a multipronged statistical capacity building strategy in the Asia and the Pacific region resolving both local as well as system-wide issues. In 2008 as a part of a concerted effort to graduate the Region's statistical systems to the provisions of SNA1993 ADB embarked on a pioneering data development and capacity building initiative to assist eighteen member economies construct benchmark SUTs of their respective economies for the latest possible year.

The project, titled *Regional Technical Assistance (RETA) 6483: Adopting the Supply and Use Framework Towards 1993 System of National Accounts Compliance in Selected Developing Member Countries* and which concluded in 2012, resulted in the following economies producing SUTs either for the first time ever in their statistical history or after a lapse of several years: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; The People's Republic of China; Fiji; Hong Kong, China; India; Indonesia; Malaysia; Maldives; Mongolia; Nepal; Singapore; Sri Lanka; Taipei, China; Thailand; and Viet Nam. A defining achievement of the initiative was that although considerable need tested financial and technical assistance were provided by ADB, the participating economies' national statistical offices (NSOs) accomplished the tasks and reached the milestones entirely with the human resources existing at that time in their national accounts domains. Further, they enhanced their knowledge and skills to effectively synthesize multiple sourced data and modelled estimates within the SUT framework to produce economic statistics conforming to relevant economic and statistical concepts. The compilation of the tables also enabled the NSOs to precisely identify, and to some extent resolve, data and conceptual gap issues with their existing processes for estimating key economic statistics. The project,

especially through its workshop model of training delivery, also provided ample opportunities for NSOs at varying levels of technical capacity and with different data compilation experiences to interact and, even, to collaborate to enhance mutual learning and development. To ensure the sustainability of the statistical capacity developed ADB technical resources were made readily accessible and available to the participating economies. More importantly, the SUTs constructed through the project formed the basis for the development of a number of high quality key economic statistics and input output analysis models to study the relevant economies.

However, since the conclusion of the RETA 6483 despite the statistical and analytical benefits realized through the achievement of the project objectives, many NSOs could not institutionalize the compilation of the SUTs, or even produce the tables on experimental basis, due to reasons of competing information priorities and resources requirements. Even though the criticality and centrality of the SUTs to the development and sustenance of a viable statistical system is well understood across the region, especially since the adoption of the SNA1993 recommendations by the United Nations Statistical Commission, deeply entrenched institutional frameworks, processes, arrangements and issues preclude the integration of the production of the tables into the national accounts compilation processes in many economies. Cognizant of the region- and economy-specific ongoing and evolving challenges in data development and statistical production especially as they relate to the compilation of key economic statistics through the SUT framework ADB commenced in December 2014 another cycle of assistance for statistical capacity building through the regional capacity development technical assistance project (*R-CDTA 8838: Updating and Constructing Supply and Use Tables for Selected Developing Member Economies*). Nineteen ADB developing member economies (DMEs) officially consented to participate in the R-CDTA. The participating DMEs are: Bangladesh; Bhutan; Brunei Darussalam; Cambodia; the People's Republic of China; Fiji; Hong Kong, China; India; Indonesia; the Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Nepal; Pakistan; Sri Lanka; Taipei, China; Thailand; and Viet Nam.

The project R-CDTA 8838 is more broad-based in its objectives compared to RETA 6483 and especially geared to meet specific conventional and emerging, often multidimensional, data needs of various segments of the modern, globally and locally interlinking, society. The participating NSOs were required to produce detailed benchmark SUTs for the most current year possible subject to economy specific data and technical constraints. They were also encouraged and assisted to produce the tables for as many nonbenchmark years as possible using all available relevant information and indicators facilitating the development of a database of a time-series of SUTs and input-output tables (IOTs) for their respective economies. Another key outcome of the project is the development of a time-series of Asia focused international SUTs and IOTs. While the evolution of various facets of an economy can be discerned and studied through the time-series of national tables, that of its integration and participation in international production and supply networks can be mapped and analyzed using the international SUTs and IOTs. The construction of the time-series of the tables, national and international, also serves to identify, track and, possibly, rectify data gap and data quality issues leading to the production of reliable, accurate and timely statistics over time. The international tables detailing the cross border production and trade linkages also facilitate measurement and analysis of the local and global effects of any given economic action or transaction. Further, to highlight, evaluate and substantiate the multifaceted (statistical, analytical, operational, managerial, etc.) utility of the project to achieving sustainable capacity in data development a series of reports were slated to be produced by ADB and the economies; by undertaking the processes for generating such reports the NSOs were also expected to enhance their capacity in technical and analytical writing.

ADB adopted a holistic approach to implement the project plans and achieve the milestones set for statistical capacity building. Key organizational, operational, resource and technical factors contributing to quality data development were engaged within the scope and mandate of the project for specific and well-defined enhancements. The rollout of the project was preceded by

comprehensive consultations, consensus building and consent formalization with stakeholders, including concerned government departments in the participating economies, at various levels. ADB identified governmental organizations officially mandated to collect, compile and disseminate economic statistics in the national accounts domain to partner with in the implementation of the project in the respective participant economies and entered into a contractual agreement with them (designated as national implementing agencies, NIAs, which are generally the NSOs). Within each NIA units that are most closely associated with the production of official GDP estimates were designated and entrusted to take the lead in constructing the benchmark SUTs given their mandate experience and expertise in working with relevant data, methods, concepts, tools and frameworks for national accounts compilation.

Generally, data used in the estimation of GDP through production and expenditure approaches yet sufficiently disaggregated provide the necessary informational basis for constructing the SUTs. Although the tables are integral to an economy's national accounts and many core economic statistics stem from them, given the existing general practice of sidestepping the construction of SUTs in the national accounts compilation processes especially due to resource constraints ADB's intervention through the TA 8838 project was to bridge the data, technical and other resource gaps through targeted assistance. Resources were provided to the NIAs for collecting relevant and more detailed data through various vehicles including surveys and administrative records. Technical assistance was extended, as required, to systematically disaggregate composite data collected to produce standard indicators like (expenditure and production based) GDP, household consumption, gross fixed capital formation and sectoral output. Periodic specialized training through structured workshops and consistent direct and online expert support were provided to collect, compile, synthesize, reconcile and analyze relevant data in the standard SUT framework and produce the tables. NIAs demonstrated their commitment to the success of the effort admirably by committing their core national accounts and support staff—largely through overtime work.

Through this initiative, besides producing detailed and quality economic information, the participating organizations also experienced how the production of the SUTs could seamlessly be integrated into their statistical system with targeted reorganization of their current data development processes largely with existing resources.

This publication contains standardized versions of the respective benchmark SUTs developed by the nineteen participating economies for the RETA 8838 project and economy-specific reports detailing data sources used, statistical methods employed, compilation processes followed, issues

and challenges encountered, analysis conducted and the results derived, and the future plans formulated in the context of constructing and studying SUTs. More detailed or disaggregated tables are available online through the ADB website.¹ Basic statistical and economic concepts forming the SUT framework; relevant standard statistical procedures for data compilation, confrontation and reconciliation; and principal challenges faced in bridging gaps in data, definitions and concepts in synthesizing multiple sourced data within the SUT framework are discussed in section 2 and section 3. The economy reports are provided in section 4 and the SUTs in section 5.

¹ (provide website link)

Supply and Use Tables and Basic Concepts: An Overview

2

A. Introduction

The compilation of supply and use tables (SUTs) is one of the critical recommendations in the United Nations (UN) System of National Accounts (SNA). SUTs are considered the most integrated framework showing the sources of supply of goods and services—produced in the domestic economy or imported—and where and how these are used, either for intermediate consumption or final use. Likewise, SUTs provide the basic framework for the construction of national and international input–output tables (IOTs).

This section describes the basic SUT concepts and explains the components of the SUT, price valuations, various adjustment items, and balancing procedures required in the compilation of the tables.

B. A Simplified Supply and Use Table

A SUT has two matrices with common valuation, and shows products in rows and industries in columns. It provides an integrated framework for checking consistency and completeness of national accounts. It generates GDP by production approach (GDP (P)), GDP by expenditure approach (GDP (E)), and GDP by income approach (GDP (I)) simultaneously; and, since both are produced at the same time, they must always be equal. The SUT also provides the basic information for the derivation of IOTs, as described in chapter 28 of the 2008 SNA. The various assumptions and processes required to move from SUT to IOT are explained in detail in the United

Nations publication, *Handbook of Input–Output Table Compilation and Analysis*.² Countries which have succeeded in compiling SUT will be well placed to move on to the production of an IOT.

A simplified SUT is shown:

1. Supply Table

The supply table consists of goods and services which are either domestically produced or imported. It is sometimes described as “make” matrix consisting of three parts: (i) domestic production, (ii) imports, and (iii) valuation adjustments.

Domestic Production (DP) of goods and services comes from enterprises in agriculture, industry, construction, trade, transport, and other services. It includes the services produced by government which are valued at cost of production. The recording of outputs is precisely the same as those recording of output the production account. The production matrix (Quadrant I of Table 1) is also known as a transposed make matrix.

Imports (M) of goods and services have to be adjusted to cost, insurance, and freight/free on board (CIF/FOB) for consistency to basic price valuation. Imports by products are usually valued at CIF prices, therefore, an extra column and row are added to reconcile the valuation of imports with a global negative adjustments. Main data comes from customs for goods and balance of payments for services.

² United Nations Statistics Division. 1999. Studies in Methods Series F, No. 74. Handbook of Input–Output Table Compilation and Analysis. New York. http://unstats.un.org/unsd/publication/SeriesF/SeriesF_74E.pdf

Table 1: Supply and Use Tables

Supply Table												
Products	Domestic Production					Imports of Goods and Services	CIF/FOB Adjustment on Imports	Total Imports	Total Supply and Use at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	Industry 1	Industry 2	Industry 3	Industry 4	Total							
	I											
Goods 1	80	70	-	-	150	20	-	20	170	20	15	205
Goods 2	60	30	10	0	100	10	-	10	110	10	10	130
Services 1	-	-	100	25	125	15	-15	-	125	-30	12	107
Services 2	5	5	15	50	75	-	-	-	75	-	8	83
CIF/FOB Adjustment on Imports	-	-	-	-	-	-15	15	-	-	-	-	-
Direct Purchases of Residents Abroad	-	-	-	-	-	5	-	5	-	-	-	5
Total	145	105	125	75	450	35	-15	20	480	0	45	525

Use Table												
Products	Intermediate Consumption					Household Consumption Expenditure	Government Consumption Expenditure	Nonprofit Institutions Serving Households Consumption	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports of Goods and Services	Total Use at Purchasers' Prices
	Industry 1	Industry 2	Industry 3	Industry 4	Total							
	I											
Goods 1	55	45	-	-	100	30	-	-	18	2	55	205
Goods 2	25	20	5	-	50	25	-	-	14	1	40	130
Services 1	-	-	-	-	55	20	7	5	-	-	20	107
Services 2	-	-	-	-	40	11	25	3	-	-	4	83
Direct Purchase on Nonresident in Domestic Market	-	-	-	-	-	-2	-	-	-	-	2	-
Direct Purchases of Residents Abroad	-	-	-	-	-	5	-	-	-	-	-	5
Total	80	65	5	0	245	89	32	8	32	3	121	525

Value Added Table					
IV					
Gross Value added	65	40	120	75	205
Compensation	30	20	35	30	115
Taxes Less Subsidies on Production	4	3	2	1	10
Operating Surplus	31	17	83	44	80
Total Output	145	105	125	75	450

CIF = cost insurance and freight, FOB = free on board.
Source: United Nations Statistics Division.

Trade and Transport Margins pertain to goods and not services. Trade margin covers the markup for trade services and is usually computed as the difference between the sales of goods for resale and goods purchased for resale. Transport margin, on the other hand, covers the transport cost of goods from place of seller (factory) to purchaser (store). It represents the freight transportation services of products paid separately by the purchaser. Both are treated as margins if these affect the profit motive or price determining power of retailers or sellers.

Taxes Less Subsidies on Products are also required to transform the basic price to purchasers'

price. It consists of nondeductible value added tax (VAT), taxes on product and import taxes, and subsidies on products and import duties.

2. Use Table

The use table describes how goods and services are used in the economy broken down into (i) intermediate consumption disaggregated by products and industries; final demand divided into (ii) use of different products by final use; (iii) exports and capital formation by products; and (iv) uses of value added quadrant showing the income generated in the production process.

Intermediate Consumption (IC) covers goods and services required to produce their output.

Government Final Consumption Expenditure (GFCE) consists of expenditure incurred by general government on both individual and collective consumption services.

Household Final Consumption Expenditure (HFCE) consists of expenditure incurred by resident households on consumption goods or services and is the largest item on the Use side.

Nonprofit Institutions Serving Households (NPISH) Consumption Expenditure includes trade unions, political parties, religious and charitable organizations, and sporting and recreational associations. In many economies, the expenditure by NPISH is included in HFCE, but the SNA recommends showing their consumption expenditure in a separate column.

Gross Capital Formation (GCF) contains separate columns usually broken down into its main components: residential and nonresidential buildings; other construction; machinery and equipment; and other GFCF, which consists mainly of the increase in stocks of certain types of farm animals, purchases and development of computer software, and costs of mineral exploration.

Changes in Inventories (INV) may either be a positive or a negative entry. As a positive entry, changes in inventories include goods and services produced or imported during the current period, but have not yet been used during the period or will be used at a later period. As a negative entry, it includes goods and services that were produced or imported in an earlier period and used in the current period. Changes in inventories ensure that the two sides of the SUT—the supply on the left-hand side and the use on the right-hand side—will always be equal.

Acquisition Less Disposal of Valuables (ADV) consists of precious stones and metals (gold, diamonds, etc.), paintings, sculpture, works recognized as works of art, and antiques that are not

used primarily for production or consumption, but are acquired and held primarily as stores of value.

Exports (X) of Goods and Services are valued in FOB and shown on the upper right of the use table. Main data comes from customs for goods and balance of payments for services.

3. Value Added Quadrant

The fourth part of the use table is the value added quadrant obtained by subtracting intermediate consumption from domestic production. In SUTs, both domestic production and intermediate consumption are broken down by kind of activity. Hence, value added, as the difference between these two components, can also be shown using the same activity classification.

Gross Value Added (GVA) in the lower quadrant can be broken down into the following components:

Compensation of Employees (COE) is the total remuneration, in cash or in kind, payable by enterprises to employees in return for work done by the latter during the accounting period.

Subsidies on Production are treated in the same way as taxes on production, and divided into “subsidies on products” and “other subsidies on production.” Basic prices exclude subsidies on products and include other subsidies on production, while purchasers’ prices include both subsidies. In practice, almost all subsidies are “subsidies on products” and “other subsidies on production” are quite rare.

Taxes on Production are of two kinds: (i) those that are proportional to the volume of goods or services produced, and (ii) those that do not vary according to the amounts produced. If taxes are proportional to the volume of goods or services produced, they are defined as taxes on products; and if not proportional to output, they are considered as other taxes on production. Some taxes on production are paid by the producers. Examples include taxes on land and buildings, taxes to own or operate vehicles, and taxes on employment.

Gross Operating Surplus/Mixed Income. In the 1993 and 2008 SNAs was a change in name of “operating surplus” of unincorporated enterprise in the 1968 SNA. The term was changed because it contains compensation for the labor input of the owner in addition to “operating surplus,” which is considered as the return to capital and entrepreneurship. In the 1968 SNA, the difference between the value added and COE of unincorporated enterprises was described as “operating surplus.”

4. Cross-Classification by Commodity and Industry

The columns in Table 1 for domestic production and intermediate consumption are matrices with commodities in the rows and industries (“kinds of activities” in SNA terminology) in the columns. Almost always there are more commodities (in rows) distinguished than industries (in columns). The International Standard Industrial Classification Revision 4 (International Standard Industrial Classification of All Economic Activities [ISIC] Rev. 4) was used to define the industries (activities); and the Central Product Classification Version 2 (CPC Ver. 2) was used to define commodities (goods and services). In this compendium, a standard SUT size, 22 commodities and 13 industries, is reported. This means that both the domestic production and intermediate consumption matrices contain $22 \times 13 = 286$ cells. However, the size of the matrices depends on the details available from the detailed tables submitted. The tables with the most detailed levels are available online.

5. Basic Prices and Purchasers’ Prices

In statistical surveys, producers usually report the value of their output at “farmgate” or “ex-factory” prices. In a market economy, producers set these prices at a level that generates profit (operating surplus in SNA terminology), in addition to covering the costs of intermediate inputs, COE, and fees or taxes on production that must be paid to the government. Examples of these fees and taxes are property taxes on land and buildings, taxes on employment, and vehicle license fees. Producers also transport their goods to purchasers so that the prices charged by producers also include transport costs.

The farmgate or ex-factory prices are referred to in the SNA as basic prices.

The imports column in the SUT shows goods and services at cost, insurance, and freight (CIF) prices. These are prices that include the costs of transport and insurance charges to bring the goods to the port of entry of the importing country, but exclude any customs duties that will be paid later by the purchasers. The CIF prices are also referred to as basic prices.

Purchaser’s price is the actual cost to users.³ These prices are higher than the basic prices because of a number of costs incurred between the sales of commodities at the place where they are produced and the place where they will be used. The relationship between basic prices and purchasers’ prices is shown below.

Basic price

- + taxes on products (excluding VAT)
- subsidies on products
- = Producer price
- + trade and transport margin
- + nondeductible VAT
- = Purchaser price

For services, there are no transport costs or trade margins but there often are taxes or subsidies on products.

In the SUT, Supply at Basic Prices can be converted to Supply at Purchasers’ Prices by adding the columns for costs paid by purchasers consisting margins and taxes (Supply: III of Table 1).

6. Transport Costs and Trade Margins

Since transport costs and trade margins are now shown as additional columns in the Supply quadrant, a problem of double-counting arises because trade and transport services are also included in the first column of the SUT in the commodities (Supply: I) that are produced or imported (Supply: II). To avoid double-counting, counter-entries are required for transport costs and trade margins are shown as services produced in the domestic production

³ Footnote 2. 2.64.

column of Table 1. These same amounts are also included in the transport and trade margin columns as adjustments to move from basic to purchasers' prices. The value of the transport and trade services must be cancelled out by negative entries, which is -30, to eliminate double-counting.

7. Cost, Insurance, and Freight/Free on Board Adjustment

In the SNA, both imports and exports are theoretically valued FOB. In practice, exports are valued FOB but almost all countries record imports at CIF. Reporting imports at CIF is another source of double-counting as explained below.

- The value of imported goods includes the transport and insurance services incurred in bringing them to the importing country.
- But the transport and insurance services are also included either in domestic production, if the transport and insurance services are provided by residents, or in imports (of services), if the transport and insurance services are provided by nonresidents.

Part II of the supply table in Table 1 shows the adjustments required to avoid double-counting freight and insurance services when, as is usually the case, imports are recorded at CIF. An additional column and an additional row, similarly labeled CIF/FOB Adjustment on Imports, are introduced in the SUT.

In this example, the difference between imports CIF and imports FOB is 15. Some amounts may have been paid to domestic transport and insurance enterprises and some to nonresident enterprises. The amount paid may have been included in either Domestic Production or Imports of Services. The total amount of 15 should be deducted from Imports to avoid counting it twice. Note that it is not necessary to know how much was provided by domestic producers and how much by nonresidents. These amounts are subtracted from transport and insurance. Therefore, Total Supply at Purchasers' Prices is reduced by the same amount and double-counting is avoided. Total imports is now valued at FOB prices as required by the SNA,

and an offsetting entry of +15 is required at the intersection of the CIF/FOB Adjustment column and row so that the CIF/FOB adjustment has no further effect on the SUT.

If imports are recorded FOB, the adjustment items are not required. For economies, which report imports at CIF, CIF/FOB adjustment items in the SUTs are required.

8. Purchases Abroad by Residents and Purchases in the Domestic Market by Nonresidents

These are adjustment items shown in the SUT. SNA recommends adjustments of imports of goods and services by including direct purchases of residents abroad; and for exports of goods and services, by including direct purchases of nonresidents in the domestic economy. Balance of payments (BOP) statistics compiled according to the guidelines of the International Monetary Fund include these two adjustments to meet the requirements of the SUT compilation.

In the SNA, household final consumption expenditure (HFCE) always refers to expenditures by resident households. This means that it must include purchases by residents abroad, and it must exclude purchases by nonresidents. Some economies start their estimates of HFCE by using sales figures reported by retailers and service providers. These figures have to be adjusted in the SUT to the correct SNA definition, by adding purchases made by residents abroad and deducting sales by retailers and service providers to nonresidents.

Many economies estimate HFCE using data from household expenditure surveys (HESs) which cover only resident households and usually ask respondents to record their expenditures abroad. Thus, if an economy uses the household expenditure survey to estimate HFCE, the estimates will be fully consistent with the SNA: purchases in the domestic market by nonresidents are automatically excluded because nonresidents are not covered by the survey, while expenditures abroad of resident households are reported as required by the survey. However, if HES does not ask households to report their expenditures

abroad, HFCE estimate has to be adjusted to include the value of their purchases abroad. But this case is rare and HES usually generate estimates of HFCE that are consistent with the SNA. Hence, these economies do not have to make any adjustment to their HFCE to account for the direct purchases made by resident households abroad (and nonresident purchases in the domestic economy).

Some economies base their estimates of HFCE on retail sales or production statistics. In this case, the estimate of HFCE will not be consistent with the SNA rules because the purchases in the domestic market by nonresidents are included and purchases by resident households abroad are excluded. Economies whose initial estimates of HFCE are not consistent with the SNA can do either one of the following adjustments:

- If detailed information on purchases abroad by residents and purchases in the domestic market by nonresidents is available, adjustments in the initial HFCE estimates can be done at a detailed level.
- If the total value of purchases abroad by residents and purchases in the domestic market by nonresidents can be estimated, one-line adjustments to the initial HFCE estimates can be done by adding the purchases abroad of residents and subtracting the domestic purchases of nonresidents.

Many economies choose the second method of adjustment because it requires less data and the result is that purchases of residents abroad is shown as a plus entry, and purchases in the domestic market by nonresidents as a negative entry in the HFCE column of the SUT.

Exports must include purchases in the domestic market by nonresidents and imports must include purchases of residents abroad. These are two entries in the standard BOP and are usually shown as totals with no detail on the types of goods and services involved. The Supply quadrant of the SUT, therefore, includes a line for purchases of residents abroad so that these can be added as a single figure to imports.

And the Use quadrant includes a line for purchases in the domestic market by nonresidents so these can be added as a single figure to exports.

In practice, some economies are able to classify these purchases by commodity, which can then be added to imports and exports. In this case, no entry will be required for purchases of residents abroad under Imports, and no entry for purchases in the domestic market by nonresidents under Exports.

Because of the different ways of estimating the purchases of residents and nonresidents, possible adjustments to the SUT, which are consistent with the SNA rules, are summarized as follows:

- No adjustment items for HFCE but with adjustment items for exports and imports;
- No adjustment items for HFCE, exports, and imports;
- With adjustment items for HFCE, exports, and imports; or
- With adjustment items for HFCE but no adjustment items for exports or imports.

Table 1 shows the Supply quadrant of the SUT with all the possible adjustments. The adjustments for transport costs and trade margins must always be made, but the adjustment for CIF/FOB and for purchases by residents abroad and nonresidents in the domestic market, may or may not be required. If economies record their imports at CIF, they are required to make the necessary adjustment to get to FOB values. On the other hand, no adjustment is required for economies that can provide detailed imports at FOB values.

Table 1 shows the Use quadrant of the SUT with adjustments for HFCE and exports. Depending on how HFCE is estimated, this adjustment may not be required. The adjustment for exports will not be necessary if an economy can distribute purchases in the domestic market by nonresidents according to commodity. If this is not possible, then an adjustment item is necessary.

9. Balancing the Supply and Use Table

If all entries in the SUT are accurately known, Supply and Use would be equal, and balancing the SUT will not be required. In practice, however, the Supply and Use do not balance because many of the entries can only be estimated. Economies usually encounter significant differences between the first estimate of Total Supply at Purchasers' Prices and the first estimate of Total Uses.

The SUT can be balanced either manually or by an automatic procedure. Manual balancing requires the compilers to identify the major discrepancies and assess the reliability of the estimates. If an estimate is based on a weak data source, other sources can be used to cross-check the reliability of the estimate. Survey reports may also be referred to for limitations of survey results, for example, if data from respondents are prone to under or overstatement. The SUT compilers may also use their own knowledge of informal or unrecorded activities to adjust the supply of certain goods and services upward if the first estimate of uses is higher than the apparent supply or the first estimate of supply is lower than the first estimate of uses. Balancing the SUT manually is tedious and time-consuming, but it is the best procedure to adopt that will ensure the final estimates based on available data.

In balancing the SUT by automatic procedure, the RAS method, which is the best known and most

commonly used. Automatic procedures, such as RAS,⁴ force the internal entries in a matrix to agree with the margin totals. The margin totals are assumed to be accurate and RAS revises the internal entries in a way that minimizes the difference between the original and revised figures. A modified form of RAS can also be used in which the vectors or cells believed to be correct are fixed, and only the other vectors or cells that are less reliable are adjusted. For example, vectors for product taxes, imports and exports, and government expenditure are usually regarded as reliable; hence, these are “fixed” and not adjusted by the RAS procedure.

Participating economies were encouraged to make every effort to balance the SUT manually, and to resort to automatic procedures only when the difference between total supply and use is reduced to 5% or less.

As the focus was on the production of benchmark SUTs, the need for manual balancing was emphasized. However, once a benchmark SUT has been produced, automatic updating can be done to a greater extent if the internal relationships within the SUT have not changed much in the short term. The usual procedure is to introduce the new margin figures with any known vectors, such as for product taxes, and imports and exports, and allow a modified RAS to adjust the internal entries to agree with the new margin figures.

⁴ Some experts believe that the RAS method is named after the economist Richard Stone (1919–1991), who, among his other achievements, co-authored the 1968 SNA together with Abraham Aidenof.

3

Addressing the Key Challenges in Compiling Supply and Use Tables

The participating economies encountered challenges and issues when implementing the supply and use table (SUT) project. This section summarizes these challenges and describes the practical solutions considered for the compilation of benchmark SUTs. To have clearer understanding on how these key challenges were addressed, this section differentiates the SUTs in the System of National Accounts (SNA), and covers the treatment of domestic production and intermediate consumption, including secondary products; household final consumption expenditure (HFCE); general government consumption expenditure (GGCE); financial intermediation services indirectly measured (FISIM); gross fixed capital formation (GFCF); change in inventories, acquisition less disposal of valuables; direct purchases abroad by residents and purchases in domestic economy by nonresidents; cost, insurance, and freight/free on board (CIF/FOB) adjustments; the informal imports (from shuttle trades); trade and transport margins; taxes and fees; and other conceptual issues where the SUT project offered practical solutions.

Difference in SUTs and Regular National Accounts Estimates. While the concepts and definitions of gross domestic product (GDP) in SUT and the regularly published, national accounts are the same, there may be differences between the SUT numbers and the published estimates if compiled separately. Although the impact of the SUT-based estimation may not be so significant on total GDP, the effect on individual components of GDP can be significant. It was noted that during SUT compilation, national implementing agencies (NIAs) adopted corrective measures to address most of the differences. Some NIAs used the

published estimates as control totals for major aggregates (final consumption expenditures, and value added by industries, among others) in the SUT to avoid confusion over the official GDP estimates, which could undermine users' confidence in official statistics. Other participants eliminated the statistical discrepancy or the differences between the estimates through calibration while maintaining the published GDP levels. However, a number of NIAs treated the SUT compilation as a research exercise independent of the official data development and publication processes.

The differences between the published national accounts and the relevant SUT estimates can be attributed to the following factors:

- (i) new data compilation and analysis system;
- (ii) new or improved methodologies;
- (iii) revision in classification schemes;
- (iv) change in scope of coverage;
- (v) availability of new data; and
- (vi) new approaches to adjusting data to ensure consistency of the estimates.

The following approaches are recommended in dealing with the differences:

- Documentation of the changes to and impact on GDP estimates during compilation process.
- Simultaneous GDP estimation in national accounts and in SUT for several years. Make use of the aggregated control totals from national account published estimates that are deemed to be accurate and work regressively on the preliminary SUT. In this manner, SUT

is adhering to estimates published for public consumption and one for internal analytical and tracking purposes. The combination of these tables will identify and track the areas for improvement and help the production of higher quality economic statistics in the long run.

- Integration of SUT into national accounts compilation by benchmarking annual estimates with the latest GDP by SUT. SUT is an integral part of SNA. To compile the accounts correctly, the compilation process should start with the construction of SUTs.
- Formulate a revision policy that will provide the rationale for changes in GDP estimates, including the frequency of revisions.
- Coordinate with a public relations unit or similar entity within the national statistical office (NSO) to address user concerns.
- During major dissemination activities, organize user engagement events (such as press conferences and other stakeholder engagements) to explain the sources of revisions, and make public all relevant information explaining the revisions.
- Work with policy departments to promote the use of high quality data in policy making and to explain to the public the data usage in the policy-making exercise.

The Australian SUT is a classic example of a supply and use system integrated in the SNA. In the Australian statistical system, GDP numbers by the three approaches are compiled independently using different data sources, often resulting in different GDP estimates. The Australian Bureau of Statistics (ABS) aligns these numbers using the SUT framework to ensure the consistency and coherence of relevant data from various sources. The ABS also ensures that annual and quarterly current price and chain volume GDP estimates are benchmarked to the balanced SUTs, however, the SUT is not published for all years.

Benchmark and Annual SUTs. For a few of the participating economies, benchmark SUTs

are available for several years; but for most, the NSOs constructed only one or two in the past. SUT compilation uses all available data sources at the most detailed level. Also for some economies, although SUTs are not available, IOTs are produced periodically; hence, a transformation from IOT to SUT was made. For the intervening or nonbenchmark years, the published GDP estimates and related details were used as controls. The inconsistency between nonbenchmark year estimates was seen to be significant over time, and this compromises the statistical and analytical utility of the annual SUTs. The procedures to link the series and ensure the time consistency and continuity of the relevant estimates are the following:

- Benchmarking of SUTs on consistent time series,
- Interpolation between benchmark years, and
- Extrapolation of one benchmark year.

Quality of Administrative Data Sources for Annual Estimation.

Although administrative data are collected for nonstatistical purposes, these are often used to measure and study parts of the economy for which other authoritative sources are not available. Administrative data needs to be carefully analyzed and adjusted as required to ensure these conform to National Accounts concepts and standards of data quality, e.g., translation of administrative record numbers into national accounts concepts of revenue and expenditure, coverage, cash and accrual recording, etc.

Commodity by Industry Input-Output Tables (IOTs).

Basically, IOTs are converted from SUTs to commodity by commodity or industry by industry based on many standard models. For some countries, the SUT is also known as a rectangular IOT, and a Commodity by Industry (Cxl) IOT resembles the SUT.

Intermediate Consumption by Products.

Consumption broken down by products is one of the most difficult parts of the SUT. Some of the participating economies regularly compile IOTs and they have reliable information on the types of goods and services used in production at a detailed

commodity or industry level. Where data or details were inadequate or even lacking, the participating economies had to use one or more of the following sources:

- Most recent surveys for production functions or structures;
- Input coefficients of neighboring countries;
- IOT structure;
- Expert opinions from company accountants or trade associations;
- Estimates of informal activities;
- Financial reports; and
- Control totals.

Secondary Products. The main products of industries are reported on the diagonal of the production matrix, and secondary products are shown off the diagonal of the production matrix. Producers are classified to International Standard Industrial Classification of All Economic Activities (ISIC) kinds of activities according to their principal output. Many producers have secondary outputs, i.e., goods or services that belong to a different kind of activity, but are less important in value added than the principal product. For example, a farmer whose principal output is crops may also keep some dairy cows; an enterprise whose principal output is plastic sandals may also produce plastic containers. Some economies did not obtain information about secondary output directly from producers, and each central product classification (CPC) product was allocated to the appropriate ISIC kind of activity. Thus, only the diagonal in the gross output matrix contains entries and all other cells, which show secondary production, are empty. Because of this, the breakdown of gross output by kind of activity and the value added, and its breakdown are not correct. This situation is unavoidable given the unavailability of basic data in some participating economies.

Adjusting Household Final Consumption Expenditure (HFCE) for External Trade on Direct Purchases Abroad by Resident and in the Domestic Market by Nonresident.

Adjustments should be made only if HFCE is based on retail survey data. This means that HFCE estimates would include purchases of goods and services in the domestic market by nonresidents. Direct purchases in domestic market by nonresidents should be deducted from HFCE estimates and treated as exports of goods and services as these are in principle automatically included in retail trade survey data. If HFCE is based on household survey data, purchases of goods and services by resident households when they are traveling abroad are excluded while purchases of goods and services in the domestic market by nonresidents are included. There is no need to make any adjustment on HFCE as it already corresponds to total final HFCE. However, direct purchases abroad by residents (imports) should be entered in the corresponding row in the column for Exports, and direct purchases in the domestic market by nonresidents (exports) should be entered in the corresponding row in the column for Imports, provided that the balance of payments (BOP) statistics have not accounted for these purchases.

Financial Intermediation Services Indirectly Measured (FISIM) Allocation by Consumer.

FISIM is allocated among various users of services such as intermediate consumption, final consumption, and exports. FISIM allocated to final consumption and net trade increases the level of GDP. The participating economies managed to allocate FISIM based on the totals of deposits by, and loans to, each sector. In the SUT, FISIM is shown as a domestically produced financial service that is either used by enterprise as intermediate consumption; or by government, households, nonprofit institutions serving households (NPISH), and the rest of the world as final consumption. The preferred methodology for allocating FISIM to intermediate consumption and final demand is to use the interest reference rate. However, its application is limited due to conceptual and

practical problems, such as lack of data. In view of this, the second approach—use of either the share of bank deposits or the share of bank deposits plus bank loans—was recommended because it was more practical to implement.

Negative Gross Fixed Capital Formation

(GFCF). The negative GFCF occurs when sales or other disposals of existing goods, whether fixed assets or not, are recorded as negative expenditures or negative acquisitions. The acquisition of one resident and sale of another resident cancel out for the economy, except for transfer cost. However, if the sale is between a resident and nonresident, no positive gross fixed capital formation is recorded elsewhere in the economy to offset the negative gross fixed capital formation.⁵ One example is a private sector having few firms selling aircrafts abroad. During one period (such as a quarter), firms sell many aircrafts—produced earlier—to the rest of the world and this makes the gross fixed capital formation negative. Another example is firms selling a huge number of used cars to households. For households, this is consumption and not capital formation. For firms, it is negative capital formation because cars used by firms are used in the production process and are counted as their fixed capital.

Good and Services Tax (GST). GST is a consumption tax based on the value-added concept, the treatment will be the same as value added tax (VAT). The term “deductible VAT” is the same as the “input tax credit” in GST and the “nondeductible VAT” would be the GST payable to government which is equal to GST collected on sales, “output tax,” less GST paid on input, “input tax credit,” and the excess will be remitted to government.⁶

Deductible and Nondeductible Value Added Tax (VAT). It should be note that “deductible VAT” is applied to the VAT payable on firms’ intermediate consumption or gross fixed capital formation. These amounts are deductible from the VAT owed by the firm to the government from its sales. Conversely, the term “nondeductible VAT” applies to the VAT buyers cannot deduct from their own VAT debt to the government. Therefore, VAT paid by households is nondeductible since households are final consumers of the goods while all VAT paid by firms on their purchases is deductible. But there are special cases where firms cannot deduct entirely the VAT on their purchases and are, thus, liable for a small portion of the nondeductible VAT.⁷ An illustration of nondeductible VAT is provided below:

Table 2: Distinction between Deductible and Nondeductible Value Added Tax

Transactions	Producer 1	Producer 2	Producer 3	Household	Total
Gross Output	100	300	700		1,100
Intermediate Consumption	-	100	330		430
Value Added at Basic Price	100	200	370		670
Value Added Tax (VAT)	10	30	70		110
Deductible VAT	-	10	-		10
Nondeductible VAT	10	20	70		100
Value of Sales	110	330	770	770	
Value Added at Producers’ Price/GDP	110	220	440		770
Final Demand				770	770

Production Account	Expenditure Account	
Sum of GVA at basic price	670	
= + Nondeductible VAT	100	
= GVA at basic price + VAT	770	= Value of final demand
		770

GDP = gross domestic product, GVA = gross value added, VAT = value added tax.
Source: United Nations Statistics Division.

⁶ NBC Group. *Malaysian Goods and Services Tax (GST): How GST Affects You?* <http://www.nbc.com.my/gst/faqs-malaysia-goods-and-services-tax-gst/>

⁷ Lequiller, Francois and Derek Blades. 2014. *Understanding National Account*, p. 331. OECD. <https://www.oecd.org/std/UNA-2014.pdf>

⁵ Footnote 2. 10.39–10.40.

The purchasers' price of goods used for intermediate input excludes VAT if the producer is listed among VAT producers, at purchasers' price; if not, producer 3 is not a VAT-registered company. The total VAT from the various flows is equal to the sum of nondeductible VAT. GDP is derived as:

“Mismatching” Trade Data. Effort should be made to investigate and adjust mismatch on imports and exports by looking at alternate data sets. For example, if consumption is higher than production, the discrepancy may be coming from imports through shuttle trade, unrecorded border transactions, or an informal setting. Similarly, adjustments in exports may be made if commodity's output and imports in the country are more than its final consumption. Other suggestions are to investigate country data of trading partner(s) and discrepancies between trade data and BOP data.

Maintenance and Repairs in 2008 SNA draws distinction between regular maintenance and repairs on the one hand, and major repair on the other. Regular maintenance and repairs should be recorded as intermediate consumption, but major repairs undertaken to increase the performance or expected life of an asset should be recorded as GFCF. Software GFCF generally takes one of the following three forms:

- Acquisition of a license to use a software copy for more than a year;
- Acquisition of custom-made software from a software development enterprise; and
- Own-account creation of software.

A repair to software system involves a change in the configuration or code of any program but not the replacement of a part or repairing something that no longer works. Conventional maintenance such as systems checking does not change the characteristics of the software and is treated as intermediate consumption. Changes to software that extend its service life should be generally recorded as GFCF. For

example, modification to software to deal with the Y2K problem (a software problem that could have affected all computers during the shift from 1999 to the year 2000) were an upgrade (involving changes to the code to record years using four digits rather two digits) which extended the expected service life of software and modification to operate on a new operating system, should be recorded as GFCF. Frequent changes to software to accommodate changes to the format of input date are treated as intermediate consumption.⁸

CIF/FOB Adjustment on Imports is required so that imports can be valued at FOB. In the absence of detailed data, estimates can be obtained using the adjustment factors of freight and insurance from the BOP.

Change in Inventories, if derived as residuals in the regular GDP estimates, can also be done for SUT compilation. The change in inventories of each type of good identified in the commodity breakdown is that part of the total supply that cannot be allocated to any other intermediate or final use. Participating economies were encouraged to avoid this, and to make direct estimates of changes in inventories to the extent possible. In most economies, information on stocks of major products, such as important food crops, fuel supplies held by electricity companies, and stocks of strategic goods held by government, are available. Specifically, economies were advised to explore the following data sources:

- Information from industry surveys by taking the share of inventory to total output for large enterprises and applying these ratios to all enterprises;
- Information and reports from public enterprises;
- Financial statements of private corporations, particularly in mining and electricity generation; and

⁸ Organisation for Economic Co-operation and Development. 2010. *Handbook on Deriving Capital Measures of Intellectual Property Products*. p. 105. <http://www.oecd.org/std/na/44312350.pdf>

- Government accounts for stocks of emergency food supplies, fuel, and other “strategic” goods.

Informal Imports are usually captured in the SUT if total Use exceeds total Supply. This implies that informal supply may be missed out on or not fully captured. Comparing supply and demand estimates with official data, such as trade statistics, is one way to capture informal imports. For example, if inputs to saw milling exceed the reported value of forestry production, the discrepancy may be because of unrecorded imports. It must then adjust upward the imports of forestry products.

Merchanting is common in Hong Kong, China; and practiced to a lesser extent in Taipei, China; and other economies.⁹

Transport Margins are the costs incurred for transporting goods from where they are produced to where they arrive as imports to the place where they are acquired by purchasers. The cost paid must also be added to basic values to obtain supply in purchasers’ prices. Transport costs are shown in a column alongside that for trade margins and, like trade margins, transport costs must also be allocated to the various goods listed in the SUT.

The following points should be noted in allocating transport costs:

- As with trade margins, transport costs are incurred only on goods.
- Producers and importers may pay the costs of transporting goods to the purchaser. The SNA recommends that the costs should be included in the basic price, and only the transport charges “invoiced separately to the purchaser” are included in the transport column of the SUT.
- Goods such as scrap and waste, used goods, earth, and similar materials used for construction projects that entail freight/transportation costs are not included in transport margins as these materials are not considered products.
- Transportation services performed by domestic carriers outside the domestic territory are excluded from transport margins; they are considered as export of services.
- When a household purchases goods for final consumption and pays a third party to transport the goods, the transport costs are considered as final consumption expenditure on transport services; and excluded on any trade or transport margin.

An illustration in Table 3 shows how transport margin as vector and row is recorded in both supply and use

Table 3: Transport Margin in Supply and Use Table

Supply Table	Manufacturing	Construction	Wholesale and Retail	Freight	Services	Imports	Trade and Transport Margins	Net Taxes	Total
Manufacturing	200	–	–	–	–	100	75	–	375
Construction	–	70	–	–	–	–	–	–	70
Wholesale and Retail	25	–	40	–	–	–	–65	–	–
Freight	–	–	–	35	–	–	–10	–	25
<i>Distributive goods</i>	–	–	–	10	–	–	–10	–	–
<i>Final consumption</i>	–	–	–	15	–	–	–	–	15
<i>Export</i>	–	–	–	10	–	–	–	–	10
Services	–	–	–	–	35	–	–	–	35
Total	225	70	40	35	35	100	–	–	505

continued on next page

⁹ Merchanting is defined as the purchase of goods by a resident (of the compiling economy) from a nonresident combined with the subsequent resale of the same goods to another nonresident without the goods being present in the compiling economy (BPM 6). An example of merchanting is when Hong Kong, China entity purchases goods from the Philippines for sale in Japan, the goods change economic ownership, but do not physically enter the economy where the owner is resident.

Table 3 continued

Use Table	Manufacturing	Construction	Wholesale and Retail	Freight	Services	Households	Exports	Capital Formation	Total
Manufacturing	100	-	-	25	-	100	50	100	375
Construction	-	-	-	-	-	-	-	70	70
Wholesale and Retail	-	-	-	-	-	-	-	-	-
Freight	-	5	-	-	-	10	10	-	25
<i>Distributive goods</i>	-	-	-	-	-	-	-	-	-
<i>Final consumption</i>	-	5	-	-	-	10	-	-	15
<i>Export</i>	-	-	-	-	-	-	10	-	10
Services	10	-	22	-	3	-	-	-	35
Total	110	5	22	25	3	110	60	170	505
Gross Value Added	115	65	18	10	32				
Total Output	225	70	40	35	35				

Transactions:

- Manufacturer receipts from domestic trader (150) and country A (50); purchase imported materials (100); domestic goods (50); purchase services (10)
- Construction production (70); freight services to transport waste materials to dumpsite (5)
- Trader purchased goods for resale (150); paid delivery fee (10) provided by third party, arranged by manufacturer, separately invoiced; receipts from sale to household (100); cost of goods for resale (60); inputs of services (20)
- Freight forwarder receipts (10) delivery of goods to trader, (5) hauling of waste, (10) from household and (10) trucking of goods to country A; purchase of supplies (25), services (2)

Source: United Nations Statistics Division.

Economy Reports: Data Sources and Methods for Supply and Use Table Compilation

4

A. Introduction

This section describes the experiences during compilation of the supply and use tables (SUTs) of the 19 economies that participated in regional capacity development technical assistance (R-CDTA) 8838. The report of each economy principally authored by designated officials of the respective national implementing agencies (NIAs) provides background information on the current system employed in compiling the national accounts, data sources and estimation methods adopted, key challenges in SUT compilation and the measures taken or proposed to address them. The last section of each report has a brief description on the way forward to continue, improve, and sustain the SUT compilation work.

B. Bangladesh

The Bangladesh Bureau of Statistics (BBS) is a centralized statistical organization. BBS was selected as the national implementing agency to work on the supply and use table for Bangladesh under ADB's RCDTA 8838 project. BBS has seven functional wings headed by the director general. For policy matters, BBS is under the administrative control of the Statistics and Informatics Division (SID), Ministry of Planning.

The broad functions of BBS are to collect, compile, analyze, and publish statistics on all sectors of the economy to cater to the needs of development planning, research, and policy and decision making. BBS oversees the conduct of the Population and Housing Census, Economic Census, Agriculture Census, Census of Establishments, and other

national level surveys in the fields of industry, labor force, demographic situation, agriculture, household income and expenditure, etc. The BBS also compiles and publishes foreign trade statistics and national income accounts, selected social indicators, and socioeconomic information relating to all sectors of the national economy.

To achieve the broad objectives of data collection, field offices were established in all divisional and district headquarters and at all the Upazilas (subdistricts) of the country. Currently, 489 Upazila statistical offices are all over the country, supervised by the deputy director at the district office. The Upazila office is headed by an Upazila statistical officer with two junior statistical assistants and one chairperson. The Upazila Office oversees all activities at field level, including periodic censuses and surveys.

1. Current System of National Accounts

Estimation of national accounts is one of the core activities of the BBS. It has engaged in national accounts compilation and publication since 1972. Statistics on national accounts are regularly published in the *Statistical Yearbook*, *Statistical Pocketbook*, and the *Monthly Statistical Bulletin*.

BBS started compiling gross domestic product (GDP) and other basic national accounts aggregates in collaboration with the Planning Commission. However, after the BBS was restructured, centralized, and revitalized in 1975, the BBS and Planning Commission started computing GDP estimates separately, causing considerable confusion among users of national accounts data. This practice was discontinued following the

recommendation of the joint committee on national accounts in 1988 to designate the BBS as chiefly responsible for national accounts compilation. The committee also recommended to revise the national accounts base fiscal year (FY) 1985, from the previous base FY1973. The country's fiscal year is from July 1 of the previous year to June 30 of the following year (e.g., FY1985 covers parts of 1984 and 1985). These recommendations were accepted and BBS began compiling GDP and other national accounts aggregates following the 1968 SNA framework, taking FY1985 as the base year for constant price estimates.

To further strengthen the national accounts compilation, the government set up the National Income Commission in 1990. The commission recommended various methodological changes and strengthening data generation activities to mitigate data gaps and improve data coverage. Following the commission's recommendation, the BBS launched many surveys and studies during 1993–1995 to improve the database of various sectors and subsectors of the economy, particularly in those sectors with serious data gaps and methodological flaws. With the availability of improved basic data, it was required to review the methodologies of national accounts estimation and its extension to other fields of macroeconomic aggregates. The government then set up a task force in May 1996 to review the national accounts data BBS prepared, including their underlying methodological deficiencies and undercoverage.

Following the recommendations of the task force, BBS revised the base year to FY1996 and completed a draft of the revised national accounts that incorporated significant improvements in the database and methodology. The draft revised and rebased sector estimates, was reviewed by the technical committee on national accounts, and presented in workshops in July 1997 and November 1999. In the workshops, several local and foreign experts gave valuable suggestions for further improvement. To review and finalize the draft revision in the national accounts, the government set up two committees: (i) the international committee (inter-agency mission) led by ADB with representatives from the Financial Institutions Directors' Education Program,

International Monetary Fund (IMF), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and the World Bank; and (ii) the local experts' committee comprising representatives from the Bangladesh Institute of Development Studies (BIDS), the Center on Integrate Rural Development for Asia and the Pacific (CIRDAP), and the universities of Chittagong, Dhaka, and Rajshahi. The committees extensively reviewed the draft revised estimates and recommended publication with a few minor adjustments. The revised compilations include adjustments recommended by the two review committees (experts' committee) and regarded adjusted estimates of national accounts tables and data as final.

The experts' committee examined the revised estimates and recommended its adoption with FY1995–1996 as a base year for compilation of constant price estimates and growth rates. The BBS revised the GDP estimates using the production approach from FY1990 to FY2000, using the new database developed from various censuses, surveys, and pilot and case studies conducted during FY1988 to FY1996. The data available from these sources were progressively incorporated in GDP estimates to increase and improve coverage. Estimates of GDP by expenditure category (GDE) were also revised in coverage and methodology.

a. Recent National Accounts

The International Standard Industrial Classification of All Economic Activities (ISIC) Revision 3.0 was adopted in revisions of national accounts as recommended by the 1993 SNA. In the revised estimates, GDP has been classified into 15 main ISIC sectors:

Prior to this revision, the BBS used 11 sectors for GDP estimates by production method following the 1968 SNA. Methodological improvements carried out in the new series relate to revised estimation procedures for the agriculture sector (particularly on crops), electricity, gas and water supply, value added estimation of small-scale manufacturing, hotel and restaurant sectors, and private final consumption expenditure. The production data of the crop subsector, particularly rice, vegetables, and

Table 4: Industry Origin and Sector Activity

Sector	Subsector
1 Agriculture and Forestry	Crops and horticulture Animal farming Forest and related services
2 Fishing	
3 Mining and Quarrying	Natural gas and crude petroleum Other mining and quarrying
4 Manufacturing	Large and medium scale Small scale
5 Electricity, Gas, and Water Supply	Electricity Gas Water
6 Construction	
7 Wholesale and Retail Trade	
8 Hotel and Restaurants	
9 Transport, Storage, and Communication	Land transport Water transport Air transport Support transport services and storage Post and telecommunications
10 Financial Intermediations	Monetary intermediation Insurance Other financial intermediation
11 Real Estate, Renting, and Business Activities	
12 Public Administration and Defense	
13 Education	
14 Health and Social Work	
15 Community, Social, and Personal Services	

Source: Bangladesh Bureau of Statistics.

fish productions, were reconciled and adjusted with the HES data. In most cases, upward adjustments were made.

Due to the lack of data and other resource constraints, the national accounts compilation by the BBS is largely confined to estimation of GDP production and expenditure approaches. GDP by the production approach is more detailed and provides gross value added (GVA) by the major ISIC categories. The estimates of GDP by expenditure approach are less elaborate. GDP is compiled in both current and constant prices for basic aggregates of private (household) and public consumption, gross fixed capital formation by public and private sectors, and exports and imports. Estimates of GDP by income approach of compensation of employees (COE), consumption of fixed capital (CFC), indirect taxes net of subsidies (NIT) and operating surplus (OS) are not compiled due to various data limitations.

The BBS is currently working toward a step-by-step adoption of the 1996 System of National Accounts

(SNA), and the 2008 SNA; and is assisted by a technical assistance (TA) project financed by ADB. To develop a national accounts framework based on SNA, the BBS collected data on selected segments relating to the five institutional sectors of SNA: (i) nonfinancial corporations (NFC) sector; (ii) financial corporations (FC) sector; (iii) general government (GG) sector; (iv) nonprofit institutions serving households (NPISH) sector; and (v) household sector (HS).

The SUT and external sector accounts or the rest of the world accounts for Bangladesh based on the 1993 SNA framework are under development. Recently, the BBS compiled an institutional sector account of Bangladesh for 2010–2011 under a government-funded program. The first SUT compiled by the BBS is for FY2006 under the guidelines of ADB (RETA 6483).

b. Current Rebasing

The BBS revised and rebased GDP from base FY1996 to FY2006 recently.

The revision and rebasing of national accounts to FY2006 was a huge exercise in preparation for the switching of base year to FY2010–2011 as a full-fledged revision without involving any budget allocation. In this activity, the IMF provided a long-term consultant for TA to guide the revision and rebasing activity. Besides this, a technical committee examined the revised estimates and recommended its adoption with 2005–2006 as the base year for compilation of constant price estimates and growth rates.

The revision was made following the 1993 SNA framework with some recommendations from the 2008 SNA. In the revised estimates, GDP was classified into 15 main ISIC sectors with a provision to switch over to 21 sectors subsequently.

c. The 2010–2011 Supply and Use Table at Current Price

This was the second-round effort of the BBS to compile the SUT funded by ADB's RCDTA 8838. The reference year of the SUT was 2010–2011 because of the availability of surveys in the year such as the Survey of Manufacturing Industries (SMI), Household Income and Expenditure Survey (HIES), and Labor Force Survey (LFS). The SUT matrix size compiled was 74 x 51, i.e., 74 rows for CPC groups and 51 columns for ISIC groups. Published data of the national accounts for output were unchanged in the SUT while there were changes in the final consumption due to volume and pattern. Also, the import figure was adjusted to include shuttle trade. The coefficients of intermediate consumption from the existing input–output table (IOT) were used to estimate intermediate consumption in the SUT.

The classifications adopted were ISIC Revision 4.0 for industries, CPC Version 2 for products, Classification of the Functions of Government (COFOG) for government consumption expenditure, and the Harmonized System (HS) for imports and exports. The published GDP in producers' price was converted to basic prices by deducting taxes net of product subsidies from the producers' prices for the SUT.

2. Data Sources and Estimation Methodology

a. Supply Side

Domestic Production Output was measured by the production approach at producers' prices in the annual national accounts. The economy was divided into 15 mutually exclusive industries or activities. For the SUT, the published output and GVA were further disaggregated into 51 ISIC activities and 74 CPC product groups.

Imports of Goods and Services and Cost, Insurance, and Freight/Free on Board (CIF/FOB) Adjustment data were supplied by the Bangladesh Bank. Imports were valued at FOB prices; hence, CIF/FOB adjustment was not required. The data on imports of goods was available at four-digit HS classifications, which were then converted to 74 CPC product groups using concordance tables.

Transport Costs and Trade Margins were based on estimates of the output of the transport and trade sectors. For estimating transport margins, total transport output was broken down into two parts: (i) margin originating from freight carrier included in the commodity, and (ii) passenger transport margin included in household final consumption. Product level trade margins were estimated using coefficient of trade margin derived from the 1992–1993 IOT compiled by CIRDAP and the 1993–1994 IOT compiled by BIDS. Furthermore, it was validated from the Wholesale and Retail Trade Survey 2009–2010.

Taxes Less Subsidies on Products were collected from the National Board of Revenue (NBR) and the Ministry of Finance. The tax data was used to convert output at basic prices to purchasers' prices, at the product level. Disaggregated information on subsidies by ISIC or CPC was not available from the source agencies.

b. Use Side

Intermediate Consumption in the annual national accounts was estimated using the results from different surveys and administrative

reports. For the SUT, the estimates were further disaggregated into activity or product levels, using coefficients from the existing IOT.

Household Consumption Expenditure estimates were obtained through the commodity flow approach supplemented by detailed data from the HIES. Adjustments were made by considering domestic production, imports, and exports.

General Government Consumption Expenditure data was derived from government budgets and the budgets of the local authorities. The data covered current expenditures on goods and services by central government departments not engaged in trading activities. Government final consumption expenditure (GFCE) was computed as the sum of COE, purchase of goods and services, and CFC.

Consumption Expenditure of Nonprofit Institution Serving Households was estimated using the results from survey of nonprofit institutions conducted in FY1995–1996 and FY2005–2006.

Gross Fixed Capital Formation aggregates for the economy were based on the commodity flow approach. This approach uses the net availability of capital goods in value terms from domestic production and net imports adjusted for various margins. The estimates of gross fixed capital formation (GFCF) for the public sector were based on government budget documents and data collected through questionnaires. Private sector GFCF was estimated as a residual by deducting public sector GFCF from the aggregate estimates of GFCF derived through commodity flow methods.

Changes in Inventories were based on published data on food balance by the Ministry of Food and the results of the Survey of Manufacturing Industries. The data was estimated product-wise.

Acquisition less Disposal of Valuables information was not available.

Exports of Goods and Services data was from the NBR, Export Promotion Bureau (EPB), and

Bangladesh Bank. The data on exports of goods was available at four-digit HS classification, and then converted to 74 product groups.

c. Value Added

Compensation and Employment Size were independently obtained from different sources such as national accounts publications, agriculture statistics (BBS), Petrobangla (Bangladesh Petroleum Corporation), SMI, administrative data, Power Development Board (PDB), Water and Sewerage Authority (WASA), Bangladesh Road Transport Authority (BRTA), Bangladesh Inland Water Transport Authority (BIWTA), Biman Bangladesh Airlines, Bangladesh Road Transport Corporation (BTRC), port authorities, the Central Bank, commercial banks, insurance companies, government budgets documents, different surveys and census reports, and the Labor Force Survey 2010.

Taxes Less Subsidies on Production data was collected from the NBR by activity. However, data on detailed subsidies was not available.

Depreciation or CFC was from the national accounts.

Operating Surplus was obtained as a residual by deducting the components of value added from the total GVA in basic prices.

d. Data Sources and Methods

The principal data sources for the compilation of SUT were national accounts publications, Agriculture Statistics Wing of BBS, Petrobangla, SMI, administrative data, PDB, WASA, Bangladesh Road Transport Authority, Bangladesh Inland Water Transport Authority, Biman Bangladesh Airlines, Bangladesh Telecommunication Regulatory Commission, port authorities, the Central Bank, commercial banks, insurance companies, government budgets document, different surveys and census reports, the Labor Force Survey 2005–2006; and the BBS Field Office.

3. Balancing Process

The manual process was adopted in balancing the SUT. The expenditure components of consumption, import, and export were rechecked at the product level and considered unrecorded imports. In addition, the consumption pattern presented in the annual national accounts was revised due to the adoption of HES data and commodity flow methods. Further, the intermediate consumption structure was also revised due to the use of coefficients from the IOTs and the results of agriculture input surveys.

4. Meeting the Challenges

In practice, the national statistics offices (NSOs) are mandated to compile IOTs and SUTs. The BBS as NSO was never assigned to compile IOTs for several reasons, though most of the data needed to compile IOT was from the National Accounting Wing of the BBS. As a major supplier of data, the BBS can take the lead to compile SUTs and appreciates ADB's initiative through RCDTA 8838 in building the capacity of NSOs that enabled the BBS to construct SUTs on its own. The BBS has immensely benefited from RETA 8838 and will definitely attempt to compile SUTs independently, and to integrate it into the regular national accounts compilation in the future.

5. Main Results and Findings

Developing a SUT for FY2010–2011 was the BBS' second attempt of its kind. The first was for FY2005–2006, containing 51 CPC and 32 ISIC groups. The updated SUT for FY2010–2011 consists of 74 CPC groups and 51 ISIC groups.

a. Supply Side

- Published output data remained unchanged in the SUT for 2010–2011, while final consumption changed in volume and pattern. Also, the import figure was adjusted in the SUT because shuttle trade was included.
- In CPC classification across the rows, rubber and rubber products (e.g., tires, tubes, other rubber products, etc.), plastic and plastic

products (e.g., PVC products, plastic goods and furniture, etc.), and glass and glass products, etc., were classified under CPC Row 42 “Glass and glass products.”

- Import data of the four-digit level were analyzed to reclassify into 74 CPC groups. Data on import of goods supplied by Bangladesh Bank is at FOB price. Therefore, no further FOB adjustment was made for the SUT.
- The trade margin was estimated depending on the coefficient of trade margin derived from available IOTs and updated based on information from the trade survey conducted by BBS.
- Data on tax collection by commodity from the NBR and Ministry of Finance were used to estimate supply at purchasers' price. Desegregated subsidy by ISIC or CPC is not available so far.

b. Use Side

- Intermediate consumption was estimated in national accounts, using data from different surveys and administrative reports. These estimates were further divided into groups of SUTs using coefficients of existing IOTs.
- The estimates of private consumption expenditure were obtained through the commodity flow approach, supplemented by data of Household Income and Expenditure Survey. Adjustments were made by considering the domestic production, import, and export.
- GFCE was derived from government budgets and the budgets of the local bodies. It relates to current expenditures on goods and services by central government departments not engaged in trading activities. GFCE was computed as the sum of COE and purchase of goods and services, and estimated CFC.
- Consumption of nonprofit institutions serving household was estimated using the survey report on NPIs.

- Estimates of the aggregate GFCF for the economy were based on the commodity flow approach. Data on capital assets acquired by the central government, government NPIs, autonomous bodies, etc. were from the respective budgets. Private sector GFCF was estimated residually by deducting public sector GFCF from the estimated aggregate.
- Change in inventory was estimated using published data on food balance, Ministry of Food, and the SMI.
- Information on acquisition less disposal of valuables is not available so far.
- Information of export of goods and services was from the NBR, Export Promotion Bureau (EPB), and Bangladesh Bank. Four-digit level export data are analyzed to reclassify into 74 CPC groups.

c. Value Added

- Employment size and wages and salaries were independently obtained from different sources such as national accounts publications, agriculture statistics from the BBS, the Labor Force Survey 2010, and SMI 2012 conducted by BBS. Also government budget documents and administrative data from different organizations were used for this purpose.
- Tax data was collected from the NBR by activity. Subsidy data by sector was not available.
- Depreciation was from national accounts publications.
- Operating surplus or mixed income was obtained residually.

6. The Way Forward

The SUT is yet to be integrated in regular national accounts compilation of the BBS. The officials of national accounts are involved in such a venture for the first time. Hence, it will take longer to be integrated in the compilation of national accounts.

The administrative controlling agency, i.e., the Statistics division, is keen on integrating the SUT in the upcoming revision and rebasing of national accounts. ADB can extend its help for this, especially to train the BBS' national accounts statisticians.

C. Bhutan

The National Statistics Bureau (NSB) is an autonomous agency under the chairmanship of the Prime Minister, empowered by an executive order to collect, compile, and disseminate official statistics. The NSB is the implementing agency for RCDTA 8838, the second phase of the ADB Supply and Use (SUT) Project.

The National Accounts and Price Division (NAPD) of the NSB is responsible for compiling the national accounts and price statistics. The NAPD constructed the SUT for the RCDTA 8838 project. The division is headed by the chief statistical officer with 10 staff (five in price statistics and five in national accounts). Currently the division publishes the *Annual National Accounts Statistics*, *Electricity Accounts*, *Monthly Consumer Price Index*, *Quarterly Producer Price Index*, among others. The division is also in the process of compiling quarterly national accounts (QNA) estimates, and construction material price indices.

1. Current System of National Accounts

The first attempt to compile and estimate the national accounts in Bhutan was in 1981 when the Fifth Five-Year Plan of the country was being formulated. GDP for 1 year, in 1980 prices by economic activity, was estimated and used for the national planning and policy formulation. It was only in 1987 that Bhutan adopted the 1968 SNA with the technical support from the United Nations Development Programme. It has been publishing annual GDP time series with 1980 as the base year.

Major revisions were done in the national accounts estimation in 2004. The revision entailed implementation of 1993 SNA recommendations. Among many others, allocation of FISIM by different industries, valuation of GDP at basic prices and market prices, changing the base year from 1980 to

2000, and adoption of the ISIC Revision 3.1 were some of the significant revisions supported by the TA from ADB.

While concerted efforts were made over the years to improve the estimation methodology and data coverage, some data gaps still exist, largely due to the lack of surveys.

Bhutan adopted both production and expenditure approaches to estimate annual GDP. The differences between the two sets of GDP estimates are reflected as statistical discrepancies.

To comply with the 2008 SNA, challenges faced by the NAPD included the lack of technical expertise, data availability, lack of adequate skills and knowledge, and financial resources.

2. Supply and Use Framework

The compilation of SUTs, under ADB project RCDTA 8838, was the second of its kind for the NSB to undertake in Bhutan. The year 2014 was chosen as the reference year for the SUT, mainly because of the availability of more recent data, such as the Bhutan Living Standard Survey (BLSS) and other administrative records.

To maintain comparability with the last published SUT, the matrix size adopted in the current SUT was the same as the 2007 SUT, i.e., 33 industries by 51 commodities. To maintain consistency between the SUT and the published annual national accounts report, 2014 annual published figures were used as the control figures for the SUT.

The industrial classification used for the 2014 SUT by activity was based on the ISIC Revision 4 as against the ISIC Revision 3.1 in 2007 SUT. The CPC Version 2 was used for products, Classification of Individual Consumption According to Purpose (COICOP) for private final consumption expenditure, and HS classification for the exports and imports.

3. Data Sources and Methods

Administrative records such as annual audited reports of an establishment, and censuses and surveys were the main source of data for the compilation of SUTs. Small case studies were also undertaken to supplement the available data.

a. Supply Side

Domestic Production was estimated mainly using administrative records, which include the annual audited financial statements of companies. The production approach was essentially adopted to compile the supply matrix, although in selected cases it was necessary to adopt the commodity flow method.

Import of Goods and Services and CIF/FOB Adjustment estimates were from the balance of payments (BOP) statistics, which also include information on informal trade with neighboring economies. Since the BOP provided figures only at the aggregated level, the data on imports of goods from the trade statistics at the basic HS heading level from custom authorities was compiled and ratios were derived to distribute the control aggregated figures of BOP. This was then matched to CPC using the bridge table. On the other hand, data on imports of services was compiled as reported in the BOP statistics and linked to the CPC classification. Both exports and imports data was valued at FOB values in BOP, hence, no need for any CIF/FOB adjustment.

Valuation Adjustments

Trade and Transport Margin (TTM) survey was not conducted in Bhutan. To fill the data gap, trade margins at the product level were calculated using the trade margin ratios of India, but customized to the Bhutanese context, and supplemented and corroborated through case studies. For the product-level transport costs, information available on

“expenditure on freight transportation” in the audited reports of companies was used to compute ratios. Since Bhutan does not have information on TTM, the 2014 SUT assumed the same trade margins as in the 2007 SUT.

About the transport margin, information from the companies audited reports—expenditure on freight transportation—was compiled to compute the ratios and accordingly distributed as per the CPC product list.

Taxes Less Subsidies on Products by CPC products in Bhutan data was not available. Hence, tax data at the aggregate level was distributed by CPC list as a proportion to the total taxes paid by the companies.

b. Use Side

Intermediate Consumption was estimated from the annual reports of the companies and other administrative records. In the absence of a detailed breakdown of intermediate consumption data, the input structures of similar major companies were used to get the detailed breakdown of the intermediate consumption.

Household Consumption Expenditure was estimated using BLSS 2012 since no survey was conducted in 2014.

General Government Consumption Expenditure data was compiled from the annual expenditure statements of the government. The government expenditure in Bhutan was not compiled based on the COFOG; the entire government expenditure was classified as collective consumption (against the public administration row) and individual consumption (against the education and health product rows) consumption in the use table.

Gross Domestic Capital Formation estimates were derived from the annual reports of companies and the Annual Trade Statistics for imports of machinery and equipment.

Changes in Inventories were derived as a residual item in the SUT compilation.

Export of Goods and Services was compiled using a similar approach to that of the import of goods and services.

4. Balancing Process

The balancing approach was done manually. Since the supply side has better information than the use side, total supply was used as the control total for balancing. In the use side, the main adjustments were made in the private final consumption and in the inventory.

5. Main Results and Findings

a. Supply Side

In 2014, the economy had a total supply of goods and services worth ngultrum (Nu)270,419 million, of which the highest share of 72% was from industry-related products; followed by the service sector with 20%; and agriculture, forestry, and livestock-related products with 8%.

Domestic output (supply) made up 74% of the total supply, and 26% was from imports from the rest of the world.

Within the total domestic supply, 56% of the total supply was from the industry sector; 35% from service-related supply; and agriculture, forestry, and livestock sector-related products constituted only 8% of the total domestic supply.

From the total import of goods and services of Nu68,545 million, industry sector-related products had the highest share of imports with 83% and the service sector-related imports had 12%. Agriculture, forestry, and livestock had the smallest share with only 5%.

b. Use Side

The Use side of the SUT shows that 30% of the total supply was used as intermediate goods and services, 26% as capital goods, and 21% as household final consumption goods and services. The remaining 16% of goods and services supplied

Table 5: Share of Total Domestic Production and Total Supply, 2014
(%)

Supply	Domestic Production				Total Supply at Basic Prices				
	Agriculture	Industry	Services	Domestic Output	Domestic Output	Imports of Goods and Services	Total Supply at Basic Prices	Trade and Transport Margins	Tax Less Subsidies on Products
Agriculture	100	-	-	100	83	17	100	13	1
Industry	-	100	-	100	66	34	100	13	3
Services	-	-	100	100	89	11	100	-31	1
Total	8	56	35	100	74	26	100	-	2

- = magnitude equals zero.

Source: National Statistics Bureau, Bhutan.

in the economy was exported to the rest of the world. The table below shows the composition of Total Use.

Within the intermediate consumption of goods and services, 72% was industry-related products, and 8%, agriculture sector-related produced products. The 20% of the total supply of services was for intermediate consumption.

While intermediate consumption by major industry shows only 2% of the total intermediate consumption used by the agriculture, forestry, and livestock sector, 29% was used by the service sector. The industry sector is the major user of total intermediate goods and services.

Household final consumption comprises 57% industry-related products, 26% agriculture-related products, and 17% service sector-related products.

The total export was estimated to be Nu43,377 million, of which 76% is industry sector-related products, 18% service sector-related products, and 16% agriculture products.

6. Meeting the Challenges

Although the NSB had the necessary technical experience in compiling SUTs through the execution of the previous SUT project, RETA 6483, compilation of the 2014 SUT was not free from challenges. With constant guidance and feedback from ADB, filling the data gaps was the main challenge the NAPD experienced as well as not having enough staff with technical expertise to compile the SUT. Further, Bhutan has a large informal sector for which detailed information was not available. Majority of these challenges were addressed through periodic sector-specific consultation, small case studies, and with technical support from the ADB SUT team.

7. The Way Forward

With the experience and knowledge gained from ADB's periodic initiation of the SUT project, the NAPD of NSB would like to integrate the SUT framework in the regular annual national accounts compilation in the coming years. Compilation of the SUT with more detailed disaggregation by industries and products will be the priority in the next compilation of SUTs.

Table 6: Composition of Total Use, 2014
(%)

Use	Intermediate Consumption	Household Consumption	Government Consumption	Gross Capital Formation	Export of Goods and Services	Use at Purchasers prices
Agriculture	31	64	-	-5	11	100
Industry	30	16	-	36	17	100
Services	30	17	37	1	15	100
Total	30	21	7	26	16	100

- = magnitude equals zero.

Source: National Statistics Bureau, Bhutan.

D. Brunei Darussalam

The Department of Statistics (DOS) under the Department of Economic Planning and Development (JPKE) compiled the SUTs and IOT for Brunei Darussalam for the reference year 2010. The first SUT and IOT for Brunei Darussalam were compiled for the reference year 2005. In 2013, the second SUT and IOT for the reference year 2010 was compiled to provide new benchmark estimates of GDP for 2010 and to provide an updated IOT to facilitate a comprehensive economy. The compilation, applications, and impact analysis were prepared per the guidelines and framework outlined in the 1993 SNA and 2008 *Eurostat Manual of Supply, Use and Input-Output Tables*.¹¹

1. The Current System of National Accounts

The 2000-based series of national accounts for Brunei Darussalam was replaced with the new 2010-base year following the recommendation of the 2008 SNA. The new national accounts series was compiled using the results from the SUT for the benchmark year 2010, which produced consistent GDP estimates using the production, expenditure, and income approach. GDP by income approach and other macroeconomic aggregates of gross national income (GNI) and gross national saving (GNS) were compiled for the first time in the new series.

The SUT was compiled to provide consistency to the national accounts while the corresponding IOT was used for economic analysis. The compiled tables provide information on the supply and use of products (goods and services) for 46 industries and five categories of final uses showing consumption, capital formation, and exports. The SUT also provided information on the generation of income in 46 industries with a distinction of four components of value added: COE, other taxes on production, consumption of fixed capital, and net operating surplus.

¹¹ European Commission. *Manual of Supply, Use and Input-Output Tables, 2008*. Luxembourg. http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-RA-07-013

2. Supply and Use Framework

The year 2010 was chosen as the reference to construct the SUT because of the availability of more statistical information from census, surveys, and other statistics.

Classifications of the IOT System. The 2010 SUT was compiled at the most detailed level of classification. Brunei Darussalam's Standard Industrial Classification (BDSIC) 2007, based on the latest version of ISIC Revision 4, was used. Meanwhile, for the classification of products, the new Brunei Darussalam's Product Classification (BDPC) 2009 was established, which is equivalent to the latest CPC Version 2 of the UN.

a. Supply Side

The supply table shows the supply of goods and services by type of product of an economy for a given period. It distinguishes between the output of domestic industries and imports. The valuation matrices for trade and transport margins and taxes less subsidies on products allow a transformation of supply from basic prices to purchasers' prices.

The supply table (Table 7) contains three important matrices: (i) production matrix, (ii) import matrix, and (iii) valuation matrix.

The production matrix reflects the main and secondary production activities of industries. The diagonal entries of the matrix always show a higher value, as they show the main products produced by that industry. However, it is also common for industries to be engaged in the production of secondary products and their values are recorded in the off-diagonal entries in the matrix.

Table 7 provides information on domestic output (column 6), imports (column 7), and total supply of products at basic prices (column 8). The supply table also includes valuation matrices for trade and transport margins (column 9) and taxes less subsidies on products (column 10). This information is used for the transformation of values at basic prices into purchasers' prices. In the last row of the supply

Table 7: Supply at Basic Prices, including Transformation into Purchasers' Prices

Products \ Industry	Output of Industries					Domestic Output at Basic Prices	Imports	Supply at Basic Prices	Valuation		Supply at Purchasers' Price
	Agriculture	Mining	Industry	Construction	Services				Trade and Transport Margins	Taxes Less Subsidies on Products	
	1	2	3	4	5				9	10	
1 Products of Agriculture											
2 Products of Mining											
3 Product of Industries											
4 Construction Works											
5 Services											
6 Total											

■ Primary activity, ■ Secondary activity

Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

table (row 6), domestic output of industries is reported, while in the last column of the supply table (column 11), total supply of products at purchasers' prices is shown.

b. Use Side

The use table shows the use of goods and services by product and by type of use for intermediate consumption by industry, final consumption expenditure, gross capital formation, or exports. The use table also shows the components of GVA by industry for COE, other taxes less subsidies on production, consumption of fixed capital, and net operating surplus.

The use table has two main objectives. Firstly, it reveals by column the input structure of each

industry. Secondly, it describes in the rows, the use of different products and primary inputs (labor and capital).

The use table (Table 8) contains three important matrices: (i) intermediate consumption at purchasers' prices (Quadrant 1), (ii) final uses at purchasers' prices (Quadrant 2), and (iii) value added at basic prices (Quadrant 3).

The final use matrix includes the values of the products absorbed by the various categories of final use such as household final consumption expenditure (HFCE), government final consumption expenditure (GFCE), gross fixed capital formation (GFCF), change in inventories (CII) (Total of GFCF and CII is known as gross capital formation or GCF) and exports of goods and services. The final

Table 8: Use Table at Purchasers' Prices

Products \ Industry	Output of Industries					Total	Final Use				Use at Purchasers' Price
	Agriculture	Mining	Industry	Construction	Services		Private Consumption	Government Consumption	Investments	Exports	
	1	2	3	4	5		7	8	9	10	
1 Products of Agriculture	<i>Intermediate Consumption at Purchasers' Prices</i> I						<i>Final Use at Purchasers' Prices</i> II				
2 Products of Mining											
3 Product of Industries											
4 Construction Works	<i>Value Added at Basic Prices</i> III										
5 Services											
6 Total											
7 Salaries											
8 Operating Surplus											
9 Value Added											
10 Output at Basic Prices											

Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

use minus the imports of goods and services, also referred to as final demand, represents the GDP.

The value-added matrix shows the costs of each industry in primary inputs, such as COE, other net taxes on production, consumption of fixed capital, and net operating surplus.

c. Symmetric Input–Output Table

The IOT is constructed as symmetric matrices, containing four submatrices. They were derived from the SUT for analytical purposes. These symmetric matrices can be compiled as industry-by-industry tables or product-by-product tables. The product-by-product IOT reflects products in rows and homogeneous branches in columns, and the industry-by-industry IOT represents product inputs from industries in rows and industries in columns. The symmetric tables used in the applications of IOT in this compendium are product-by-product tables.

To transform the SUT into an IOT, the models used are based on technology assumptions and the fixed sales structure assumptions. The technology assumption models will generate product-by-product IOTs, and the fixed sales structure assumption models will result in industry-by-industry IOTs.

d. Valuations

Three ways of valuation are applied for domestically produced goods and services: basic prices, producers' prices, and purchasers' prices.

In Brunei Darussalam, the valuation of all inputs and outputs is at basic price defined as the amount receivable by the producer for a unit of good or service minus any tax payable plus any subsidy receivable on the product. The taxes less subsidies on products only comprise import duties. No other taxes are levied on products.

3. Data Sources and Methods

The main sources for the compilation of the SUT for Brunei Darussalam were census data, collected every 10 years (Population and Housing Census) or 5 years (Economic Census); HES and Labor

Force Survey; annual and quarterly data from administrative sources, and surveys compiled regularly by the JPKE.

The main data sources included census data, the Population and Housing Census 2011; *Economic Census of Business Enterprises 2011*¹²; annual and quarterly data; Quarterly Survey of Businesses; External Trade Statistics, 2010; Balance of Payments, 2010; oil and gas data; government accounts; consumer price index; import and export price index; HES, 2010–2011; Labor Force Survey, 2008; and Economic Input–Output 2009.

a. Supply Side

The compilation of the supply table can be divided into two parts. The first part focuses on compilation of the domestic production matrix. Relevant data sources at this stage were the *Economic Census Business Enterprises 2011*, Treasury Accounting Financial Information System (TAFIS) of the government, and other administrative sources. Incorporation of all information into the production matrix framework provided the gross value added at basic prices of industries in the columns, and the gross domestic output at basic prices of products in the rows.

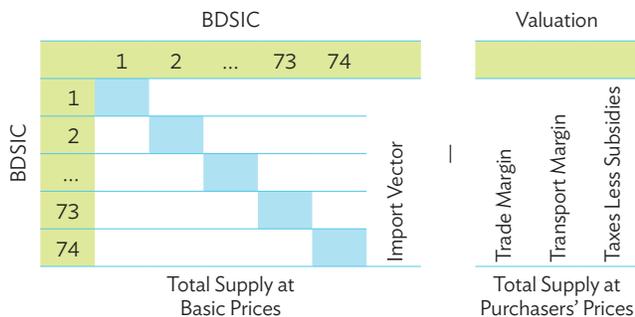
Based on the 2010 external trade statistics and 2010 BOP statistics, an import vector of products was generated for the SUT sectors. The import vector yields, in this context, the total supply at basic prices.

The second part concentrates on the compilation of the valuation matrix to transform into purchasers' prices. Therefore, firstly, the valuation matrix contains information on trade margins of private companies from the *Economic Census Business Enterprises 2011*, i.e., trade margins of wholesale and retail trade of motor vehicles and motorcycles, and trade margins of wholesale and retail trade services, except motor vehicles and motorcycles.

¹² Department of Economic Planning and Development. 2013. *Economic Census of Business Enterprises 2011*. Brunei Darussalam. <http://www.depd.gov.bn/DEPD%20Documents%20Library/DOS/Economic%20Census/2011/final%20report/FINAL%20REPORT%20BE%202011.pdf>

Moreover, information on transport margins of land transport services and transport services via pipelines, water transport services and air, and other transport services was required. Lastly, a vector for taxes less subsidies on products was added to the system. This procedure is illustrated in Figure 1.

Figure 1: Compilation of the Supply Table at Basic and Purchasers' Prices



BDSIC = Brunei Darussalam Standard Industry Classification.
Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

Domestic Production by Industry data was from the *Economic Census Business Enterprises 2011* (ECBE 2011), TAFIS data, and other administrative sources. The explanation on sources and methods for domestic production is as follows:

Agriculture, Forestry, and Fishery Sector's main data source for estimating the output was from government departments under the Ministry of Industry and Primary Resources.

The main data source for estimating the output of agricultural crops was the Department of Agriculture and Agrifood (DAA). The DAA provided the quantities of production, producer price, quantities of imports, and CIF values of imports of crops and livestock products; the Department of Forestry provided data for forestry products; and the Department of Fishery for fishery

data. The valuation was assumed to be at basic price valuation. For crops for which wholesale prices were not available, the data on retail and CIF values of imports was used to arrive at the basic price, as follows:

Mining and Quarrying Sector and Manufacturing Sector's

main data source for estimating the output of activities covered under this industry was the EC 2011 for the base year 2010. The information received was comprehensive with detailed value of production by commodities.

Construction Sector estimates of value of output at basic prices, were computed based on information available in the EC 2011.

Trade; Transport, and Storage; Accommodation and Food Services; Information and Communication; and Business Services Sector

were combined since the data sources and method of estimation were the same. The main data source for estimating the output of activities covered under these industries was the ECBE 2011 for the base year 2010.

Finance Sector consists of commercial banks, insurance, and other financial institutions. The data sources for estimating output of activities were (i) ECBE 2011, (ii) annual accounts of individual banks, and (iii) consolidated financial information of all banks from the Authority Monetary of Brunei Darussalam (AMBD). The data on distribution of loans by type of businesses and households is available in the AMBD's *Monthly Statistical Bulletin*, which was the source for allocating FISIM to user industries and final users. Also, used in the allocation of FISIM to users was the information on interest payments and receipts available in the ECBE 2011, and HES, 2010–2011.

$$\text{Basic Price of Crop} = \text{Retail Price of Domestic Production} \times \frac{\text{CIF Price of Imports}}{\text{Retail Price of Imports}}$$

For 2010, estimates of output of banks were prepared using the ECBE 2011 data and the consolidated financial information on banks from the AMBD. Both sets of data were consistent with each other. However, more detailed data was available in the ECBE 2011.

Gross value of output of banks is the sum of FISIM and explicit charges. FISIM was estimated as interest earned from loans minus interest paid on deposits. Due to the large differences in interest rates of deposits and loans and in the total deposits and total loans, the reference rate method recommended in the SNA was not adopted. Experimental calculations made using the published accounts of banks to compile FISIM through the reference rate method showed very high FISIM due to significant differences between average lending and deposit rates and between total loans and total deposits. Therefore, FISIM estimates were not compiled using the reference rate method. The other operating income shown in AMBD data and the ECBE 2011, were taken as explicit charges.

$$\text{Gross output} = \text{FISIM} + \text{Other Operating Income}$$

$$\text{FISIM} = \text{Interest/Profits Income} - \text{Interest/Profits Expense}$$

For allocating FISIM to user industries and final users, monthly and quarterly data on loans and advances to businesses and households available in the *Monthly Statistical Bulletin* of AMBD was used. Data was only available for broad categories of businesses. FISIM was initially allocated to these broad categories of businesses and households. For further allocating FISIM of these broad categories of businesses to 46 industry groups, data available on interest payments and receipts from the ECBE 2011 by businesses; and HES 2011 by households, was used.

Gross value of output of insurance was estimated indirectly as the sum of earned premiums and investment income minus the sum of claims incurred and increase in technical reserves. For allocating

output of insurance services to user industries and final users, data available on insurance premium payments from the ECBE 2011 by businesses; and HES 2011 by households, was used.

Owner Occupied Dwellings and Domestic Services Sector's

data sources for estimating output of activities were the HES 2010–2011 on expenditures under these two items, and Population Census, 2011 for number of households and number of occupied dwellings in the country.

Public Administration and Defense; and Compulsory Social Security Sector's

key data source was the budgetary central government in Brunei Darussalam. Data was available in the TAFIS for revenue and expenditures. Revenues were classified into categories, while expenditures were broken down into current and capital outlays, broadly under the accounts of charged, development, and ordinary expenditures.

The summary data of government budget under broad categories of revenue and expenditures (only totals of charged and development accounts, but for the ordinary account, under three broad categories of personnel emoluments, other current charges annually recurrent [OCAR], and other charges special expenditures [OCSE]) was disseminated through several published documents. However, the detailed item level information on revenues and expenditure was available only in the TAFIS. In addition to the budgetary government units, general government also includes statutory bodies in the national accounts.

Government output was estimated on cost basis, since government services are provided to individuals and the community either free or on a nonmarket basis at economically insignificant prices.

Health and Education Sector falls under both government and private sectors. For the private sector, the main data source for estimating the output of activities covered under these industries was the ECBE 2011, for the base year 2010. The

data sources for the government part were (i) by-department detailed data on expenditures from the Ministry of Finance under development expenditure, (ii) by-department data on aggregated expenditure from the Ministry of Finance under the categories of salaries and wages, OCAR, and OCSE (which are under ordinary expenditure), and (iii) expenditures of statutory bodies engaged in these activities.

Imports of Goods and Services data was from the International Merchandise Trade Statistics, based on information from the Royal Customs and Excise Department of the Ministry of Finance through customs declarations. Since 2004, commodity items are reported according to the Brunei Darussalam Trade Classification and Customs Duties 2004. For the publication of trade statistics, commodity data is reported on import and export declarations which are converted to the Standard International Trade Classification Revision 3 (SITC Rev. 3) of the UN. This classification is more suitable for statistical purposes and economic analysis. Imports were valued on a CIF basis, i.e., the value at arrival including the costs of goods, insurance, freight, handling and other charges. Customs duty was not included. For imports of services, the data source was the Department of Statistics responsible for compiling the BOP based on information from the Ministry of Finance.

Trade and Transport Margin was added to ex-producer prices for each commodity to arrive at

purchasers' prices. The total of these additions was treated as deliveries from the "distributive trades" industry to other industries. The main data source was the ECBE 2011.

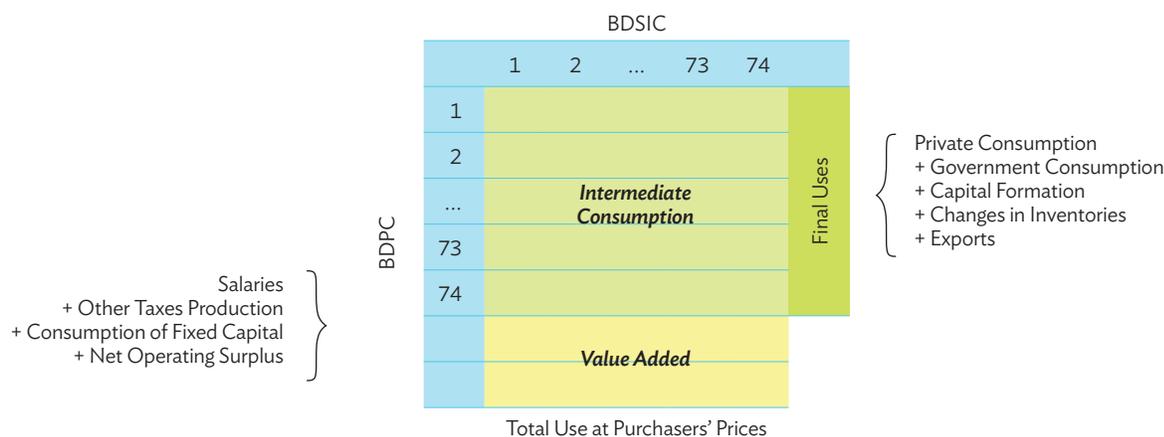
Taxes Less Subsidies on Products data on taxes was from the TAFIS and the Ministry of Finance. Meanwhile, the data on subsidies was from various government agencies responsible for providing subsidies to companies.

b. Use Side

The use side at purchasers' prices comprises purchase of intermediates and final uses at purchasers' prices and value added at basic prices of private enterprises, nonprofit institutions, and government services. Figure 2 presents the different necessary components of final uses and value added for the compilation process of the Use Table. Accordingly, final uses comprise information on private and government consumption, capital formation, changes in inventories, and exports. Furthermore, value added comprises information on COE, other net taxes on production, consumption of fixed capital, and net operating surplus.

The main sources for compilation of the Use Table were the ECBE 2011 of private enterprises' TAFIS; External Trade Statistics and Balance of Payments Statistics, 2010; the HES 2010–2011; and other administrative sources.

Figure 2: Compilation of the Use Table—Intermediate Consumption, Value Added, and Final Use



BDPC = Brunei Darussalam's Product Classification, BDSIC = Brunei Darussalam Standard Industry Classification. Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

Intermediate Consumption by Industry

consists of the value of goods and services used as inputs in the production process. It excludes the use of fixed assets, which is recorded as consumption of fixed capital. A general criterion is that a good with an economic life span of more than 1 year shall be treated as a fixed asset. In addition, such a good must also have a certain value, e.g., the expenditure on small hand tools was recorded as intermediate consumption.

Agriculture, Forestry, and Fishery; Mining and Quarrying; Manufacturing; Construction; Trade, Transport and Storage, Accommodation and Food Services; Information and Communication; and Business Services Sectors

estimates of intermediate consumption (IC) were based on the ECBE 2011. This data was used to estimate ratio of intermediate consumption to gross value of output. There is no other regular source of data for estimating intermediate consumption in this sector.

Finance Sector data source for estimating intermediate consumption of materials and services was AMBD's consolidated data on banks and insurance companies for the year 2010. This was used to estimate the ratio of intermediate consumption to gross value of output in the year 2010.

Owner-Occupied Dwellings and Domestic Services data source for estimating the intermediate consumption was the HES, 2010–2011. No intermediate consumption was attributed to household services produced with paid domestic staff.

Government Services data on intermediate consumption was from the TAFIS by commodities and detailed government services activities.

Household Final Consumption Expenditure estimates were based on the HES, 2010–2011 of JPKE. The survey captured household expenditures in detail (for about 600 products, including imputed rentals of owner-occupied dwellings), using COICOP classification. The detailed expenditure data from COICOP was initially supplemented with FISIM and insurance service charges allocated to households and then

mapped to 46 products of GDP, to obtain HFCE estimates for the year 2010.

Government Final Consumption Expenditure

was estimated from the TAFIS, as output of general government (sum of COE, intermediate consumption, and CFC) minus receipts from sale of goods and services. The commercial activities of government, printing, electricity, and television were excluded in the GFCE calculations, as their output was estimated on a market basis. Therefore, GFCE estimates were in respect of (i) public administration, defense, and compulsory social security; (ii) education; and (iii) health. Only these three COFOG classifications of GFCE were possible to compile out of those recommended in the 2008 SNA.

Gross Fixed Capital Formation consists of gross fixed capital formation (GFCF) and change in stocks or inventories. The data sources for estimating GFCF and change in inventories were the ECBE 2011 for the private sector, and the TAFIS for the government sector.

Exports of Goods and Services. Exports of goods comprise domestic exports only which were valued on FOB basis. Re-exports of imported goods were excluded. Exports of services cover transactions in services between residents and the rest of the world and consist of travel, other transportation and communication, and insurance and miscellaneous services.

Imports of Goods and Services were also part of final expenditures but with a negative sign (-). Imports of goods are normally valued on CIF basis, but in GDP estimates, they are valued on FOB basis. The data source is the BOP statistics of JPKE.

c. Value Added

Uses of value added by industry consist of COE, taxes less subsidies on products and production, consumption of fixed capital, and operating surplus.

Compensation of Employees is the total remuneration payable by an enterprise to the employees for work done by them during the accounting period. As different from employees,

workers who are the sole or joint owners of the unincorporated enterprise where they work are classified as self-employed. Workers engaged in production for own final consumption and unpaid family workers also fall in this category. The three main components of COE are wages and salaries in cash, wages and salaries in kind, and employers' social contributions.

Taxes Less Subsidies on Products and Production includes import duties only.

Depreciation/Consumption of Fixed Capital is a cost of production on the use of fixed assets. It measures the decline in the current value of the stock of fixed assets during the accounting period. The main source is ECBE 2011.

Operating Surplus/Mixed Income constitutes the surplus accruing from the production process, which is normally derived as a residual or balancing item.

4. Balancing Process

Balancing was done both manually and automatically by using a macro in Excel. Both SUTs at purchasers' prices compiled initially were not balanced at product level. To balance the two tables, two identities needed to be maintained: first, supply of products at purchasers' prices in the supply table should match the uses of products at purchasers' prices in the use table (row totals in both supply and use tables should show identical figures); and second, the total domestic output shown in the supply table at basic

prices should match the total inputs shown in the use table (the column totals of industries should be identical in both tables).

The purpose of balancing was to adjust SUT based on two identities:

$$\frac{\text{Total Output in Supply Table}}{\text{Total Input in Use Table}} = \text{eq. (1)}$$

$$\text{Total Supply} = \text{Total Uses} \quad \text{eq. (2)}$$

Balancing was done directly after the compilation of the preliminary SUT by checking the source data repeatedly in the manual balancing procedure. Once the discrepancy between the two tables at product level was reduced to less than 5%, the RAS balancing procedure was done.

5. Main Results and Findings

This section highlights some of the significant findings from 2010 SUT and IOT of Brunei Darussalam.

a. Supply Side

Table 9 presents the Supply Table for 2010 at a more aggregated form for five industries. In 2010, the Brunei Darussalam economy produced Brunei dollar (B\$)31.8 billion worth of goods and services. The major sector was the mining industry, accounting for 39.2% of total domestic output, followed by services at 32.6%, and manufacturing and electricity at 21.3%.

Table 9: Supply Table at Basic Prices, including a Transformation into Purchasers' Prices, 2010
(billion Brunei dollars)

Products	Industry	Output of Industries					Domestic Output at Basic Prices	Imports of Goods and Services	Supply at Basic Prices	Valuation		Supply at Purchasers' Price
		Agriculture	Mining	Industry	Construction	Services				Trade and Transport Margins	Taxes Less Subsidies on Products	
		1	2	3	4	5				9	10	
1	Products of Agriculture	210.0	-	5.6	0.1	0.8	216.5	189.1	405.6	218.8	-7.4	617.0
2	Products of Mining	-	11,434.1	-	-	-	11,434.1	32.9	11,467.0	39.4	-	11,506.4
3	Product of Industries	0.1	633.8	6,575.9	0.2	19.5	7,229.4	3,409.8	10,639.1	1,786.7	-154.6	12,271.2
4	Construction Works	0.0	347.1	34.2	1,754.8	73.4	2,209.5	0.2	2,209.7	-	-	2,209.7
5	Services	24.2	71.1	170.7	193.6	10,276.9	10,736.4	1,594.2	12,330.7	-2,044.9	-191.2	10,094.6
6	Total	234.3	12,486.0	6,786.3	1,948.6	10,370.6	31,825.8	5,226.3	37,052.1	-	-353.2	36,698.9

- = magnitude equals zero, 0 = magnitude is less than half of unit employed.

Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

Total supply of goods and services in 2010 was estimated at B\$36.7 billion, which included imports of goods and services of B\$5.2 billion.

b. Use Side

Table 10 presents the Use Table at a more aggregated form for five industries. In 2010, total intermediate inputs supplied by domestic industries amounted to B\$12.8 billion, representing 40.2% of total domestic production. Final uses were dominated by exports of goods and services which reached B\$12.6 billion in 2010. The mining sector contributed 50.5% of gross value added (GVA).

c. Gross Domestic Product

The SUTs compile the GDP for the year 2010 using all three approaches. GDP from this source was greater by 10.8% compared to the data in the national accounts (NA). However, if we included

the statistical discrepancy shown in the expenditure GDP, the GDP estimates for 2010 from SUT were higher by just 0.7%.

The major findings from the new GDP series for 2010 are as follows:

- By the production approach, the industry sector contributed more than 60% to the GDP, followed by the services sector at about 32%, and less than 1% contributed by the primary (agriculture, fishery, and forestry) sector. The main reason for the changes in figures was the use of new benchmark census data, principally the ECBE 2011. In the manufacturing activity, change in the level of value added was expanding because of the coverage for methanol production. For health and education services, the new series included both private and government services, therefore, estimates were higher in the new series. Correspondingly,

Table 10: Use Table at Purchasers' Prices, 2010
(billion Brunei dollars)

Products	Output of Industries						Final Use				Total Use at Purchasers' Prices
	Industry					Total Industry	Household Consumption	Government Consumption	Investments	Exports	
	Agriculture	Mining	Industry	Construction	Services						
1	2	3	4	5	6	7	8	9	10	11	
1 Products of Agriculture	0.0	-	0.0	0.0	0.3	0.4	0.2	-	0.0	0.0	0.6
2 Products of Mining	0.0	1.3	3.2	0.0	0.0	4.5	0.0	-	0.9	6.2	11.5
3 Product of Industries	0.1	1.0	0.4	0.8	1.8	4.1	0.8	-	1.6	5.8	12.3
4 Construction Works	0.0	0.0	0.0	0.1	0.1	0.2	0.0	-	2.0	0.0	2.2
5 Services	0.0	0.6	0.3	0.6	2.1	3.7	1.7	4.1	-	0.6	10.1
6 Total	0.1	2.9	3.9	1.6	4.3	12.8	2.7	4.1	4.4	12.6	36.7
7 Gross Value Added	0.1	9.6	2.9	0.3	6.1	19.0					
8 Compensation	0.1	0.6	0.2	0.2	3.5	4.6					
9 Other Taxes on Production	0.0	0.0	0.0	0.0	0.0	0.0					
10 Consumption of Fixed Capital	0.0	0.2	0.1	0.0	0.5	0.8					
11 Net Operating Surplus	0.0	8.8	2.6	0.1	2.1	13.6					
12 Output at Basic Prices	0.2	12.5	6.8	1.9	10.4	31.8					
13 Employment	0.0	0.0	0.0	0.0	0.1	0.2					
14 Gross Capital Formation	0.0	1.9	1.1	0.0	1.5	4.4					

- = magnitude equals zero, 0 = magnitude is less than half of unit employed.

Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

Table 11: Comparison of Supply and Use Tables and Current National Accounts, 2010
(million Brunei dollars)

	Supply and Use Tables	Current National Accounts	Difference (%)
Gross Domestic Product	18,689.80	16,867.40	10.8
Gross Domestic Product ^a	18,689.80	18,559.50	0.7

^a Includes statistical discrepancy.

Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

there was a fall in the value added of government services which only contained data on public administration, defense, and compulsory social security.

- By the expenditure approach, exports of goods and services recorded the highest share of 67.4%, followed by imports of goods and services of 28.0%, gross fixed capital formation (GFCF) of 23.7%, government final consumption expenditure (GFCE) of 22.2%, and household fixed consumption expenditure (HFCE) of 14.7%. There was a fall in the level of HFCE based on the HES 2010–2011, and increase in the GFCF due to the government accounts and EC 2011. There were downward revisions in imports and exports, especially services, which was due to revisions in the BOP statistics.
- By the income approach, net operating surplus/mixed income had a share of 72.7%, followed by COE of 24.8%, and consumption of fixed capital of about 4%. However, taxes less subsidies on products had a negative share of about 2%.

There were also changes of the economic structure of final demand in 2010 when the system of IOT was used to compile GDP by types of expenditure (Table 12).

- The contribution of household final

consumption expenditure was lower when the calculation was based on the SUT, i.e., 14.7% of GDP, compared with 23.2% of GDP, if calculations of the NA were used;

- The contribution of GFCF was higher in the SUT approach, i.e., 23.5% of GDP, compared with 15.8% of GDP in the NA;
- The contribution of exports of goods and services was lower in the SUT, i.e., 67.4% of GDP, compared with 81.4% of GDP when calculated using the NA.

Meanwhile, the economic activities in the 2010 SUT (Table 13) showed that:

- The economic structure of Brunei Darussalam was dominated by mining, accounting for 50.3% of GVA;
- Agriculture, forestry, and fishing of Brunei Darussalam accounted for 0.7% of GVA;
- The manufacturing sector in Brunei Darussalam accounted for 14.7% of GVA;
- Government services (including those in public administration and other activities) accounted for 13.8% of GVA.

Table 12: Gross Domestic Product by Types of Expenditure, 2010
(million Brunei dollars)

Expenditure Aggregate	Supply and Use Tables		Current National Accounts		Difference (%)
	Estimates	Share (%)	Estimates	Share (%)	
Household Final Consumption Expenditure	2,749.8	14.7	3,908.6	23.2	-29.6
Government Final Consumption Expenditure	4,140.1	22.2	3,780.7	22.4	9.5
Gross Fixed Capital Formation–Construction	1,964.5	10.5	1,608.8	9.5	22.1
Gross Fixed Capital Formation–Machinery and Equipment	2,433.6	13.0	1,068.8	6.3	127.7
Change in Inventories	29.6	0.2	0.7	-	-
Exports of Goods	11,970.6	64.0	12,302.1	72.9	-2.7
Exports of Services	627.8	3.4	1,434.5	8.5	-56.2
Imports of Goods	3,498.1	18.7	3,349.2	19.9	4.4
Imports of Services	1,728.1	9.2	2,195.5	13.0	-21.3
Statistical Discrepancy	-	-	-1,692.1	-10.0	-100.0
Gross Domestic Product	18,689.8	100.0	16,867.4	100.0	10.8

- = magnitude equals zero.

Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

Table 13: Composition of Value Added, 2010
(million Brunei dollars)

Economic Activity	Supply and Use Tables		Current National Accounts		Difference (%)
	Estimates	Share (%)	Estimates	Share (%)	
Oil and Gas Mining	9,574.5	50.3	8,571.7	50.8	11.7
Manufacture of Liquefied Natural Gas	2,552.6	13.4	1,890.1	11.2	35.1
Vegetables, Fruits, and Other Agriculture	18.5	0.1	28.8	0.2	-35.6
Livestock and Poultry	51.7	0.3	45.9	0.3	12.7
Forestry	16.8	0.1	2.9	-	478.2
Fishery	50.0	0.3	50.6	0.3	-1.1
Manufacture of Wearing Apparel and Textile	29.7	0.2	57.6	0.3	-48.5
Other Manufacturing	203.9	1.1	87.8	0.5	132.2
Electricity and Water	131.7	0.7	131.5	0.8	0.2
Construction	338.8	1.8	524.1	3.1	-35.4
Wholesale and Retail Trade	754.6	4.0	623.2	3.7	21.1
Water Transport	128.2	0.7	157.2	0.9	-18.5
Air Transport	70.0	0.4	122.6	0.7	-42.9
Other Transport Services	93.4	0.5	122.7	0.7	-23.9
Communication	254.1	1.3	173.8	1.0	46.2
Finance	759.6	4.0	583.4	3.5	30.2
Real Estate and Ownership of Dwellings	619.8	3.3	438.4	2.6	41.4
Hotels and Restaurants	149.2	0.8	74.1	0.4	101.4
Health and Education Services	731.0	3.8	132.2	0.8	453.0
Business Services	353.3	1.9	612.9	3.6	-42.4
Domestic Services	68.7	0.4	53.7	0.3	28.0
Other Private Services	99.7	0.5	69.7	0.4	43.1
Government Services	1,993.0	10.5	2,312.5	13.7	-13.8
Total	19,043.0	100.0	16,867.4	100.0	12.9
Taxes Less Subsidies on Goods and Services	-353.2	-	-	-	-
Gross Domestic Product	18,689.8	-	16,867.4	-	10.8

- = magnitude equals zero.

Source: Department of Economic Planning and Development - Department of Statistics, Brunei Darussalam.

d. Employment

The number of persons employed in Brunei Darussalam according to the Population Census, 2011 was 183,715, of which 67,956 were in the government sector (37.0%); and the number of jobs performed was 188,647, of which 37.2% were in the government sector. For 2010, it was estimated that the number of persons employed in Brunei Darussalam was 181,995, of which 67,802 were in the government sector (37.3%); and the total number of jobs performed was 186,928, of which 36.3% were in the government sector. The majority of government employment was in services (96.5% of government employment).

- Overall, almost 90% of jobs were in services and construction. Within this 90%, about 54% were in the private sector, and the balance of 36% was in government;
- Mining employed 3.6% and industry employed 5.5% of total employment, and government's

share was just 1.3% in industry. Very few from the government were employed in agriculture and mining.

6. Meeting the Challenges

- Data Limitation.** Most data for the benchmark year was available, although it would be good to have data on unavailable information such as NPISH, nonresident purchases in domestic economy, household investments in dwellings, and subsidies by products.
- Staff Constraints and Capacity Building.** For improving the NA and sustainability of capacity in the Department of Statistics (DOS), the establishment of several statistical units in the Real Sector Division is necessary by augmenting statistical staff, such as establishing the survey unit, company statistics unit, and government analysis unit.

7. The Way Forward

Construction of the SUT is an essential step in providing a consistent and coherent GDP estimate. It is planned to revise the SUT annually to eliminate the statistical discrepancy between the production and expenditure approaches for GDP estimates. However, the IOT does not have to be compiled every year because of Brunei Darussalam's small economy.

The DOS conducted the Economic Census Business Enterprises 2016 for reference year 2015 in June 2016. The results from this census will be used to compile the third SUT for Brunei Darussalam with benchmark year 2015, and like with the previous SUT, the results will be further used to compile the IOT 2016 and revise the NA to the 2015 base year.

It is hoped that the successful completion of the construction of the second SUT for Brunei Darussalam and the results produced will provide vital information for the country's socioeconomic planning and for users' various needs.

E. Cambodia

The National Institute of Statistics (NIS) at the Ministry of Planning is the Government of Cambodia's central statistics office. The Law on Statistics 2005 guarantees the independence of NIS. There are six departments under the NIS, including the Department of National Accounts (DNA) which is responsible for compiling the national accounts statistics and implementing supply and use tables (SUTs). From 2008 to 2010, the DNA of the NIS compiled the SUT.

The NIS has been granted technical assistance (TA) and finance from the Asian Development Bank (ADB) and United Nations Development Programme since 1992. Other development partners also assisted the development and improvement of Cambodian statistics, including the Department of International Development (DFID), International Monetary Fund (IMF), GTZ, Japan International Cooperation Agency (JICA), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), United States Agency for International Development (USAID), Swedish International Development

Cooperation Agency (SIDA), and the World Bank. SIDA projects started in 2006 for continuing the annual household survey, improving and strengthening information technology, consumer price index (CPI), and national accounts (NA). Since April 2015, ADB's RCDA8838 project financed the DNA to update the SUT 2011 by following the 2008 SNA in accordance with the country's national practice of the 2005 SUT, 2005 IOT, and the NA manual 2004.

1. Current System of National Accounts

Since 1996, the NIS has been compiling the NA statistics in time series from 1993 onward. These have been progressively expanded and revised, and compiled broadly in accordance with the 1993 SNA. GDP is estimated by using both production and expenditure approaches at current and constant 2000 prices. In addition, GDP by income factors were introduced in experimental estimates, but not independently compiled due to the lack of resources. In principle, NA covers all residential units for compiling the GDP. However, data sources from administrative surveys do not cover all industries and subsectors within the production account, and many industries are indirectly measured using expenditure data, such as informal sectors, insurance, microfinance, financial auxiliaries, and the recreational and personal services industries. These cover some financial transactions, but do not cover the transaction taking place outside the banking sector (National Accounts Manual 2004). The current NA follows the 1993 SNA, and the DNA seeks TA to upgrade the accounting to the 2008 SNA.

According to NIS official, the current system of national accounts (SNA) is still based on the 1993 SNA, in which economic coverage is still incomplete due to the lack of surveys and full-scale data collection. The Cambodian Economic Census is still not integrated into the NA due to a big gap of output of census and output in NA. The base year is still 2000, more than 15 years ago. The NA of Cambodia has to be restructured to accommodate the change in economy, particularly construction, food and beverage, semiconductors, rubber, and metal and nonmetal industries. Integrating the Cambodian Economic Census into national accounts is the main priority, followed by the need to develop IOTs.

Through RCDTA 8838, an SUT framework following the 2008 SNA, the DNA updated and constructed the SUT for 2011 as a reference benchmark for 60 industries based on ISIC Revision 4 and 60 products based on CPC Version 2.

2. Supply and Use Framework

a. Reference Year

Cambodia's SUT was updated and constructed with 2011 as the reference benchmark year, for the following reasons:

- The NIS had the current data of the economic census in 2011 and data on the inter-census economic survey in 2014, and labor force survey in 2012 as the main available sources to update and construct the 2011 SUT. In addition, the economic growth in 2011 of 7.1% was higher by 0.1% after the downturn in 2009.
- Information on both GDP and GDE was available for the SUT compilation. In addition, GVA by income factors was also available from the NA statistics.
- Data from the 2011 ICP and Cambodian Socio-Economic Survey (CSES) in 2011 was available for estimates of final consumption.

b. Matrix Size

The 2005 SUT was constructed at a two-digit level of 51 products with CPC version 1.1, and 32 industries with ISIC Revision 3.1. The 2011 SUT was updated and constructed at a two-digit level of 78 industries with ISIC Revision 4, and 78 products with CPC Version 2. The products and industries were broken down by sectors of economics in accordance with the classification in the NA. The products and industries were disaggregated by sector of the economy as follows:

c. Supply Table

The supply matrix shows the domestic production of goods and services at basic prices. The rows matrix presents the products (commodities) used in the

Table 14: Sector Disaggregation

Groupings	Industries	Products
Agriculture	4	4
Mining and Quarrying	1	1
Manufacturing	18	25
Electricity, Gas and Water	2	2
Construction	1	1
Services	34	27
Total	60	60

Source: National Institute of Statistics, Cambodia.

different industries, and the columns matrix show the products (commodities) produced by the respective industries (2005 SUT, June 2011).

The supply table is constructed with a matrix of 60 products in rows by 60 industries in columns. The matrices of gross outputs in the supply side were valued at basic prices. The components of the supply side are shown as follows:

- Rows represent products classified by CPC Version 2 at two digits.
- Columns represent the industries classified by ISIC Revision 4 at two digits.
- The gross output (GO) at basic prices in the column total are shown as total outputs by products. GO in the row total is shown as total outputs by industry.
- Import of goods and services was added to the total outputs by row to get the total supply at basic prices with CIF/FOB adjustments on imports from the direct purchase abroad by residents, as shown in the supply table.
- Trade and transport margin; and taxes less subsidies on products were added into the supply side to get the total supply at purchasers' prices.

Product mix data on output structures was constructed by using the available data sources such as the Cambodia Economic Census 2011, Cambodia Inter-Census Economic Survey in 2014, the Cambodia Socio-Economic Survey 2011, Agriculture Census 2013, and other surveys. The structure of coefficient GO by industry was applied

for macrocontrol of GVA by industries from the published 2011 NA. Total supply at purchasers' prices can be derived as;

$$TS^{bp} = \Sigma GO^{bp} + MGS \quad eq. (1)$$

$$TS^{pur} = TS^{bp} + TTM + TOPS \quad eq. (2)$$

Where:

- GO^{bp} : Gross output at basic prices
- MGS : Imports of goods and services
- TS^{bp} : Total supply at basic prices
- TS^{pur} : Total supply at purchasers' prices
- TTM : Trade and transport margin
- TOPS: Taxes on products less subsidies

d. Use Table

The use table was constructed with a matrix of 60 products as rows by 60 industries as columns. The intermediate consumption matrix was valued at purchasers' prices in accordance with the 1993 SNA and 2008 SNA. Total intermediate consumption was present in both columns and rows. The components of GVA were revealed as a row in the use side. Other main components of the use side were household final consumption; NPISHs individual and collective government consumption expenditure, gross capital formation, and export of goods and services. The adjustment on direct purchase abroad by residents and direct purchase abroad by nonresidents were also made for the use side, as follows:

$$TU^{pur} = \Sigma IC + HFCE + NPISHs + GCE + GFCF + CI + XGS \quad eq. (3)$$

$$\Sigma GO^{pur} = \Sigma IC + \Sigma GVA = \Sigma GO^{bp} \quad eq. (4)$$

Where:

- TU^{pur} : Total uses at purchasers' prices
- ΣIC : Total intermediate consumption/input
- XGS : Exports of goods and service
- HFCE : Household final consumption expenditures
- NPISHs : Nonprofit institution serving households

GCE : Government consumption expenditures

GFCF : Gross fixed capital formation

CI : Change in inventory

3. Data Sources and Methods

a. Supply Side

Gross Output at Basic Prices (GO_{bp}) estimate was based on the GO of the 2011 NA, and used as a macrocontrol in compiling the 2011 SUT. There were 21 industries with GO, and IC were officially published on an aggregate level. The GVA at basic prices were calculated by GO at basic prices minus IC at purchasers' prices. Thus, GVA by industry at basic prices was recalculated to have the GVA at producer's prices (GVA_{pur}) by apportioning given totals on product taxes, less subsidies and FISIM to each industry sector. Thus:

$$GVA_{pur} = GVA_{bp} + TOPS + FISIM \quad eq. (5)$$

A formula was applied for GO_{pur} for industry: where "j" is the GVA_{j,pur} divided by gross value added ratio (GVAR)_j; where GVAR_j for industry "j" could be derived from the GO and GVA for each industry available from the 2011 NA. Other GVAR_j for some products of each industry were derived from major administrative data and surveys, such as the Cambodia Economic Census 2011, Cambodia Inter-Census Economic Survey 2014, Cambodia Socio-Economic Survey (CSES) 2011, the 2000 SIE, i.e., manufacturing, hotels, and restaurants. These available data sources were used to disaggregate the industries and products for the compilation of SUT 2011 with GO matrix of 78 industries (ISIC Revision 4) and 78 products (CPC Version 2). To derive GO_{bp} using the formula below:

$$GO_{bp} = GO_{pur} - TOPS \& FISIM \quad eq. (6)$$

Imports of Goods and Services by product was done by using the custom data on import of goods in HS code at eight digits converted into the CPC Version 2 at two digits. The different value of import of goods between the custom data and the 2011 NA was distributed as an adjustment. The

Table 15: Cambodia Supply and Use Tables Framework

Supply Table												
Code	ISIC Rev4	GO _{bp}	MGS	Adjust. CIF/FOB	TS _{bp}	TdTnM	TOPS	TS ^{pur}				
CPC2	GO matrix:											
	- Agricultures	$\sum GO_{c,1}$	-	-	\sum	-	-	$\sum S_{c,1}$				
	- Industries	$\sum GO_{c,2}$	-	-	\sum	-	-	$\sum S_{c,2}$				
	- Services	$\sum GO_{c,3}$	-	-	\sum	-	-	$\sum S_{c,3}$				
Adjustment:												
	CIF/FOB on Import		-	-	0			0				
	DPAR		-	-	-			\sum				
Total	GO _i	$\sum GO$	\sum	0	\sum	0	\sum	$\sum TS^{pur}$				
Use Table												
Code	ISIC Rev4	TIC	HFCE	NPISHs	GGCE	TFCE	GFCF	CI	ALDV	TGCF	XGS	TU ^{pur}
CPC v.2	IC matrix:											
	- Agricultures	$\sum IC_{c,1}$	-	-	-	\sum	-	-	-	\sum	-	$\sum U_{c,1}$
	- Industries	$\sum IC_{c,2}$	-	-	-	\sum	-	-	-	\sum	-	$\sum U_{c,2}$
	- Services	$\sum IC_{c,3}$	-	-	-	\sum	-	-	-	\sum	-	$\sum U_{c,3}$
Adjustment:												
	DPAR		-			-				0		-
	DPNR		-			-				0		0
Total	IC _i	$\sum TIC$	\sum	\sum	\sum	\sum	\sum	\sum	\sum	\sum	\sum	TU ^{pur}
GVA	GVA _i	$\sum GVA$										
	COE	\sum										
	TPIS	\sum										
	GOS/MI	\sum										
	(-) CFC	\sum										
	NOS/MI	\sum										
Total	IC _i + GVA _i	$\sum GO$										

Note:

- ALDV : Acquisition Less Disposal of Valuables
- CFC : Consumption of Fixed Capital
- DPNR : Direct Purchase Abroad by Nonresidents
- DPR : Direct Purchase Abroad by Residents
- EGS : Exports of Goods and Services
- GO_i : Gross Output for Industry *i*
- GOS : Gross Operating Surplus
- GVA_i : Gross Value Added for Industry *i*
- IC_i : Intermediate Input for Industry *i*
- MI : Mixed Income
- MGS : Imports of Goods and Services
- NOS : Net Operating Surplus
- NPISHs : Nonprofit Institutions Serving Households
- TFCE : Total Final Consumption Expenditures
- TGCF : Total Gross Capital Formation
- TIC : Total Intermediate Consumption/Inputs
- TPIS : Taxes on Production and Import less Subsidies
- TU^{pur} : Total Uses at Purchasers' Prices

Source: National Institute of Statistics, Cambodia.

imports of services by product was done using the BOPs from the NBC. The valuation of imports in goods by products was revalued at FOB prices (M_{fob}) from the values of import in goods at CIF prices (M_{cif}) by a CIF adjustment rate (CIF rate%). In this case, the CIF/FOB adjustment rate was 8%. Thus,

$$M_{fob} = M_{cif} (1 - \text{CIF rate}\%) \quad \text{eq. (7)}$$

The allocation of values CIF/FOB adjustment was based on its total value of imports for the transport and insurance, i.e., passenger transport services, freight transport services, rental services of transport vehicles with operators, and financial and related services (insurance). Direct purchase abroad by resident carriers was adjusted with import values based on available data from the National Bank of Cambodia (NBC). Import of service by product from

BOP was matched to CPC Version 2. The adjustment on some import/export values of products was made using a commodity flow technique with macrocontrol in the supply and uses of the products.

Trade and Transport Margin was estimated by being assumed to be equal to the total outputs at basic price for trade service (excluding repair service) and transport/freight services. Then, the allocation of the values of trade and transport margin (TTM) used the proportion ratio of total supply at basic prices by products in the industries sector, except the services sector. Some adjustments on value of TTM for some products were made by using commodity flows techniques. Thus:

$$TTM = GOTT^{bp} * RSc \quad eq. (8)$$

where:

$GOTT^{bp}$: Gross output of trade and transport at basic prices

RSC : Distribution ratio of total supply by commodity

The TTM of some commodities were adjusted using the margin from the Economic Census 2011 (EC 2011).

Taxes on Products Less Subsidies were allocated by using GVA share by industry applied with macrocontrol by products, then matched to CPC Version 2. Some adjustments of values for some commodities were made using commodity flows and the situation of the economy; available sources of data, i.e., custom import and export data; and government finance from the Ministry of Economy and Finance.

b. Use Side

Intermediate Consumption at Purchasers' Prices (IC^{pur}) estimate was derived as the difference between GO and GVA at producers' prices. GVA at producers' prices by industry "j" (GVA_j^{pur}) was subtracted from the GO at producers' price by industry "j" (GO_j^{pp}), plus TTM. Thus:

$$IC_{j,pur} = GO_{j,pp} - GVA_{j,pur} \quad eq. (9)$$

Another way to derive this, using SNA93/2008 is:

$$IC_{i,pur} = GO_{i,bp} - GVA_{i,bp} \quad eq. (10)$$

Constructing a matrix of intermediate consumption (IC) at producers' prices for the 2011 SUT used the intermediate inputs structures derived from major administrative data and available surveys of data such as the Cambodia Economic Census 2011, Cambodia Inter-Census Economic Survey 2014, Cambodia Socio-Economic Survey (CSES) 2011, and SIE 2000. These surveys were also used for the breakdown of each column of IC_j^{pur} , which in this case covered 60 industries of ISIC Revision 4 at two digits and 60 products of CPC Version 2 at two digits. Thus:

$$IC_{j,pur} = A_j * TIC_{j,pur} \quad eq. (11)$$

where:

$IC_{j,pur}$: estimated matrix of IC for industry "j" of SUT,

A_j := IC coefficients of industry "j," and

$TIC_{j,pur}$: total IC at purchasers' price as macrocontrol values in industry "j" of the SUT.

FISIM was treated as IC in the economic activity (1993 SNA), it was allocated within industries that obtained loans from creditors (2008 SNA). In this case, FISIM was allocated within industries using the proportion of different types of loan of business activities, such as agriculture, trade and commerce, services, transportation, construction, households, and others reported by the microfinance institution.¹³

Household Final Consumption Expenditure (HFCE) by COICOP classification was from Household Surveys 2011 (CSES 2011) with macrocontrol of published HFCE, then were

¹³ National Bank of Cambodia. Annual Report 2011, https://www.nbc.org.kh/download_files/publication/annual_rep_eng/AnnualReport2011.pdf

matched to CPC Version 2 at two digits. This used GDP share of the 2011 ICP to distribute its expenditure category by macrocontrol total of HFCE with matching CPC Version 2, and then adjusting on direct purchase abroad by residents and nonresidents. Both CSES with COICOP classification and 2011 ICP were used to revise the HFCE by products. Some adjustments were made using flows of the supply–use of commodities.

General Government Consumption

Expenditure (GGCE) broken down to individual and collective consumption expenditure were estimated by using data from the 2011 ICP to distribute the government expenditures category by macrocontrol values, then matching them to CPC Version 2.

Nonprofit Institution Serving Households

(NPISHs) were estimated using the shares of GDP expenditure weight from the 2011 ICP, then getting the macrocontrol total of NPISHs as shown in the published SNA, and breaking down by using the government statistics and nongovernmental organizations' (NGOs') expenditures. Adjustments on some commodities were made using the 2011 CSES data.

Gross Capital Formation was estimated using data from the 2011 ICP, and getting the macrocontrol total the same way the HFCE estimation was done.

Changes in Inventory were obtained as a residual by deducting all other uses from total supply at purchasers' prices.

$$CI = GO_{pur} + MGS - (IC + TFCE + GFCF + ALDV + XGS) \quad eq. (12)$$

where:

- CI : Change in inventory for product i
- GO_{pur} : Gross output at purchasers' prices is equal to total supply
- MGS : Import of goods and service

IC_{pur} : Intermediate consumption at purchasers' prices

GFCF : Gross fixed capital formation

ALDV : Acquisition less disposable values

XGS : Export of goods and services

Export of Goods and Services was based on trade statistics and BOP data. Export goods by CPC Version 2 at two digits from the custom data with the ASEAN Harmonized Tariff Nomenclature code HS at eight digits; using both custom data and 2011 NA data on exports to make adjustments on the export values of goods by CPC Version 2. The export of services was derived from the BOP data then matched to CPC Version 2. Export values were adjusted to balance supply and use of services.

c. Value Added

Compensation of Employees (COE) was estimated based on the number of formal and informal sector workers by industry from CSES 2011, EC 2011, and the Labor Force Survey 2012. The smoothed formal and informal labor forces were done from 1993 onward. The COE by industry for the SUT 2011 ($COE_j^{SUT2011}$) were computed by multiplying the COE ratio and GVA by industry, where the COE ratio by industry was derived from the SUT 2005 and EC 2011. Thus, COE by each industry could be derived by:

$$COE_j^{SUT2011} = \frac{\text{Share \% of } COE_j}{GVA_j^{SUT2011}} \times \quad eq. (13)$$

Taxes Less Subsidies on Production (TPIS)

included taxes on products and imports less subsidies and other taxes on production, estimated for the manufacturing and services sectors using EC 2011,¹⁴ and National Accounts Statistics 2011; taxes on products less subsidies were allocated among the industries based on the value added by industry.

¹⁴ National Institute of Statistics, Ministry of Planning. 2013. *Analysis of the Census Results Report No.11 – Application to National Accounts. Economic Census of Cambodia 2011*. Phnom Penh. <http://www.stat.go.jp/info/meetings/cambodia/pdf/c11ana11.pdf>

Consumption of Fixed Capital (CFC) by industry in 2011 was estimated by using the share (%) of CFC multiplied by the gross operating surplus of each industry, where the share (%) of CFC was from the SUT 2005 and EC 2011 because data on livestock as CFC, and useful life of fixed assets (i.e., construction and durable goods) were not available. Thus, CFC for each industry was derived by:

$$CFC_j^{SUT2011} = \text{Share \% CFC}_j \times GOS_j^{SUT2011} \quad \text{eq. (14)}$$

Gross Operating Surplus (GOS)/Mixed Income (MI) by Industry was estimated by deducting the COE_j and $TPIS_j$ at industry “j” from the gross value added for industry “j” (GVA_j). The formula is:

$$GOS_j/MI_j = GVA_j - (COE_j + TPIS_j) \quad \text{eq. (15)}$$

Where:

GOS_j : Gross operating surplus for industry “j”

MI_j : Mixed Income for industry “j”

GVA_j : GVA for industry “j”

COE_j : COE for industry “j”

$TPIS_j$: Taxes on production and imports less subsidies for industry “j”

Another way to derive the GOS/MI for industry “j” (GOS_j/MI_j) was using the share (%) of GOS_j/MI_j matching with the GVA for industry “j” ($GVA_j^{SUT2011}$), where the share (%) of GOS_j/MI_j was derived as:

$$\text{Share (\%)} \text{ of } GOS_j/MI_j = \frac{1 - \text{Share \% of } COE_j}{\text{Share \% of } COE_j} \quad \text{eq. (16)}$$

d. Data Sources

The principal data sources used for the SUT compilation were the following;

- National Accounts Statistics 1993–2013, NIS
- BOP and financial sector data, NBC.

- Data of import and export of goods, General Department of Customs and Excises (GDCE).
- Monthly import and export of goods, Ministry of Economy and Finance (MEF): Government Finance Statistics 2011
- Statistics of Agriculture, Ministry of Agriculture, Forestry, and Fishery (MAFF)
- Cambodia Economic Census 2011, NIS
- Agriculture Census 2013, NIS
- Cambodian Socio-Economic Survey (CSES) 2011, NIS
- Survey of Industrial Establishments (SIE) 2000, NIS
- Labor Force Surveys (LFS) 2012, NIS and ILO
- Consumer Price Index (CPI), NIS
- International Comparison Program for Asia and the Pacific (ICP) 2011, ADB and NIS
- Producer Price Index (PPI) 2003–2007, NIS and UNDP
- Construction Statistics for 2011–2015, Ministry of Land Management Urban Planning and Construction
- Statistics of Electricity and Water from, Open Development Cambodia (EDC) and Phnom Penh Water Supply Authority (PPWSA).

4. Balancing Process

A manual method was used for the SUT balancing process—correction and coherence checks were done for the SUT framework of each level for 78 products and 78 industries. To find missing data, negative data, verification, validation check, data quality check, and row discrepancy between supply and use; those were allocated among the inputs by industry and to the final consumption

expenditure and gross capital formation based on the flow of commodities and expert ideas on current economic structures.

Supply at purchasers' prices for product "j" (S_j^{pur}) was computed by the trade and transport margin for industry j (TTM_j), and taxes less subsidies on product for industry "j" (TPS_j) were added to the gross domestic supply for product "j" at basic prices (S_j^{bp}). Thus:

$$TS_j^{pur} = TS_j^{bp} + TTM_j + TOPS_j = TU_j^{pur} \quad eq. (17)$$

where:

TS_j^{pur} : Total supply at purchasers' prices for product "j"

TS_j^{bp} : Total supply or gross domestic supply for product "j" at basic prices

TTM_j : Trade and transport margin for product "j"

$TOPS_j$: Taxes on product less subsidies for product "j"

The use at purchasers' prices for product "j" (TU_j^{pur}) was estimated by:

$$TU_j^{pur} = TIC_j + FCE_j + GFCF_j + XGS_j = TS_j^{pur} \quad eq. (18)$$

Where:

TU_j^{pur} : Total uses at purchaser prices for product "j"

TIC_j : Total intermediate consumption for product "j"

FCE_j : Total final consumption expenditure for product "j"

$GFCF_j$: Total gross fixed capital formation for product "j"

XGS_j : Total export of goods and service for product "j"

Total uses by column of industry was computed by the total IC/inputs at purchasers' prices (IC^{pur}) plus GVA components, including: COE_j , $TPIS_j$, CFC_j , and NOS_j/MI_j . Thus:

$$Outputs_j = TIC_j + GVA_j = USES_j$$

$$GVA_j = COE_j + TPIS_j + CFC_j + NOS_j/MI_j$$

5. Main Results and Findings

The GO at basic prices was riel (KR)90,093,103 million. The largest GOs are dominated by manufacture of textiles; wearing apparel; dressing and dyeing of fur; tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear, with a GO value of KR14,992,088 million which was 17% of the total output. Wholesale and retail trade; repair of motor vehicles, motorcycles, and personal and household goods were next with a value of KR8,436,747 million, representing 9.4% of the total output. Growing rice, with a gross output value of KR8,114,993 million, represented 9% of the total output. Construction and related activities with a value of KR5,890,771 million, represented 7% of the total output. Hotels and restaurants, fishing, aquaculture, and service activities incidental to fishing, represented about 6% of the total output of industries.

The trade and transport margin totaled KR10,233,483 million, representing 8.5% of the total supplies at basic prices (KR121,074,542 million). Taxes less subsidies on products was KR3,672,289 million, about 2.9% of total supplies at basic prices. Total supply at purchasers' price was KR124,746,831 million. Domestic production was about 72.2% of the total supply of goods and services with purchasers' prices, while 24.8% is from imports of goods and services. Net taxes on product was a small share (about 3%) of total supply of goods and services at purchasers' prices.

Total inputs of the industries economy amounted to KR41,042,791 million, which was 45.6% of total gross output at basic prices. The largest share was within the manufacture of textiles; wearing apparel; dressing and dyeing of fur; tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness, and footwear, with a value of KR9,799,839 million, representing 23.9% of the total inputs of the industries economy. This was followed by wholesale and retail trade, that was 9% of total inputs; hotels and restaurants, accounting for KR3,362,889 million, which was about 8.2% of the total inputs; construction of buildings, accounting for KR2,861,537 million, about 7% share of the total inputs; and transport, and growing rice, that combined for more than 5% of the total inputs.

The gross value added (GVA) amounted to KR49,050,312 million, about 54.4% of the total gross output at basic prices. The largest share of the GVA was for agriculture, hunting, and related service activities under growing of rice with KR6,023,501 million, about 12.3% of the GVA of the total industries economy. Second was the manufacturing of textiles; wearing apparel, and footwear with a value of KR5,192,251 million, about 10.6% of total GVA. Third was wholesale and retail trade about 9.7% of total GVA. Fourth

was fishing about 7.6% of GVA. Other sectors were lower than 6.2% of total GVA.

The largest input commodity was textile articles and wearing apparel with a value of KR8,234,271 million, about 20.1% of total commodity inputs. The second highest commodity inputs was coke oven products; refined petroleum products, fuel, with a value of KR4,158,540 million, about 10.1% of total commodity inputs. The third highest commodity was the hotel and restaurant industry about 5.3% of the total commodity inputs. The combined shares of other products were less than 5.3%.

Total commodity outputs at purchasers' prices amounted to KR124,746,831 million of which 32.9% was for intermediate inputs, 37.1% for total final consumption expenditure (FCE), 7.4% for gross capital formation, and 22.6% for export of the total commodity supply at purchasers' prices.

Total uses amounted to KR124,746,831 million, including intermediate inputs of KR41,042,791 million, household final consumption expenditure (HFCE) of KR42,046,651 million, NPISHs of KR1,097,320 million, general government consumption expenditure (GGCE) of KR3,134,232 million; gross fixed capital formation (GFCF) of KR8,681,796 million, changes

Table 16: Gross Value Added by Industries, 2011
(million riels)

No.	Code	Industry	Gross Value Added	Share (%)	Gross Value Added Ratio
1	A	Agriculture, Forestry and Fishery	18,484,251	37.7	76.3
2	B	Mining and Quarrying	329,698	0.7	70.4
3	C	Manufacturing	7,907,519	16.1	33.8
4	D+E	Electricity, Gas, Steam and Water Supply, Sewerage, etc.	262,501	0.5	13.4
5	F	Construction	3,029,234	6.2	51.4
6	G	Wholesale and Retail trade	4,763,255	9.7	56.5
7	H	Transportation and Storage	2,707,645	5.5	54.7
8	I	Accommodation and Food Service Activities	2,250,765	4.6	40.1
9	J	Information and Communication	1,257,025	2.6	55.0
10	K	Financial and Insurance Activities	796,935	1.6	83.0
11	L	Real Estate Activities	1,412,499	2.9	58.3
12	M	Professional, Scientific and Technical Activities	139,465	0.3	60.0
13	N	Administrative and Support Service Activities	681,992	1.4	42.9
14	O	Public Administration and Defense, Social Security	843,971	1.7	49.4
15	P	Education	799,600	1.6	72.7
16	Q	Human Health and Social Work Activities	1,721,610	3.5	69.2
17	R	Art, Entertainment and Recreation	577,311	1.2	69.2
18	S	Other Service Activities	1,085,037	2.2	69.2
		Total	49,050,312	100.0	54.4

Source: National Institute of Statistics, Cambodia.

in inventory and acquisition of KR584,898 million, and exports of KR28,159,143 million while imports of goods and services were at a CIF value of KR33,459,954 million. Imports of goods and service with CIF/FOB adjustment was KR30,981,438 million in 2011.

a. Selected Performance Indicators Based on Supply and Use Tables or National Accounts

Based on the SUT and NA in 2011, the GVA represented about 54.4% of gross outputs (GO) while the intermediate inputs or intermediate consumption (IC) was 45.6% of GO. The total number employed was 7,891,000 persons in 2011, a change of 2.8% over the last year. The average annual employment value added was KR6,215,982 per worker in 2011. The compensation of employees (COE) was an average of KR2.4 million per worker in 2011, representing 38.5% of GVA. The gross operating surplus (GOS) was about 61.5% of GVA or 57.1% of GDP (I).

HFCE was 79.8% of GDP. Gross fixed capital formation (GFCF) was 16.5% of GDP. Total taxes

on products less subsidies was about 7.0% of GDP. Imports of goods and services at FOB value was 58.8% of GDP, the exports of goods and services at FOB prices was 53.4% of GDP, and total trades were about 112.2% of GDP, which trade balance was a negative sign-in of 5.4% of GDP. The values of GDP for the 2011 SUT and 2011 NA differed by KR653,909 million. The different values were due to the discrepancy of KR289,875 million in the expenditure side of the 2011 NA while the 2011 SUT was zero. In addition, the value of gross capital formation in the 2011 SUT of KR364,034 million was greater than in the 2011 NA. These different values were commodities such as software and office tools treated as gross fixed capital formation under the 2011 SUT. Table 17 shows the comparison between the SUT and NA using different approaches:

6. Meeting the Challenges

- The Agriculture Census 2013 did not capture data on outputs in agricultural products.
- There were no surveys or studies on the input structure of the economy for breaking down

Table 17: Comparison of Supply and Use Table and Published National Accounts, 2011
(million riels)

Production Approach	Supply and Use Tables		Published National Accounts		Difference (%)
	Estimates	Share (%)	Estimates	Share (%)	
Agriculture, Forestry, and Fishery	18,484,251	35.1	17,993,542	34.5	490,709
Mining and Quarrying	329,698	0.6	329,698	0.6	-
Manufacturing	7,907,519	15.0	7,900,171	15.1	7,348
Electricity, Gas, Steam, and Water Supply, and Sewerage, etc.	262,501	0.5	269,849	0.5	-7,348
Construction	3,029,234	5.7	3,029,234	5.8	-
Wholesale and Retail trade	4,763,255	9.0	4,763,255	9.1	-
Transportation and Storage	2,707,645	5.1			
Information and Communication	1,257,025	2.4	3,960,993	7.6	3,677
Accommodation and Food Service Activities	2,250,765	4.3	2,250,765	4.3	-
Financial and Insurance Activities	796,935	1.5	796,917	1.5	19
Real Estate Activities	1,412,499	2.7			
Professional, Scientific, and Technical Activities	139,465	0.3	2,727,934	5.2	-493,978
Administrative and Support Service Activities	681,992	1.3			
Public Administration, Defense, and Social Security	843,971	1.6	843,971	1.6	-
Education	799,600	1.5			
Human Health and Social Work Activities	1,721,610	3.3			
Art, Entertainment and Recreation	577,311	1.1	4,183,985	8.0	-428
Other Service Activities	1,085,037	2.1			
Total	49,050,312	93.0	49,050,312	94.0	-
Taxes Less Subsidies on Products	3,672,289	7.0	3,672,289	7.0	-
Less: Financial Intermediation Services Indirectly Measured	-	-	568,516	-	-568,516
Gross Domestic Product	52,722,601	100.0	52,154,085	100.0	568,516

continued on next page

Table 17 continued

Expenditure Approach	Supply and Use Tables		Published National Accounts		Difference (%)
	Estimates	Share (%)	Estimates	Share (%)	
Final Consumption Expenditure	46,278,203	87.8	46,278,203	88.9	-
Household Final Consumption Expenditure	42,046,651	79.8	42,046,651	80.8	-
NPISHs Final Consumption Expenditure	1,097,320	2.1	1,097,320	2.1	-
General Government Final consumption Expenditure	3,134,232	5.9	3,134,232	6.0	-
Gross Capital Formation	9,266,694	17.6	8,902,661	17.1	364,033
Gross Fixed Capital Formation	8,680,327	16.5	8,316,293	16.0	364,034
Changes in inventories	484,056	0.9	586,367	1.1	-
Acquisitions less disposals of valuables	102,311	0.2			
Exports of Goods and Services	28,159,143	53.4	28,159,143	54.1	-
Exports of goods (FOB)	23,473,861	44.5	20,206,420	38.8	3,267,441
Exports of services	4,685,282	8.9	7,952,722	15.3	-3,267,440
Imports of Goods and Services	30,981,438	58.8	30,981,438	59.5	-
Imports of goods (FOB)	26,296,157	49.9	26,296,157	50.5	-
Imports of services (FOB)	4,685,282	8.9	4,685,282	9.0	-
Statistical Discrepancy	-	-	-289,875	-0.6	289,875
Gross Domestic Product by Expenditure	52,722,602	100.0	52,068,693	100.0	653,909
Income Approach	Estimates	Share (%)	Estimates	Share (%)	Difference (%)
Output, at Basic Prices	90,093,103	100.0	...	...	-
Intermediate Consumption, at Purchasers' Prices	41,042,791	45.6	...	...	-
Gross Value Added at Basic Prices	49,050,312	54.4	49,050,312	...	-
Compensation of Employees	18,897,076	38.5	...	...	-
Taxes Less Subsidies on Products	3,672,289	7.5	3,672,289	...	-
Taxes on Production less Subsidies	44,519	0.1	...	...	-
Gross Operating Surplus/ Mixed Income	30,108,718	61.4	...	...	-
Gross Domestic Product	52,722,601		52,722,601	...	653,909
Number of Employment (average, in 1000)	7,891		...	...	-

... = not available, - = magnitude equals zero, FOB = free on board, NPISH = nonprofit institutions serving households.
Source: National Institute of Statistics, Cambodia.

inputs of product among the industries. Thus, the NIS needs technical assistance and fund support to improve and update the inputs structure for the recent years.

- Changes in inventory are still estimated using computation as residual methods. Data from EC 2011 does not capture the inventory values of goods at the beginning, thus, the methodology of survey data collection for estimation needs improvement.
- Survey data captures some of the industries and products, yet were coded by name only, not as a number classification code, such ISIC or CPC.
- Other issues and challenges include the following:
 - Difficulty in mapping international classifications for bridge tables: HS-CPC-ICP-ISIC;

- Lack of personnel for data coding and matching to different types of industries;
- Lack of input-output structures for selected industries;
- Unavailability of trade and transport margin survey, and survey for nonobserved economy; and
- Changes in inventories were only derived as residual.

- **Human resources:** Because of the lack of human resources, knowledge and capacity building needs improvement for concepts, methodology, and analysis of the SUT and IOT compilation, i.e., specific training or on-hand training is a priority. TA is also needed to build a national manual SUT and IOT, and to compile SUT at constant prices is second priority.

- **Financial constraints:** There is no budget to support the operational costs to continue to carry out the SUT and IOT framework, i.e., for data collection, compilation, and analysis, especially for the survey on input–output structures by industry sector.

7. The Way Forward

- The SUT or IO structure for the recent years (2015) should be updated, with main data sources to be available, i.e., ICP 2015, CSES 2015, and other surveys. In addition, the extent to which the SUT and IOT estimation is integrated in the regular NA compilation should be determined.
- Knowledge and capacity building in the SUT and IOT following the SNA 2008 should be improved. There are plans to compile the regular SUTs' estimation on a more regular basis, and adopt the recommendations of the 2008 SNA updates.
- Cambodia's NA have to restructure to accommodate the change in economy, particularly in the construction, food and beverage, semiconductor, rubber, and metal and nonmetal industries. Integrating the Cambodian Economic Census into the NA and developing IO tables are priorities.
- Financial support will be sought to implement the SUT framework. The government needs the help and support of local and international donors, i.e., ADB, for the sustainable implementation of the SUT and IOT framework. There are plans to estimate annual SUTs from 2011 onward, and to get the estimation of the SUT constant price by 2019.

F. People's Republic of China

The National Bureau of Statistics (NBS) of the People's Republic of China (PRC) implemented RCDTA 8838, with the objective of developing the 2012 SUT. The NBS, as an agency directly under the State Council, is in charge of statistics and economic accounting in the PRC. The staff from Department of National Accounts in the NBS compiled the 2012 SUTs with data and information from the 2012 IO survey and other sources.

1. The Current System of National Accounts

a. Recent National Accounts

The NBS has been compiling national accounts of the PRC since 1992; GDP estimation by production and income approach started in 1952, and GDP by expenditure approach started in 1978. The PRC's national accounts statistics are compiled in accordance with the 1993 SNA, including GDP accounts, input–output accounts, flow of fund accounts, balance sheet, and BOP. The current Chinese System of National Accounts (2002 CSNA) is under revision; a new version (2015 CSNA) based on the 2008 SNA recommendation will be released in 2017.

GDP was calculated using three approaches: production, income, and expenditure approach. The industrial classification in GDP accounts is based on the Industrial Classification for National Economic Activities (GB/T 4754-2011). Quarterly and annual GDPs were estimated using different data resources, including the annual statistical survey conducted by the statistical system; administrative records, such as financial information from the Ministry of Railway; fiscal revenue and expenditure from the Ministry of Finance; and others.

b. Existing Supply and Use Tables

The NBS did not compile a SUT up to 2009. During the ADB RETA 6483, NBS compiled the 2005 SUT for 37 industries and 56 products, valued at producers' prices (including VAT). For the ADB RCDTA 8838 project, the NBS compiled the 2012 SUT.

c. Existing Input–Output Tables

The IOT is part of the PRC's national accounts. The NBS conducts the IO survey and has compiled benchmark IOTs every 5 years since 1987. Between 2 benchmark years, the NBS compiles nonbenchmark tables using the information from the last IO survey and other annual statistical data. To date, the PRC has compiled benchmark IO tables for the years 1987, 1992, 1997, 2002, 2007, and 2012; and nonbenchmark tables for the years 1990, 1995, 2000, 2005, and 2010. Taking the 2012 IOT as an example, the NBS published the Symmetric IOT (at the PRC producers' prices, 139 commodities by 139 commodities), Make Matrix (at producers' prices, 42 commodities by 42 industries), and Use Table (at producers' prices, 42 commodities by 42 industries).

d. The 2012 Supply and Use Table at Current Price

The NBS chose 2012 as the reference year for the benchmark SUT because of the available information from the 2012 input structure survey and capital formation survey, household survey, and goods and services import and export. The 2011 PRC industry classification of the national economy was based on ISIC Revision 4.0, and the 2010 product classification for statistics was based on CPC Version 1.0. In the PRC's IOT, there are 139 commodities. For the ADB project, the 2012 SUT has 92 commodities and 62 industries based on the PRC's classification, and 82 commodities and 64 industries based on the ISIC Version 4.0 and CPC Version 1.0 at producers' prices.

2. Data Sources and Methods

The commodity by industry SUT was compiled using information from corporation units and the 2011 IOT. The two tables were then balanced.

a. Supply Side

The supply side was measured at purchasers' prices, comprising domestic output, imports, and the trade and transport margin.

Domestic Production by Industry was from the annual survey of agriculture, manufacturing, and services. Agricultural output was estimated by volume of products multiplied by the price of the same product. Manufacturing output was also estimated by volume of products multiplied by the price of the same product, but products only included those delivered to other enterprises. Outputs of other sectors were estimated based on either the revenue or expenditure. Outputs by industry in the supply table were valued at producers' prices.

Imports of Goods and Services were from the PRC Custom (GACC), by the category of HS8. Services data was mainly from BOP compiled by the State Administration and Foreign Exchange (SAFE).

CIF/FOB Adjustment on Imports used data from the GACC and SAFE; the amount was about 5% of the CIF value. Following the SNA 2008 recommendation, goods imported for further processing were removed from import and export; and only the processing fee was added to export.

Trade and Transport Margins for various products used rates of trade and transport margins from the 2012 Input Survey multiplied by the domestic output and import to calculate the trade and transport cost.

b. Use Side

Intermediate Consumption by Industry.

The NBS used the 2012 IOT and supply table to construct the table of intermediate consumption using mathematical methods. Following "product

assumptions,” first calculate input coefficients of industry sectors with the formula $B = AC$, in which A is the direct consumption coefficient matrix of IOT, and C is the product proportion coefficient matrix of gross output. Then, calculate the intermediate consumption matrix by gross output of industry multiplied by the corresponding input coefficient. Thus, we obtain the intermediate consumption matrix at producers’ prices, that needs to be transformed to purchasers’ prices. The detailed procedure is as follows: compile the transport margins matrix and trade margins matrix of goods for intermediate consumption, then add transport margins and trade margins on goods for intermediate consumption at producers’ prices, hence, obtaining goods for intermediate consumption at purchasers’ prices; then, record the corresponding minuses in the rows of the transport and trade sectors.

Household Consumption Expenditure was mainly from the household survey and GDP by expenditure approach or GDP (E), and information from administrative sources (such as vehicle register records) is also used.

General Government Consumption Expenditure (Individual and Collective) was mainly from government budget documents and GDP (E).

Gross Fixed Capital Formation included machinery and equipment, building and construction, cultivated biological resources, and mineral exploration and evaluation. The NBS conducted a special survey on composition of fixed assets in 2012 to get information for the fixed capital formation calculation; other information such as GDP (E) was also used.

Changes in Inventories were calculated as the difference between the end and beginning of the year for all the inventories. Data resources were enterprise or firm annual statistical reports and GDP (E).

Exports of Goods and Services. Information was from the GACC and SAFE.

c. Value Added

The value added by industry was from the GDP by income approach or GDP (I), since the number of sectors in GDP (I) was different from that in use table, some of the industries were aggregated according to the classification relationship between them. Some detailed information from the 2012 IO survey was also used in estimating value added by industry.

3. Balancing Process

Balancing was done both manually and using the RAS method. First, using the output from the supply table as control, use side items were rechecked, and discrepancies were manually adjusted by sector, making sure the discrepancy of supply and use was less than 2% for each product group, and the error between total supply and total use was equal to 0.1%. Then, the RAS procedure was used to adjust intermediate consumption to get a balanced SUT.

4. Main Findings and Results

In 2012, the total supply was yuan (CNY)172.4 trillion, broken down into domestic supply of the PRC at CNY156.8 trillion (91% of total supply), import at CNY12.2 trillion (7.1% of total supply), and taxes less subsidies at CNY3.4 trillion (1.9% of total supply).

Table 18: Composition of Total Supply of Goods and Services, 2012

Industry	Share (%)
Domestic Production at Producers’ Price	91.0
Agriculture, Forestry, and Fishery	5.0
Industry	52.5
Services	33.5
Imports of Goods and Services	7.1
Taxes Less Subsidies on Products	1.9
Total Supply at Purchasers’ Prices	100.0

Source: National Bureau of Statistics, People’s Republic of China

In 2012, the total use was CNY172.2 trillion, intermediate use was CNY106.9 trillion, final consumption expenditure was CNY27.2 trillion, gross capital formation was 24.8 trillion, and export was CNY13.7 trillion. The discrepancy between supply and use was CNY0.2 trillion, nearly 0.1% of the total supply or total use.

Table 19: Composition of Total Supply of Goods and Services, 2012

Industry	Share (%)
Inter-industry Use (Intermediate Consumption)	61.9
Agriculture, Forestry, and Fishery	2.1
Industry	41.7
Services	18.1
Household Consumption	11.5
Nonprofit Institutions Serving Households	–
Government Consumption	4.3
Gross Fixed Capital Formation	13.8
Valuables and Changes in Inventories	0.6
Exports of Goods and Services	7.9
Total Use at Purchasers' Prices	100

– = magnitude equals zero.

Source: National Bureau of Statistics, People's Republic of China.

Value added included all taxes on all production and products. Industry had the largest share of GDP at 37%, followed by agriculture at 10%. A comparison of the SUT and published national accounts is shown below.

Table 20: Comparison of Supply and Use Tables and Gross Domestic Product Estimates, 2012
(100 million yuan)

	Supply and Use Tables	Annual Accounts	Discrepancy	(%)
Production Approach	536,800.00	534,123.00	2,677.00	0.50
Expenditure Approach	534,747.40	534,747.50	0.10	–

– = magnitude equals zero.

Source: National Bureau of Statistics, People's Republic of China.

Table 21: Comparison of Supply and Use Tables and Trade Estimates
(100 million yuan)

	Import	Export	Net Export
Gross Domestic Product - Expenditure	–	–	14,636.00
2012 Supply and Use Tables	136,665.90	122,027.00	14,638.90
Balance of Payment Manual 5	141,920.00	127,283.90	14,636.10
Balance of Payment Manual 6	137,297.60	122,661.60	14,636.00

Source: National Bureau of Statistics, People's Republic of China.

5. Meeting the Challenges

The main challenges in compiling the SUT are data and human limitation.

- Data Limitation.** The compilation of the IOT or SUT needs very detailed data in all aspects. The NBS does not have enough detailed information on capital goods and inventories, nor much information of intermediate consumption by industry. For the trade and transport margins, the NBS uses the same margin rates for the same goods used in different industries or in final use. Taxes and subsidies data do not have enough details to break into different products.
- Resource Constraints.** The lack of staff, particularly skilled staff, is the most important limitation in compiling the SUT. In the NBS, there were only three people in the division currently working on input-output.
- Implementation.** The NBS conducts the IO survey every 5 years to get information on intermediate input to compile the IOT or SUT. The IOT was used for policy simulation, environment impact, and international trade analyses by government agencies and research institutions. Per experience from RETA 6483 and 8838 projects, compilation of the SUT can be done more frequently and serve as a framework for GDP estimation.

6. The Way Forward

The SUT provides a consistent estimate for GDP from the expenditure, income, and production sides. As a framework for GDP measurement, the knowledge from this project will be used to improve the SUT compilation. Due to data and human resources constraints, the NBS has no plans yet to compile annually the IOT or SUT.

G. Fiji

The Fiji Bureau of Statistics (FBOS) is the core statistical organization of the Government of Fiji. The national accounts (NA) unit in the Economic Statistics Division (ESD) of FBOS is responsible for compiling the SUT needed for rebasing and balancing the three approaches of GDP, i.e., production, expenditure, and income approaches. With few staff working on

NA, a team was formed consisting of establishment survey, external sector, satellite, and NA statisticians to complete the required task in a timely manner. A total of 17 statisticians were chosen for the 2011 SUT compilation.

The SUT and national accounts manager carried out the complex areas of the compilation such as valuation adjustment and balancing while the other members carried out data entry, classification concordances, and industry investigations.

1. Current System of National Accounts

The FBOS annually compiles and publishes NA statistics, covering GDP by production, expenditure, and income approaches, in compliance with the 2008 SNA. From 2011, compilation of the annual SUT was included in the annual NA, and published in August each year. In doing so, the previous year's estimates use actual survey information. The numbers for the year before that were revised using the supply and use balanced estimates. The estimates were finalized once the team balanced the SUTs. For the 2011 SUT, the economic activities were classified according to the Fiji Standard Industrial Classification (FSIC) 2010 following the ISIC Revision 4 for industries, CPC Version 2.0 for commodities, COICOP for household final consumption expenditure, COPNI for nonprofit institutions, COFOG for government consumption expenditure, and HS 2002 for trade in goods. Data from many sources was used to draw a complete design of the economy.

The establishment survey was the main data source for the compilation of the NA and SUT. The establishment survey unit collected and compiled 16 annual and three ad hoc industrial reports as below for the private sector and public enterprises operating with the aim of making profit.

Data for household final consumption was sourced ad hoc from the Household Income and Expenditure Survey. The gap years were estimated using commodity indicators. In addition, the following administrative sources were also used to compile the national accounts estimates:

- Tax data (used as indicators in the latest period in the absence of survey information to estimate gross output);
- Pension data (used as an indicator in the latest period in the absence of survey information to estimate COE and output of the pension fund);
- Government finance statistics (to calculate government output and government final consumption expenditure);
- Data from the Ministry of Health (to estimate gross output of the industry in constant price); and
- Data from the Ministry of Education (to estimate gross output of the industry in constant price).

a. Existing Supply and Use Tables

The FBOS compiled the 2005 SUT for 51 commodities and 32 industries. It was challenging for the team since comprehensive data needed for the SUT was not readily available.

The next SUT had 2008 as the reference year with 71 commodities and 44 industries. The FBOS, after the 2005 SUT compilation, realized it had to collect and publish comprehensive data on industries. The division started compiling more comprehensive data than before. A total of 18 annual industrial survey reports were generated for the base year 2011. Thereafter, 10 surveys with five business indicator quarterly releases were compiled and published regularly.

The year 2011 was chosen as the reference year for the latest SUT. This matrix had 114 commodities and 56 industrial breakdowns. A total of 18 annual industrial survey reports were generated for the base year. Thereafter, 16 industries are surveyed annually, with five business indicator quarterly releases.

The SUT is integral to the NA. It was compiled annually after the 2011 SUT to support the compilation of tourism satellite accounts and

to eliminate the statistical discrepancy between approaches. The next exhaustive SUT was prepared for 2014 which will be used to rebase the GDP to year 2014.

b. Existing Input–Output Tables

The only IOT prepared for the country was for 1993, compiled by the University of the South Pacific.

2. Data Sources and Methods

- Domestic Production by Industry: survey and administrative data.
- Imports of Goods and Services: for Goods – customs or trade data; and for Services – surveys.
- Valuation adjustments.
- Trade and Transport Margin: surveys.
- Taxes less Subsidies on Products: government finance statistics.
- CIF/FOB Adjustment on Imports: percentage used on total imports; other adjustments aligned to BOP published figures.
- Intermediate Consumption by Industry: survey and special investigations.
- Household Consumption Expenditure: 2011 HFCE modeled from the 2008–2009 HIES.
- General Government Consumption Expenditure (Individual and Collective): government finance statistics.
- Nonprofit Institutions Serving Households: survey.
- Gross Fixed Capital Formation and Changes in Inventories: survey.
- Acquisition Less Disposal of Valuables: not applicable.

- Exports of Goods and Services: for Goods – customs or trade data, and for Services – survey.

3. Uses of Value Added by Industry

- Compensation: sourced from surveys.
- Taxes Less Subsidies on Products and Production.
- Gross Operating Surplus/Mixed Income: sourced from surveys.

4. Balancing Process

Manual balancing was done until all product and commodity discrepancies between supply and use were low. Thereafter, the RAS method was used to proportionally distribute the difference in IC and HFC.

5. Main Findings and Results

Fiji's economy gross output for 2011 stood at Fiji dollars (F\$)11.5 billion. The primary sector contributed 9.0%, industries produced 28.5%, and services generated 62.5%.

The top five industries contributing to the total gross output were manufacturing (F\$2,351.2 million or 20.4%); transport and storage (F\$1,277.5 million or 11.1%); wholesale and retail (F\$1,177.5 million or 10.2%); AFF (F\$1,035.3 million or 9.0%), and accommodation and food service activities (F\$872.6 million or 7.6%).

Fiji's economy incurred an intermediate cost of F\$5.8 billion for the year 2011 to produce F\$11.5 billion of output. The primary sector's contribution was 7.1%, industries incurred 36.4%, while services incurred 56.4%.

The GVA derived from the 2011 SUT stood at F\$5.7 billion. This was an upward revision of 6.6% from the previous estimate of F\$5.4 billion. The next table shows the revision by industry.

The upward revision in the estimate was mainly contributed by public administration, education, and the health industry. The number for public

administration and defense activities was revised upward due to the inclusion of new government categories not captured under the previous base. The education industry was heavily underestimated in the previous base. Availability of new survey information enabled the revision, correcting and reflecting the education industry's contribution. New

establishment information on the health industry led to the upward revision as well. The education and health industry's indicators were based on the previous base. On the other hand, the finance and insurance industry was revised downward due to a refinement in the methodology for estimating output of the pension fund.

Table 22: Output and Value Added, 2011
(thousand Fiji dollars)

Industry	Gross Output	Share (%)	Intermediate Consumption	Share (%)	Gross Value Added	Gross Value Added Ratio (%)
Total	11,501.20	100.00	5,762.30	100.00	5,738.80	50
A Agriculture, Forestry, and Fishing	1,035.30	9.00	411.4	7.14	623.9	60
B Mining and Quarrying	192.1	1.67	102.1	1.77	90	47
C Manufacturing	2,351.20	20.44	1,544.10	26.80	807.1	34
D Electricity	303.9	2.64	194.6	3.38	109.3	36
E Water Supply and Sewerage	52.6	0.46	34.1	0.59	18.5	35
F Construction	378.1	3.29	224.3	3.89	153.7	41
G Wholesale and Retail	1,177.50	10.24	508.3	8.82	669.2	57
H Transport and Storage	1,277.50	11.11	918.2	15.93	359.3	28
I Accommodation and Food Service Activities	872.6	7.59	503	8.73	369.5	42
J Information and Communication	507.6	4.41	166.9	2.90	340.7	67
K Financial and Insurance Activities	785.6	6.83	256.9	4.46	528.7	67
L Real Estate Activities	423.2	3.68	135.7	2.35	287.5	68
M Professional, Scientific, and Technical Activities	182.8	1.59	54.8	0.95	128	70
N Administrative and Support Service Activities	346.1	3.01	213.2	3.70	132.9	38
O Public Administration and Defense	635	5.52	197.6	3.43	437.4	69
P Education	543.2	4.72	133.6	2.32	409.6	75
Q Human Health and Social Activities	191.9	1.67	53.9	0.94	138	72
R Arts, Entertainment, and Recreation	58.2	0.51	36.6	0.64	21.6	37
S Other Service Activities	186.9	1.63	72.9	1.27	113.9	61

Source: Fiji Bureau of Statistics.

Table 23: Comparison of Supply and Use Table and Published National Accounts, 2011
(thousand Fiji dollars)

Industry	Supply and Use Table	Published National Accounts	Ratio
Agriculture, Forestry, and Fishing	623.9	631.9	-1.3
Mining and Quarrying	90.0	77.9	15.5
Manufacturing	807.1	806.6	0.1
Electricity	109.3	110.6	-1.2
Water Supply and Sewerage	18.5	10.6	74.5
Construction	153.7	151.4	1.5
Wholesale and Retail	669.2	661.7	1.1
Transport and Storage	359.3	339.1	6.0
Accommodation and Food Service Activities	369.5	366.7	0.8
Information and Communication	340.7	344.7	-1.2
Financial and Insurance Activities	528.7	596.8	-11.4
Real Estate Activities	287.5	284.3	1.1
Professional, Scientific, and Technical Activities	128.0	114.6	11.7
Administrative and Support Service Activities	132.9	117.9	12.7
Public Administration and Defence	437.4	304.3	43.7
Education	409.6	239.6	71.0
Human Health and Social Activities	138.0	94.3	46.3
Arts, Entertainment, and Recreation	21.6	21.0	2.9
Other Service Activities	113.9	111.3	2.3
Total	5,738.8	5,385.3	6.6

Notes:

Ratio > 1.00 Industry Estimate revised upwards.

Ratio < 1.00 Industry Estimate revised downwards.

Source: Fiji Bureau of Statistics.

Total Supply Components. The total supply for the year 2011 stood at F\$17.0 billion where domestic output was F\$11.5 billion (67.7%); imports, F\$4.5 billion (26.2%); and net taxes on product, F\$1.0 billion (6.1%).

Total Use Components. The total use for the year 2011 stood at F\$17.0 billion of which intermediate cost was F\$5.8 billion (33.9%); household final consumption expenditure, F\$4.4 billion (25.7%); exports, F\$4.1 billion (23.9%); gross fixed capital formation, F\$1.2 billion (7.2%); government final consumption expenditure, F\$1.2 billion (6.9%); NPISH, F\$0.2 billion (1.2%); and changes in stock, F\$0.2 billion (1.2%).

6. Meeting the Challenges

Issues and actions taken to address concerns are as follows:

a. Implementation

- Request for funds from government to conduct surveys and rebases.
- Plan events.
- Conduct surveys.
- Prepare the SUT.
- Conduct rebase.
- Promote and educate users on the use and importance of the SUT.

b. Data Limitations

- Breakdown of intermediate consumption: some data was lumped together in surveys. Further investigation with major players in the industry was required.

- Household final consumption expenditure: The 2011 HIES was not available. The 2011 HFCE was modeled from the 2008–2009 HIES.
- Fixed capital formation and changes in inventories: possible underestimation of survey GFCF was identified during the SUT compilation. Survey data was adjusted in the SUT.
- Trade and transport margins: allocating it to products was challenging.
- Informal economy.

c. Resource Constraints

The Fuji's NA unit is very small. The lack of human resource is a major challenge for comprehensive work such as compiling supply and use. This challenge was overcome by forming a team or group to complete the task.

7. The Way Forward

The FBOS already started the annual compilation of the SUT. The driving reason for the annual compilation was the annualized tourism satellite accounts compilation after 2011. The main SUT prepared during the rebase years were comprehensive compilations. The exercise is done every 3 years. Between nonbenchmark years, the previous SUT is used as a benchmark for product allocations of gross output and intermediate consumption. The other components are comprehensively compiled as in the rebase years' SUTs. Once the SUT is prepared for a particular year, the previous estimates published in the NA are revised as per the balanced numbers from the SUT.

H. Hong Kong, China

The compilation of the Supply and Use Tables (SUTs) in Hong Kong, China was undertaken by a team of four officers in one of the National Income Branches of the Census and Statistics Department (CSD). The team did the work in addition to their routine duties.

1. The Current System of National Accounts

Gross Domestic Product by expenditure approach or GDP (E) is the single measure of GDP in Hong Kong, China. The following breakdown of GDP is available:

- By expenditure component, including private consumption expenditure, government consumption expenditure, gross domestic fixed capital formation, changes in inventories, exports of goods, exports of services, imports of goods, and imports of services.
- By economic activity, whereby economic activities are classified according to the Hong Kong Standard Industrial Classification (HSIC), with one additional item on ownership of premises, according to the national accounting convention.

GDP (E) includes annual and quarterly series, both at current prices and in chain volume terms. GDP by economic activity includes annual series at current prices, and annual and quarterly series in chain volume terms.

The production boundary and the asset boundary generally follow the 2008 SNA. Fixed assets include building and construction, costs of ownership transfer, and machinery, equipment and intellectual products. Valuables and entertainment, and literary or artistic originals are currently not included in the fixed assets.

In compiling the volume measures of GDP and its components, the annually reweighted chain-linking approach was adopted. This means that the base year for the volume estimates of a particular year is always the preceding year.

The classifications used in the compilation of GDP conform to internationally recommended systems and follow the 2008 SNA. For household final consumption expenditure, the classification of goods and services was based on the Classification of Individual Consumption by Purpose (COICOP), with local adaptations. Government consumption expenditures were classified according to the

Classification of the Functions of Government (COFOG). International transactions of goods were classified according to the Harmonized Commodity Description and Coding System. International transactions in services were based on the recommended classification given in the *6th Edition of the Balance of Payments and International Investment Position Manual (BPM6)*. Sector classification of economic activities was based on the HSIC Version 2.0, an adapted version of the United Nations' International Standard Industrial Classification (ISIC) Revision 4.0.

A wide range of data sources was used in estimating GDP statistics. For GDP (E), private consumption expenditure was estimated based on economic surveys, external trade statistics, administrative records, HESs, and other sample surveys conducted by the CSD, supplemented by information from other miscellaneous sources where appropriate; government consumption expenditure was sourced from government accounts; gross domestic capital formation was based on economic surveys, government accounts, and administrative records; change in inventories was based on economic surveys and administrative records; trade in goods was based on trade statistics and trade surveys, whereas trade in services was mainly based on data collected from the Annual Survey of Imports and Exports of Services. GDP by economic activity was mainly estimated based on economic surveys supplemented by administrative data.

The 2008 SNA was closely followed in compiling the GDP. A technical revision was conducted in 2012 to implement the latest international statistical standards in the 2008 SNA and enhanced estimation methods in the GDP compilation framework. In particular, the new standards implemented were (i) adoption of the change of ownership principle in recording goods sent abroad for processing and merchanting; (ii) capitalization of research and development expenditure, (iii) estimating the output of financial intermediation services indirectly measured using the reference rate method, (iv) recording employee stock options as compensation of employees (COE), and (v) adoption of new classification and enhanced estimation methods for trade in services statistics.

On the scope of accounts and tables, the following tables¹⁵ were compiled:

- (i) GDP by expenditure at current prices (Table 1.1).
- (ii) GDP by expenditure in chained dollars (Table 1.2).
- (iii) Accounts for the total economy (Table 1.3/Table 4.1).
- (iv) Value added by industry at current prices (Table 2.4).
- (v) Value added by industry in chained dollars (Table 2.5).
- (vi) Output, gross value added, and fixed assets by industry at current prices (Table 2.6).
- (vii) Government final consumption expenditure by function at current prices (Table 3.1).
- (viii) Individual consumption expenditures by purpose at current prices (Table 3.2).
- (ix) Rest of the world accounts (until net lending) (Table 4.2).

Under RETA 6483, Hong Kong, China compiled the first experimental SUT for the reference year 2005. The second experimental SUT was compiled under RETA 8838.

2. The 2011 Supply and Use Table at Current Price

The reference year 2011 was selected for the SUT as more breakdowns of data were available from various economic surveys for that year.

Given that the existing data sources were not designed for SUT compilation, detailed breakdowns were not fully available. Having considered the reliability of the data, the size of the matrix for Hong Kong, China's SUT was fixed at 30 types of products (10 breakdowns for goods and 20 breakdowns for services) and 25 industries (8 goods-producing sectors and 17 services sectors). Since Hong Kong, China is a service-oriented economy with its services

sector accounting for more than 90% of GDP and manufacturing accounting for less than 2%, the provision of more breakdowns of services was in line with Hong Kong, China's economic structure.

In compiling the SUT, sources of information were mainly the national income statistics and trade statistics, supplemented by detailed information obtained from annual economic surveys and administrative data.

Under the existing compilation framework, household final consumption expenditure was classified based on COICOP with local adaptations, while government consumption expenditure was classified according to COFOG. Exports and imports of goods were classified according to the Harmonized Commodity Description and Coding System while services were based on the recommended classification given in BPM6. For the SUT compilation, products were all converted to CPC Version 2.0 based on relevant concordance tables, with local adaptations. The sector classification of economic activities was based on the HSIC Version 2.0, which is an adapted version of ISIC Revision 4.0.

In the SUT, output was valued at basic prices, whereas intermediate consumption and final demand were at purchasers' prices. Exports of goods by product were valued at FOB prices while imports of goods by product were valued at CIF prices. Valuation adjustments were made on the supply table to convert the valuation of total supply from basic prices to purchasers' prices.

Owing to data limitations, most of the products breakdowns on both supply and use sides for Hong Kong, China were crude estimates using proxy indicators. Thus, Hong Kong, China's SUT was compiled on an experimental basis only.

3. Data Sources and Methods

a. Supply Side

Domestic Production by Industry was estimated mainly from the annual economic surveys supplemented by data from administrative sources.

¹⁵ The number in parentheses refers to the table number in the UN National Accounts Questionnaire. United Nations Statistics Division. *National Accounts Statistics: Main Aggregates and Detailed Tables*. <https://unstats.un.org/unsd/nationalaccount/madt.asp>

Imports of Goods were based on trade statistics and the annual economic surveys. Estimates of imports of services by product were mainly based on data collected from the Annual Survey of Imports and Exports of Services, supplemented by administrative data and household surveys.

Trade and Transport Margins were derived from the annual economic surveys, the Annual Survey of Economic Activities for Import/Export, Wholesale and Retail Trade, Accommodation and Food Services Sectors. Transport costs were crudely estimated by referring to ratios of similar economies.

Taxes Less Subsidies on Products were obtained from government accounts.

Import of Goods and Services and CIF/FOB Adjustment were collected from the Monthly Survey on Insurance and Freight Costs for Import Trade.

b. Use Side

Intermediate Consumption was mainly estimated from the annual economic surveys.

Private Consumption Expenditure, Government Consumption Expenditure by Individual and Collective Consumption, Consumption of Nonprofit Institutions Serving Households, and Gross Domestic Capital Formation were taken from the GDP compilation system and annual economic surveys. Acquisition less disposal of valuables was not compiled in Hong Kong, China.

Exports of Goods were based on trade statistics and annual economic surveys, whereas exports of services by product were mainly based on data collected from the Annual Survey of Imports and Exports of Services, supplemented by administrative data.

For **Valuation Adjustments, Intermediate Consumption, and Gross Domestic Capital Formation**, the level of details in the existing compilation system was not sufficient for producing the SUT. The required breakdowns of data were thus only crudely estimated by referring to output, trade statistics, retained imports statistics, among others,

with detailed product breakdowns; and by using the structures and ratios of other similar economies.

c. Value Added

For the **Uses of Value Added**, COE was compiled based on data collected from the annual economic surveys, while taxes less subsidies was from government accounts. Operating surplus was derived as a residual item.

4. Balancing Process

Based on the best possible data source for each item, a preliminary unbalanced SUT was first compiled. Products with large discrepancies between their supply and use were critically reviewed by looking at the consistency of the classification system, coverage of the products under the supply and use sides of the table, and valuation method, among others. Once the inconsistencies and sources of discrepancies were identified, adjustments were introduced taking into consideration related indicators and ancillary information. Such adjustments were performed continuously until the discrepancies were reduced to an acceptable level. After that, automatic balancing was done using the RAS method to distribute the remaining discrepancies. Items with a higher degree of certainty or considered to be better estimates were fixed as predetermined values during the automatic balancing process.

5. Main Results and Findings

a. Supply Side

Imports in Hong Kong, China in 2011 accounted for 51% of total supply at basic prices, and domestic production for 49%. As a trading hub, the economy had a higher proportion of imports to total supply than domestic production.

Agriculture and fishing was only 1% of domestic production; and industry, for only 19%. Services made up 80% of total domestic production and consisted primarily of wholesale and retail trade, real estate and business services, financing and insurance services, and transport and storage services.

b. Uses Side

Intermediate consumption made up 25% of the total uses at purchasers' prices, followed by household final consumption expenditure at 14%, and gross domestic capital formation at 6%. Hong Kong, China has a small and efficient government structure and government consumption expenditure was only 2% of all uses. Exports of goods and services accounted for 52% of all uses, which consisted predominantly of goods. For services, water transport contributed to 20% of total export of services, followed by financial intermediation services (16%), and air transport services (14%).

c. Value Added

Value added was valued at basic prices. Value added in agriculture and fishing was negligible. Industry generated only 7% of GDP and services accounted for the remaining 93%. Hong Kong, China is one of the most service-oriented economies in Asia and worldwide. For the economy, about half of GDP (52%) went to COE.

6. Meeting the Challenges

The most pressing challenge in compilation was the unavailability of detailed breakdowns for compiling the SUT, for valuation adjustments and intermediate consumption. To overcome the data gaps, reference was made to the supply data or other sources (e.g., administrative data) and the information from similar economies. This meant that the breakdown data was crude estimates only, and caution was needed to analyze the supply and use of a product.

Another challenge was the identification of the sources of discrepancies. The problem areas were thoroughly investigated, among others, re-examination of the source data, allocation method, and classification system. Discussions with data suppliers and relevant parties were also done to determine the reasons for the large gaps and find ways to minimize them.

7. The Way Forward

Despite data limitation, the compilation of the experimental SUT provided useful information for reconciling the aggregates of GDP from different perspectives. The SUT compilation provided a good opportunity to further check and contrast data from various sources of GDP, and to identify the weaknesses and data gaps for compiling the GDP by production and expenditure approaches under the existing system. The findings from this exercise will be incorporated into the GDP compilation framework, where appropriate, to improve the coherence of the current GDP estimates.

Toward integrating the SUT into the regular national accounts compilation, the commodity flow method was used extensively in compiling consumption expenditure in the domestic market, as well as investment expenditure on the machinery and equipment component of gross fixed capital formation. With the experiences gained in this project, wider application of the commodity flow method and the SUT framework in the compilation of GDP will be further explored.

I. India

The Ministry of Statistics and Programme Implementation (MOSPI) is the apex body at the national level for coordinating all statistical activities in India. The National Accounts Division (NAD) in the Central Statistical Office (CSO) of the MOSPI is responsible for the compilation and release of NA statistics for India.

1. The Current System of National Accounts

a. Recent National Accounts

India adopted the 2008 SNA in January 2015 for the new series beginning 2011–2012. While revising the base year, efforts were made to implement the recommendations of the 2008 SNA to the extent data was available. Some of the recommendations currently forming part of the new series were the following:

- Valuation of various GVA, NVA, and related aggregates were at basic prices; and GDP at market prices.
 - Estimates of the institutional sectors: nonfinancial and financial corporations, general government, and households were shown separately, in view of their intrinsic difference in their economic objectives, functions, and behavior.
 - Distinction between general government and public corporations was made and units were allocated to institutional sectors so that general government and other public units could be identified separately.
 - Unincorporated enterprises belonging to households, which have complete sets of accounts, tend to behave in the same way as corporations. Therefore, as recommended by the 2008 SNA, such enterprises were treated as quasi-corporations. Some examples of quasi-corporations in India are proprietorship and partnership enterprises, maintaining accounts.
 - The head office was allocated to the nonfinancial corporations sector unless all or most of its subsidiaries were financial corporations, in which case, it was treated as a financial auxiliary in the financial corporations sector.
 - Subsectoring of nonprofit institutions (NPIs) in the corporate and government sectors was done for autonomous bodies and Section 25 companies.
 - Expenditure on research and development (R&D) was capitalized in government, public corporations, and private corporations, and hence, has become part of capital formation.
 - Financial intermediation services indirectly measured (FISIM) was calculated using a reference rate for units engaged in financial intermediation.
 - Output of the central bank (the Reserve Bank of India) was measured at cost.
 - Nonfinancial assets in the earlier series were classified as “construction” and “machinery.” In the new series, as recommended by the 2008 SNA, nonfinancial assets were classified as “dwellings, other buildings, and structures;” “machinery and equipment;” “cultivated biological resources;” and “intellectual property products.”
 - Consumption of fixed capital was measured at the average prices of the period with respect to a constant-quality price index of the asset concerned.
 - Harmonization between SNA and BOP for the external sector transactions was achieved since Reserve Bank of India (RBI) adopted BPM6 in its compilation.
- India has been releasing annual estimates of GDP since 1948–1949. The years in which the base was changed (figures in parentheses are year in which the series was brought out) are 1948–1949 (1956), 1960–1961 (1967), 1970–1971 (1978), 1980–1981 (1988), 1993–1994 (1999), 1999–2000 (2005), 2004–2005 (2010), and 2011–2012 (2015).
- Coverage includes the corporate sector in mining, manufacturing, and services by incorporation of annual accounts of companies as filed with the Ministry of Corporate Affairs (MCA) under their e-governance initiative, MCA21. Accounts of more than 500,000 companies were analyzed and incorporated. Financial corporations in the private sector, other than banking and insurance in the earlier series, were limited to a few mutual funds and estimates for the nongovernment nonbanking finance companies as compiled by the RBI. In the new series, the coverage of the financial sector was expanded by including stock brokers, stock exchanges, asset management companies, mutual funds and pension funds, as well as the regulatory bodies, Securities and Exchange Board of India (SEBI), Home-Pension Fund Regulatory and Development Authority (PFRDA), and Insurance Regulatory and Development Authority (IRDA). In the new series, there was improved coverage of local bodies and autonomous institutions, covering around 60% of the transfers or grants provided to these institutions. Results of recent

surveys and censuses and related type of studies were also used. Since the contribution of the informal sector to India's GDP is more than 40%, a number of surveys and type studies were used.

The results of latest available surveys were also used. Some of the important sources of data used in the new series, were as follows: (i) NSS 68th round (2011–2012) –Survey on Employment and Unemployment and Consumer Expenditure; (ii) National Sample Survey (NSS) 67th round (2010–2011) –Survey on Unincorporated Non-Agricultural Enterprises (excluding Construction); (iii) All India Livestock Census, 2012; (iv) NSS 70th round (2013) –All India Debt and Investment Survey and Situation Assessment Survey; (v) House-Listing and Housing Census, 2010 and Population Census, 2011; (vi) Study on Yield Rates of Meat Products and By-Products of Different Livestock Species Conducted by National Research Centre on Meat, Hyderabad; (vii) Study on the Inputs in the Construction Sector by Central Building Research Institute (CBRI), Roorkee; (viii) Study on “Harvest and Post-Harvest Losses of Major Crops and Livestock Products in India” conducted by the Central Institute of Post-Harvest Engineering and Technology (CIPHET), Ludhiana; and (ix) Annual Survey on Industries.

The NA followed the National Industrial Classification based on ISIC Revision 4.0 and the National Product Classification for Manufacturing Sector (NPCMS) and National Product Classification for Services Sector (NPCSS) based on CPC Version 2 and COFOG. The sequence of accounts was compiled up to the finance accounts for the total economy, and by institutions: general government, households, financial and nonfinancial corporations.

Compilation of aggregates was by institution and, therefore, the data sources were also by type of institution—corporate data for corporations and surveys for households, except agriculture and construction which were compiled at the economy level. A combination of all the three approaches, i.e., production, income, and expenditure, was followed.

b. Existing Supply and Use Tables

The current SUTs available are compiled for the years 2011–2012 and 2012–2013 in 2016, which are

described in section 2. Earlier attempts to compile the SUT for the year 2009–2010 was initiated, but with the change of base year, the same could not be completed and focus shifted.

c. Existing Input-Output Tables

India has a tradition of compiling the IOT at factor cost based on the 1968 SNA for a long time. The first IOT consistent with NA Statistics related to the year 1968–1969. After its completion, IOTs for the years 1973–1974, 1978–1979, 1983–1984, 1989–1990, 1993–1994, 1998–1999 and 2003–2004 were published. The IOT for 1968–1969 was published with 60 sectors and subsequently, the tables consisted of 115 sectors since 1973–74 until 1998–1999. The IOTs for 2003–2004 and the last one (2007–2008) contained 130 sectors.

The first 37 sectors in the sector classification represent primary production, the next 68 sectors relate to manufacturing industries, and the remaining 25 sectors deal with the tertiary activities. In the primary production, 20 categories belong to agriculture, four to animal husbandry, and one each to forestry and fishing, and the remaining 11 to mining. Tertiary activities include services such as construction, electricity, water supply, railway transport, land transport including via pipelines, water transport, air transport, supporting and auxiliary transport activities, storage and warehousing, communication, trade, hotels and restaurants, banking, insurance, ownership of dwellings, education, medical and health, business services, computer-related services, legal services, real estate service activities, renting of machinery and equipment, other community, social, and personal services, public administration and defense, and other services.

The final uses are divided into six categories: (i) private final consumption expenditure (PFCE), (ii) government final consumption expenditure (GFCE), (iii) gross fixed capital formation (GFCF), (iv) change in stocks (CIS), (v) exports of goods and services (EXP), and (vi) imports of goods and services (IMP).

So far, no SUT has been transformed into an IOT.

2. The 2011–2012 Supply and Use Table at Current Prices

a. General Description

The rationale for construction of the SUT for the year 2011–2012 was that 2011–2012 is the base year of the NA. As explained above, the base year adopted the 2008 SNA with expanded coverage of activities. New data sources, such as the corporate affairs data, and local bodies' accounts were available. Compilation of national income aggregates was by institution. The size of matrix of 66 industries and 140 products was dictated more by the NA requirements. For instance, the agriculture industry was a combination of 1–20 crops. The classifications were based on the National Industrial Classification (NIC) and National Product Classification of manufacturing and services constructed and adopted based on ISIC Revision 4 and CPC Version 2. The COFOG and COICOP classifications were adopted for government and private consumption. ITC HS classification was adopted in the merchandised trade data classification and BOP data from RBI in concordance with services data to SUT codes. Data sources were the same as those used in the compilation of NA.

b. Methodology and Valuation

The supply matrices which were at basic prices were compiled in the following manner. If we divide the economy into broad sectors such as agriculture, mining, manufacturing, construction, and services; agriculture and construction follow different methods of valuation. Aggregate by product, agriculture output was estimated using production and ex-farmgate price data and the construction by commodity flow method was followed. For the other sectors mentioned, the supply and use aggregates were generated by aggregating the estimates of different institutional sectors, namely the departmental enterprises, public corporations, general government, and the unincorporated sectors. The basic data sources used were budget documents, annual financial statements of corporations, special studies and enterprise surveys, and employment and unemployment surveys. The input–output structure for the relatively large manufacturing sector was derived from a

comprehensive survey of the manufacturing sector known as the Annual Survey of Industries. However, there was a lag of 2 years in obtaining the data. For the unincorporated manufacturing and services sector, data was based on an enterprise survey which is done quinquennially (once in 5 years). As a starting point, the national income industry aggregates were used as the control totals.

c. Supply Table

Import of Goods and Services and CIF/FOB Adjustment data was obtained from BOP statistics of the Central Bank. Since imports at CIF were converted to FOB prices using a ratio of 5% on the imports of services relating to air, water, and insurance. Subsequently, the import and tax vectors derived from the budgets and the merchandised trade data were added to get producers' prices

Transport Costs and Transport Margins by products were added to get supply at purchasers' prices.

d. Use Table

The use table at purchasers' prices was obtained by product from cost of cultivation studies to build the input structure in the agriculture sector. In the manufacturing sector, *Annual Survey of Industries* (ASI) results were used to construct the input structure, and enterprise surveys for the unincorporated sector.

The final demands vectors were compiled as follows:

Government Final Consumption Expenditure (GFCE) comprises COE, consumption of fixed capital, and intermediate consumption (purchase of goods and services, including repair and maintenance less sales. Detailed analysis of budget documents of central and state governments, local bodies, and NPISH serving government were done for the final demand vector of GFCE. Classification of function of government (COFOG) such as government expenditure on public administration and defense, education, health, community, social, and other services part were kept under GFCE, while purchase of products and services by the administrative departments were kept under the industry sector;

public administration and defense in the use table as inter-industry use.

Private Final Consumption Expenditure

(PFCE) data was obtained through the commodity flow approach, as followed in the NA, and was applied for PFCE estimates. The commodity flow approach considers the availability, supply from domestic production, and imports of a product, duly converted to purchasers' prices by applying taxes less subsidies on products and TTM; and then from it, the intermediate consumption, government consumption, exports and change in stocks were removed to arrive at the PFCE estimates which conceptually include the Household FCE and NPISH FCE, including any errors and omissions. Since all these were already in the compilation of PFCE for National Accounts Statistics; for the purpose of the SUT, the PFCE estimates were made in concordance with the SUT product classification form—the COICOP adopted in the NA.

Gross Fixed Capital Formation (GFCF) estimate was based on different percentage shares of various kinds of capital goods (such as wholly or partly capital goods, and parts of capital, and partly capital goods) on ex-factory value, excise, import less export, and trade transport margins (TTM) to constitute GFCF were applied to calculate GFCF of plant and machinery. Data sources for GFCF were the same as manufacturing, excise and import duty data from the Central Board of Excise and Customs (CBEC) and the RBI. The data for intellectual property products (IPP) was separately available from the MCA 21 database as well as analysis of annual reports of government companies and autonomous bodies. For the Households Sector, IPP information pertained only to software for which information was from the NSS 67th Round Survey on Unincorporated Enterprises, 2010–2011. CIS: estimates of change in stocks were prepared using Food Corporation of India (FCI) reports for wheat, rice, and sugar. IBM reports for mining, and ASI results of 2011–2012 for manufacturing. For agricultural items, PFCE worksheets information was the data source (stock with private traders). For mining, data from India Bureau of Mines (IBM) reports on change in reserves was taken as a proxy; while for manufacturing, information of

the concerned blocks of ASI was used. Exports: as explained earlier, Directorate General of Commercial Intelligence and Statistics (DGCIS) data on merchandise was used in concordance with trade data (ITC HS), and BOP data from the RBI in concordance with services data with the SUT codes.

3. Balancing Process

The by-product outputs of the SUTs were used to assess the variation in the supply and use of a product. The initial divergence between supply and use for 86 of the 140 products was within 20%, and for the remaining products, it was more than 20%. The observed differences in the supply and use were resolved by taking a second look at the final uses or the intermediate consumption; for instance, PFCE for household consumption products, GFCF for construction basic materials, and machinery and equipment products. In some cases, coding mistakes in the export/import items were detected. Besides, for certain products, auxiliary information such as input–output ratios from the latest IOT or the TTM were found to be inappropriate, and necessary adjustments were made to reconcile the supply and use figures. In a few cases, the supply figure was too low so that balancing was done until the discrepancy between supply and use was reduced to around 3%, after which the RAS (automatic row–column prorated adjustments) balancing was adopted.

4. Main Results and Findings

Table 24 presents the differences between the GVA at basic price estimates published in the National Accounts Statistics (NAS) and the estimates derived from the SUTs at a broad aggregate level. The SUT estimates were benchmarked with the NAS 2011–2012. Major differences were observed in electricity, real estate, ownership of dwellings, and other services. Use of electricity was very high and the output was low because the water used to produce electricity was not accounted for on the supply side. In the case of real estate and business services, the estimated output was low though the service taxes collected were very high, indicating that the output was an underestimation, which was then corrected.

Table 24: Comparison of Supply and Use Table and Published National Accounts Levels: Production Approach
(Crores^a Rs)

Industry	Supply and Use Table	Published National Accounts	Difference (%)
Agriculture, Forestry, and Fishing	1,502,948	1,501,816	0.1
Mining and Quarrying	261,036	261,035	-
Manufacturing	1,409,986	1,409,986	-
Construction	777,363	777,363	-
Electricity, Gas, and Water Supply	195,382	186,668	4.7
Trade and Hotels Accommodation	883,582	883,582	-
Transport and Communication	529,534	529,534	-
Real estate, Ownership of Dwellings, and Business Services	1,037,620	1,050,465	-1.2
Financial Services	480,226	480,226	-
Public Administration and Defence	491,155	491,155	-
Other Services	598,756	534,827	12.0
GVA at Basic Prices	8,167,588	8,106,656	0.8
Gross Domestic Product	8,796,971	8,736,039	0.7

^a Crores is a unit of value equal to ten million rupees or 100 lakhs.
- = magnitude equals zero, GVA = gross value added.
Source: Ministry of Statistics and Programme Implementation, India.

Table 25 presents the comparison between the expenditure side of the NAs and the use side of the SUT. The aggregates of NA show statistical discrepancies, which was the difference between the production and expenditure side. It was believed that since the production side had more available data, it was considered firm. GCF was considered a firm estimate since most estimates were derived from the manufacturing sector. On the other hand, the valuables only made up one entry. The difference in the exports and imports of goods services was due to the recoding of data between the Central Bank and the DGCIS on merchandise goods. Taxes and

subsidies were taken from the same source as that of the NA, i.e., budget documents.

5. Meeting the Challenges

As stated above, the contribution of the informal sector to GDP was above 40% in India, and the data was based on benchmark surveys moved forward using appropriate indicators. The indicators also get firmed up over time. There was considerable lag in the availability of annual data for instant detailed Annual Survey of Industries or Business accounts which is generally 2 years from the date of survey. This also

Table 25: Comparison of Supply and Use Table and Published National Accounts Levels: Expenditure and Income Approach
(Crores^a Rs)

Expenditure Items	Supply and Use Table	Published National Accounts	Difference (%)
Household Final Consumption Expenditure	4,906,378	4,910,447	-0.1
Nonprofit Institution Serving Household Consumption Expenditure			
Government Final Consumption Expenditure	968,375	968,375	-
Gross Fixed Capital Formation	2,997,619	2,997,619	-
Valuables and Changes in Inventories	459,887	459,887	-
Exports of Goods and Services	2,160,489	2,143,931	0.8
Less: Imports of Goods and Services	2,695,777	2,715,554	-0.7
Statistical Discrepancies		-28,667	
Gross Domestic Product	8,796,971	8,736,038	0.7
Income Approach			
Value Added Components	8,167,588	8,106,656	0.8
Consumption of Fixed Capital	917,140	917,141	-
Net Value Added	7,250,448	7,189,515	0.8
Compensation of Employees	2,712,370	2,651,436	2.3
Gross Operating Surplus	4,531,629	4,531,630	-
Taxes Less Subsidies on Products	635,832	635,832	-
Gross Domestic Product	8,796,971	8,736,039	0.7

^a Crores is a unit of value equal to ten million rupees or 100 lakhs.
- = magnitude equals zero.
Source: Ministry of Statistics and Programme Implementation, India.

necessitated frequent revisions of national aggregates in advance estimates, revised estimates, first revised estimates, etc.; a similar strategy should be built in for the release of estimates based on SUTs.

6. The Way Forward

At present, the IOTs are benchmarked to the estimates of NA. However, the latest IOT as stated above relates to the year 2007–2008 (released in 2011–2012), and is based on the old series of 2004–2005. There is a proposal to integrate the SUTs with the NA on a regular basis. But the compilation of SUTs and IOTs has been lagging so far as the details required for such compilations were seldom available during or after the year. The frequency of revisions of the national accounts aggregates will also necessitate frequent revisions of SUTs. Compiling the current years, SUT is an issue and once resolved, integration would be useful. There is also a proposal to release annual SUTs. Finally, timelines should be worked out.

J. Indonesia

The Directorate of Production Accounts of Statistics Indonesia is responsible for compiling Indonesia's SUTs. The national accounts (NA) team of around 40 persons, consisting of staff members from Production Accounts and Expenditure Accounts Directorate, was set up to compile SUTs.

The study to compile Indonesia's SUTs started under the project established by ADB, RETA 6483, but it was not used to benchmark the three GDP approaches: production, expenditure, and income. ADB continued the project under RCDTA 8838: Adopting the Supply and Use Framework toward 2008 System of National Accounts (SNA) Compliance in selected developing member countries, including Indonesia. Statistics Indonesia also had TA grants from the Australian Bureau of Statistics (ABS) for assisting the Rebased of Indonesia GDP using the SUT Framework under the 2008 SNA principle.

The SUT is a framework that focuses on production activities in the economy, to illustrate the flow of goods and services in the economy. The SUT can

provide detailed information on the production process, interdependence in production activities, the use of goods and services, and the creation of income earned from production activities. The balance SUT provides a coherent overview of industry data relationships, products, and sectors. In addition, the SUT also provides consistent results of the three GDP compilation approaches and is a basis for compiling IOTs.

1. The Current System of National Accounts

a. Recent National Accounts

Previously, Indonesia's NA was compiled based on the IOT as the benchmarking frameworks and valued at the 2000 constant price. The data was compiled for both by the industry and expenditures approaches at national and provincial levels. Through 2000–2015, the data was disseminated every year and quarter (35 days after the quarter).

The figures were compiled based on the old SNA of 1968 standard and adopted ISIC Revision 2 to group the classification, consisting of 43 industries. In this series, the discrepancies between national and provincial figures were not maintained at a low level, instead, was increasing.

In its 42nd annual meeting, the United Nations Statistical Commission (UNSC) requested member countries to dedicate their resources to adopting a new macroeconomic compilation standard: the 2008 SNA. Hence, BPS-Statistics Indonesia adopted the 2008 SNA as the guideline, and developed the 2010 SUT as the organizing framework. Some improvements were made to rebase the GDP to the 2010 base year, and produce three consistent GDP approaches. To maintain consistencies between national and provincial figures, the compilation was then conducted simultaneously between National GDP and provincial Gross Regional Domestic Product (GRDP).

Some major recommendations were implemented in the GDP 2010 base year, including the following:

■ Concepts and Scopes

The Cultivated Biological Resources (CBR) was adopted as part of the output, which meant the natural asset growth resulting from agricultural cultivation which had not been harvested, was treated as part of the output of the underlying industries, including the value of oil palm or rubber trees, and/or dairy cows not yet harvested or yielded.

■ Method

The revision of banks' output methodology from Imputed Bank Services Charge (IBSC) to Financial Intermediation Services Indirectly Measured (FISIM).

■ Valuation

The industry value added was stated at basic price that was the price of products (good and services) received by producers before taxes and subsidies on products.

■ Classification

Classification was based on International Standard Industrial Classification (ISIC Revision 4) and Central Product Classification (CPC revision 2). BPS-Statistics Indonesia adopted those classifications as the 2009 Indonesia Standard Industrial Classification/Klasifikasi Baku Lapangan Usaha Indonesia (KBLI 2009), and the 2010 Indonesia Standard Classification of Commodities/Klasifikasi Baku Komoditi Indonesia (KBKI 2010).

2. Existing Input–Output Tables

The Indonesia 2010 IOT was compiled based on the 2010 SUT. It had symmetrical dimensions and was designed to list products against 185 industries. The table was designed for the benefit of macro-analysis, and not for data gap analysis nor for setting up the level of GDP at the base year.

The transfer-in-transfer-out (TITO) input-output method was adopted to maintain homogeneity within the same industries. Data used for the transformation based on the SUT comprises the following at basic prices: supply table, use table, domestic use table,

use table for imports at basic prices; and taxes minus subsidies on the products table. The SUT data was transformed into the IOT in four steps, as follows:

- Review and finalization of symmetric transformation of the 2010 SUT;
- Transfer of secondary products and rectangular or asymmetric transformation of the SUT into symmetric IOT;
- Symmetric conversion of IOT from total purchasers' prices to total basic prices and domestic transaction of basic prices; and
- Review and finalization of symmetric transformation IOT product by product.

3. The 2010 Supply and Use Table at Current Price

General Description

The compiled 2010 Indonesia SUT has 81 industries and 244 products, but the submission to ADB has the detailed breakdown of 52 industries and 52 products.

The table adopted establishments as the statistical units to maintain homogeneity within the same industry, and, as such, minimized secondary activities. The ISIC Revision 4 was used to group industry classifications while CPC Revision 2 was adopted to define the homogeneous products or commodities. Other classifications used in the compilation include: Classification of Individual Consumption According to Purpose (COICOP) for household expenditure consumption, Classification of the Purposes of Nonprofit Institutions (COPNI) for consumption of nonprofit serving households, Classification for the Function of Government (COFOG) for government consumption, and the Harmonized System (HS) for Export and Import.

Indonesia selected 2010 as the benchmark year for these reasons: (i) Indonesia's economy was relatively stable; (ii) Indonesia's economic structure had transformed after a decade, especially since the introduction of information and communication technology (ICT), affecting distribution patterns

and bringing the emergence of new products; (iii) to follow the UN recommendation to change the GDP base year every 5 or 10 years; (iv) the renewal concepts, definition, coverage, and methodology were recommended by the 2008 SNA; and (v) the availability of new sources of data to improve the quality of GDP, such as the Population Census (SP 2010) and Producer Price Index (PPI).

Data Sources and Methods

The data sources for the SUTs were mainly based on the same statistical and administrative sources of information used in the NA, but available in more detail. The BPS data sources include agriculture, mining, large- and medium-scale manufacturing, construction, and services survey, the Household Expenditure Survey (SUSENAS), the NPISH survey (SKLNP), employment, cost structure survey, price index, the 2006 Economic Census, and the 2003 Agriculture Census. Administrative data sources are also collected from ministries, such as the Ministry of Agriculture, Ministry of Forestry, and Ministry of Marine and Fisheries, etc.; and agencies such as the Central Bank, state-owned enterprises, financial reports from business activities, etc.

Estimating domestic output used physical output by multiplying volume and per unit prices, for agriculture, service activities such as education and health; while manufacturing, mining, electricity, and services used the information disposition method by adding sales to changes in inventory, plus own final use. Financial services activities were estimated using the FISIM method; trade and transport used margin approaches; and nonmarket output used the input cost method. Most activities were estimated using the data by column, with the available information from various sources on domestic output, imports, trade and transport margins, taxes subsidies, intermediate consumption, final consumption, capital formation, and exports.

The initial data for intermediate use used the structure from the survey of cost structure, the 2006 Economic Census, 2003 Agriculture Census, 2005 IOT, and a special survey. The household final consumption expenditure (HFCE) estimates were from the 2010 population census and the National Social Economic

Survey (SUSENAS) BPS, using items' per capita consumption expenditure a week for food, and spending per capita a month for the nonfood group; and then multiplying with the annual population. The NPISH estimates used input cost. The GFCF calculation was directly done by adding the values of the changes of fixed assets GFCF that occurred as stated in the financial statements. The indirect method refers to the commodity flow approach, as with the domestic output of construction. The exports and imports data derived from the custom office, and BOP from the Central Bank.

SNA recommended the compilation of the SUT as an integrated framework to accommodate the variety of data sources, make data consistent, and make the compilation of data coherent with other indicators. The data confrontation process was done by performing the stages of reconciliation or balancing which were the following:

a. Manual Balancing

Problems of imbalances were investigated thoroughly, and needed to be evaluated or the initial value and/or preliminary estimate was revalued. Those compiling had to possess or gain adequate knowledge of the products or industries.

The steps were: analyze unbalanced data (identify the data hierarchy), to compare with the previous or other information, to make adjustments, and to document.

b. Automatic Balancing

Used only when the residual value was very small, by distributing mechanically and proportionally to the data estimation. In addition to the balancing process, compiling the 2010 Indonesia SUT was also supported by SUT management's tools software, developed in-house by the BPS staff.

4. Main Results and Findings

The compilation of Indonesia's 2010 SUT showed the value of the supply goods and services was rupiah (Rp) 14.8 trillion, generated from Rp13.1 trillion (88.4%) domestic output at basic prices; Rp1.5 trillion (10.4%) imports and

Rp0.2 trillion (1.2%) from taxes less subsidies on products. On the use side, the total demand of goods and services was Rp14.8 trillion; Rp6.4 trillion (43.3%) for the industrial intermediate consumption and Rp8.4 trillion (56.7%) for final consumption of households, government, and private sector (final demand). The total of the final demand was Rp6.7 trillion (80.1%) for domestic consumption and Rp1.7 trillion (19.9%) for export. The detailed breakdown of inter-industry use and final use are in Table 26.

Table 26: Flow of Goods and Services, 2010
(trillion rupiah)

Description	Value	Share (%)
Supply	14.8	100.0
Domestic Production	13.1	88.4
Imports of Goods and Services	1.5	10.4
Taxes Less Subsidy on Products	0.2	1.2
Use	14.8	100.0
Intermediate Consumption	6.4	43.3
Final Demand	8.4	56.7
Domestic Final Demand	6.7	80.1
Exports of Goods and Services	1.7	19.9
Gross Value Added at Basic Prices	6.68	
Gross Domestic Product at Market Prices	6.86	

Sources: Directorate of Production Accounts of Statistics Indonesia.

Table 27: Composition of Total Uses of Goods and Services, 2010
(trillion rupiah)

Description	Value	Share (%)
Inter-Industry Use (Intermediate Consumption)	6,425.4	43.3
Agriculture, Forestry and Fishery	895.0	6.0
Industry	4,454.3	30.0
Services	1,076.1	7.3
Final Uses	8,401.9	56.7
Household Consumption	3,786.1	25.5
Nonprofit Institutions Serving Households Consumption	72.8	0.5
Government Consumption	618.2	4.2
Gross Fixed Capital Formation	2,127.8	14.4
Valuables and Changes in Inventories	129.1	0.9
Exports of Goods and Services	1,667.9	11.2
Total Uses	14,827.3	100.0

Sources: Directorate of Production Accounts of Statistics Indonesia.

The 2010 SUT generated three equal approaches of GDP, i.e., Production = Income = Expenditure = Rp6.9 trillion (this is the benchmark GDP figure for 2010). The detailed breakdown is presented in Table 28.

GDP at current prices in 2010 (with a 2000 base year) was Rp6.5 trillion, while GDP 2010 based on SUT

reached Rp6.9 trillion, with a Rp0.4 trillion (6.5%) difference. This difference was due to the impact of the 2008 SNA implementation by 2.4%, and revised prices and volumes by 4.1%. Table 29 describes the detailed breakdown of the impact of implementing the 2008 SNA in the 2010 base year GDP.

Table 28: Gross Value Added and Intermediate Consumption Ratio to Output

Industry	GVAR	IC/GO
Agriculture; Forestry, and Fishing	82.1	17.9
Mining and Quarrying	71.9	28.1
Manufacturing	35.4	64.6
Electricity, Gas, and Water; and Waste Management	24.5	75.5
Construction	34.8	65.2
Wholesale and Retail; and Repair of Motor Vehicles and Motor Cycles	67.6	32.4
Transport, Storage, Postal and Courier	44.4	55.6
Accommodation and Food Service Activities	45.5	54.5
Financial and Insurance Activities	72.5	27.5
Information and Communication Technology	62.6	37.4
Real Estate Activities and Business Services	73.1	26.9
Public Administration; Education; Human Health and Social Work Activities	60.0	40.0
Other Service Activities	61.3	38.7
Total	51.0	49.0

GO = gross output, GVAR = gross value added ratio, IC = intermediate consumption.

Source: Directorate of Production Accounts of Statistics Indonesia.

Table 29: Impact of 2008 System of National Accounts Implementation, 2010

Type of Revision	Implication to Indonesia's GDP
Output of Agriculture	Increase GDP by 1.90%
Expenditure on Mineral Exploration and Evaluation	Increase GDP by 0.34%
Expenditure on Entertainment and Artistic Original	Increase GDP by 0.10%
Expenditure on Software and Databases Production	Increase GDP by 0.05%
Expenditure on License and Copyright	Increase GDP by 0.25%
Changes in the Method of Calculating Bank Output from IBSC to FISIM	Increase GDP by -0.29%
Allocation of Central Bank Output to Final Consumption	Increase GDP by 0.07%
Total	Increase GDP by 2.42%

GDP = gross domestic product, FISIM = Financial Intermediation Services Indirectly Measured, IBSC = Imputed Bank Services Charge.

Source: Directorate of Production Accounts of Statistics Indonesia.

5. Meeting the Challenges

Challenges were encountered in compiling the SUT, such are the following:

- The need to improve human resource development (HRD) through capacity building or by organizing focus group discussions (FGDs) to improve the adoption of 2008 recommendations;

- b. The need for more data support, i.e., the current estimation of domestic output for some industries in agriculture and some service industries still used the structure of the previous available data (i.e., the 2003 Agriculture Census and 2006 Economic Census);
- c. The need to improve the compilation to support data integration in compiling, balancing, and analyzing to address issues of effectiveness and data quality.

6. The Way Forward

Statistics-Indonesia plans to improve the NA compilation by the following:

- a. Broadening the coverage of SNA implementation;
- b. Strengthening the linkage among stakeholders (data suppliers and data users) of NA in general and GDP, in particular;
- c. Extending the adoption of raw data from the 2013 Census of Agriculture and the 2016 Census of Economy; and
- d. Developing the SUT regularly.

K. Lao People's Democratic Republic

The Statistics Law in the Lao People's Democratic Republic (Lao PDR) was approved by the National Assembly in June 2010. Through this law, the Department of Statistics (DOS) was restructured as the Lao Statistics Bureau (LSB) with its status equal to a vice-ministry under the Ministry of Planning and Investment. The Prime Minister's Decree on Institutional Set-Up and Functionality of LSB was issued on 25 February 2011 and the subsequent implementing rules were approved in June 2012. The law provides clear guidance for the LSB and line ministries and province to fulfill the law's mandate such as the roles and responsibilities of each agency. The bureau has four departments: the administrative department, social statistics

department, economics statistics department, and data service department. The NA division is under the economics statistics department responsible for the compilation of the NA. The law emphasizes the road map to improve the Lao PDR's NA in the Strategy for the Development of National Statistical System (SDNSS) 2011–2020. The main objective is to produce comprehensive NA statistics to meet national, regional, and international demand, as recommended by the 2008 SNA.

Since the 1990s, the LSB was granted a TA and finance from Statistics Sweden (a SIDA project) to improve the Lao PDR's NA. The GDP was first rebased in 1997, and rebased again 2002 by using the SUT at an aggregate level. Other development partners that supported and assisted in the development and improvement of NAs were the IMF, World Bank, UNSIAP, ADB, and more. In 2013, the LAOSTAT project under the World Bank was adopted by the Government of the Lao PDR to strengthen the national statistical system. The project also supported the TA on GDP re-benchmark and SUT compilation. In addition, the Ministry of Planning and Investment endorsed RCDTA 8838. This project was first introduced to the Lao PDR to integrate the SUT into the regional program.

1. The Current System of National Accounts

a. Recent National Accounts

The LSB has compiled the national accounts since 1990 despite data limitations. However, in 2005, the NA was developed and rebased using 2002 as the reference year, covering all industries based on ISIC Revision 3 in accordance with the 1993 SNA. GDP was estimated by using the production approach with time series from 1990 onward at current and constant price 2002. Moreover, the GDP by expenditure approach was estimated from 2002 to 2005 and some other years due to data limitations.¹⁶ GDP by income approach was not compiled at all in the Lao PDR. With support from RCDTA 8838, the 2012 SUT was constructed at the two-digit

¹⁶ It was discontinued in 2005 and was again computed in 2007, 2009, and 2011 under the ICP program supported by ADB.

level of ISIC Revision 4 and 215 products of the Lao Classification of Products by Activity (LCPA) corresponded with CPC 2 and complied with the 2008 SNA recommendation.

b. Supply and Use Tables

The 2012 SUT was constructed using all available information to ensure it covered all residential units and economic activities in the country.¹⁷ The “mirror check” method was used during the estimation of supply and demand to measure other activities that may not be captured from other information such as gambling, other domestic services, and personal services industries. Also, the financial sector did not cover microfinance and other informal activities.

2. The 2012 Supply and Use Table at Current Price

a. General Description

Reference Year. 2012 was selected as a reference year for the Lao PDR’s SUT for the following reasons:

- The Lao PDR’s economy was stable and GDP growth steadily increased at 8% on average.
- The structure of the economy shifted over the decade from the agriculture to the industrial sector, particularly in the mining and electricity industries. Moreover, the service sector also took a large share of the economy.
- The 2008 SNA recommended that the GDP base year be changed every 5 or 10 years.
- The availability of new data sources such as the Economic Census 2013 and the Lao Expenditure and Consumption Survey (LECS) 2012–2013. Both were the main sources to estimate the supply and expenditure side.

b. Size of the Matrix

The 2012 SUT was compiled in two stages. First, a simplified SUT was compiled, corresponding to Part B of the framework, together with a simple production account for each activity (Part A). This stage required three iterations since the result of each iteration was critically examined. In the second stage, an intermediate consumption matrix was added (Part C).

The steps taken in compiling the first simplified SUT were as follows:

- Adapting the international classifications of activities and products to local conditions for SUT purposes;
- Creating a framework for compiling the SUT in Excel with 215 products classified by the LCPA;
- Assembling the necessary data from administrative and survey sources;
- Constructing “bridge” tables between the classifications used in the various datasets and the SUT categories;
- Converting the data from the original classifications into SUT categories;
- Entering the data into the framework; and
- Initial balancing of supply and use.

The intermediate consumption (IC) matrix was generated as follows:

- Construct the IC matrix in Excel by using 76 products (LCPA) and 30 activities (ISIC Revision 4);
- Enter the information of IC and intermediate demand, which was estimated from the SUT framework;
- The structure of the matrix was estimated based on information from the IOT from Viet Nam; and

¹⁷ Data sources include administrative data, the Economic Census 2013, Lao Expenditure and Consumption Survey (LECS 2012–2013), and others.

- The manual and the RAS method were used for balancing.

To match ADB's requirement, the SUT was transformed into a comprehensive format and the supply was then put into a 30 x 30 supply matrix. Products were converted to CPC Version 2. The use table was constructed by combining the use table and the IC matrix. It also showed GDP by production and expenditure approaches.

c. Breakdown of Industries and Products

In compiling the SUT, the detailed standard international classifications of activity (ISIC) and product (CPC) were adapted and simplified to suit local conditions. The Lao Classification of Products by Activity (LCPA) is a structured classification that combined the two as well as introduced an element of end-use that assisted in balancing the SUT.

Each code had four digits. The first was a capital letter corresponding to the letter used to denote a Section in ISIC Revision 4. The second digit further subdivided Sections A (Agriculture, Forestry, and Fishing) and C (Manufacturing) into major activity groups. The third and fourth digits represented further details of activity and product groupings. These were defined in of ISIC and/or CPC four-digit categories.

3. Data Sources and Methods

a. Supply Side

Domestic Production by Industry. Output was estimated as a sum of enterprise outputs, household nonmarket outputs, other nonmarket outputs, and state-owned enterprise outputs. It was presented by 215 products by LCPA. After entry of all information and analysis, the adjustment was used.

$$\text{Output}_i = \text{Enterprise Output} + \text{Household Nonmarket Output} + \text{Other Nonmarket Output} + \text{State-Owned Enterprise Output} + \text{Adjustment}$$

The economic census was used as the enterprise output. Household and other nonmarket outputs were based on the LECS survey and government

account. State-owned enterprise output used information from the Ministry of Finance.

Imports of Goods and Services. The import value of goods was measured at 215 products at the four-digit level of the LCPA. The estimation was mainly based on custom data from the Ministry of Finance. Additionally, this was compared and adjusted by comparing with the mirror trade.¹⁸ Other main industries, such as mining and electricity, were based on direct reports from enterprises and the Ministry of Energy and Mining. Import of services was based on the balance of payment data from the Central Bank of Lao PDR.

Valuation Adjustments

Trade and Transport Margin. The trade margin was estimated by using the wholesale and retail sector from the Economic Census. It was clearly analyzed on its expenses for labor, and other expenses. After that, the trade margin and markup share were identified; the trade margin was then distributed to all industry sectors, except the electricity and service sectors. For the transport margin based on the result from the Economic Census, it was assumed to be very small in the Lao PDR, because most of the goods' transport was included in the industry activities.

Taxes Less Subsidies on Products. Taxes on products were estimated based on information on import duties, excise tax on products, turnover tax, VAT, and other related taxes, distributed by industries. The data was based on custom data and government revenue from the Ministry of Finance.

b. Use Side

Intermediate Consumption by Industry. Intermediate demand (ID) by 215 products of the LCPA was derived using output data as a main source. Adjustment was made for the construction product, in which IC was also added.

$$\text{ID} = \% \text{ Share of Raw Material Used} \times \text{Output}$$

¹⁸ Mirror trade is the data from a trade partner's record in the UN COMTRADE website: www.uncomtrade.org

IC by 29 industries (ISIC Revision 4) was estimated by share of output (IC ratio). The estimation was based on IC ratio from the Enterprise Survey in Economic Zone in 2014, based on the 2002 structure. It was also adjusted based on the IOT from Viet Nam.

Household Consumption Expenditure.

Household final consumption expenditure (HFCE) was measured from the LECS 2012–2013 by COICOP, then transformed into LCPA in a four-digit level. The share of nonresidents' purchase in country was estimated based on a study from National Economic Research Institute (NERI) by control total of HFCE.

General Government Consumption Expenditure (Individual and Collective).

The government gazette (government account), identified products the government purchased in 2012.

Nonprofit Institutions Serving Households.

NPISHs were estimated based on the shares of GDP expenditure weight from ICP 2005 and then a control total of NPISHs was made as shown in the NA by using and breaking down NGOs' expenditure information.

Gross Fixed Capital Formation (GFCF). Since there was no information related to this indicator, it was assumed to be a residual in the expenditure side.

$$\text{GFCF} = \text{Total Supply} - X - \text{HFCE}$$

Where:

$$\text{GFCF} = \text{Gross fixed capital formation}$$

$$X = \text{Export of goods}$$

$$\text{HFCE} = \text{Households final consumption expenditure}$$

Changes in Inventories. Due to data constraints, this was assumed to be very small in the Lao PDR, therefore, the variable was used as a residual for the SUT. The change in inventory was computed as:

$$\text{Chng Inv}_i = \text{Supply} + M - (\text{IC} + \text{HC} + \text{GFC} + X)$$

Where:

$$\text{Chng Invi} = \text{Change in inventory for product } i$$

$$\text{GO}_{pp} = \text{Gross output at purchasers' prices is equal to total supply}$$

$$M = \text{Import of goods}$$

$$\text{IC} = \text{Intermediate consumption at purchasers' prices}$$

$$\text{HFCE} = \text{Households final consumption expenditure}$$

$$\text{GFCF} = \text{Gross fixed capital formation}$$

$$X = \text{Export of goods}$$

Exports of Goods and Services. The export figure was estimated by using the same method with the import of goods and services.

4. Balancing Process

The SUT was balanced manually. On the other hand, the IC matrix was balanced using both manual and RAS methods.

5. Main Results and Findings

a. Supply and Use Tables

About three-fourths (74%) of total supply for the country was locally produced, and 22% came from abroad (imported). The rest was in the form of taxes.

On the use side, 37.5% was final consumption (HFCE and GFCE), where almost 30% of consumption was used as inputs.

On IC, 44% was consumed by other manufacturing, particularly petroleum, chemical, rubber and plastic products, and the manufacture of metal, machinery, and equipment products. Only 14% was spent on agriculture products, while the share of other sectors was relatively small.

b. The SUT 2012

Overall, the percentage difference from the SUT's results and publication in 2012 was only 8%. The major increases were from the services sector, that went up by 400%, and accommodation and real estate, up by 348%. The manufacturing sector also increased, particularly electricity, that increased by over 100%. On the other hand, agriculture fell by 17% (Table 30).

Table 30 shows the percentage per GDP by economic activities. It was clear from the SUT's results that the GDB structure changed. Agriculture dropped by about 6%. On the other hand, electricity, accommodation, and real estate had higher shares compared to the publication.

6. Meeting the Challenges

Issues and actions taken to address the following challenges:

- The Lao PDR is a small economy, with few resources available for statistical purposes. The availability of reliable data relating to the Lao PDR economy in 2012 was limited. However, this was the year a comprehensive economic census was held, covering over 100,000 producers. The census recorded the kinds of activity (according to ISIC Revision 4), the number of workers, and indications of monthly turnovers. The reliability of the

turnover data collected in an exercise of this size was difficult to assess. There were some clear anomalies. For a few major businesses, other sources of data were used instead of the census figures. But, in the absence of more precise financial information for most businesses, the census provided the only available estimates for the value of production.

- Also in 2011–2012 the Lao Expenditure and Consumption Survey was conducted. Without this data source, it would not have been possible to construct a benchmark. The importance of household expenditure data in the context of the NA is often downplayed as not reliable internationally. In some countries, large discrepancies are apparent between household expenditures in the NA and the smaller totals from household surveys. But in small countries, mainly rural economies, a well-conducted survey of household expenditure is an indispensable source of data for compiling the SUT and a benchmark estimate of GDP. Of course, the survey will have shortcomings, especially in capturing some types of expenditure. It may not cover the larger expenditures of wealthier sections of the population as well as it covers those with less spending power. To compensate for these issues, it was decided to increase the expenditures recorded in the LECS diaries in three ways: an overall addition of 10%, an

Table 30: Comparison of Supply and Use Table and Published National Accounts, 2012
(million kip)

Activities	Supply and Use Table	Share (%)	Published National Accounts	Share (%)	Difference (%)
Agriculture, Forestry, and Fishing	15,174	18.6	18,269	24.3	-17
Mining and Quarrying	8,842	10.8	12,085	16.1	-27
Manufacturing	7,483	9.2	5,794	7.7	29
Electricity, Gas, and Water; and Waste Management	5,227	6.4	2,392	3.2	119
Construction	5,273	6.5	4,728	6.3	12
Wholesale and Retail; and Repair of Motor Vehicles and Motor Cycles	9,681	11.9	12,870	17.1	-25
Transportation and Storage	1,267	1.6	1,309	1.7	-3
Accommodation and Food Service Activities	2,345	2.9	469	0.6	400
Financial and Insurance Activities	1,553	1.9	2,617	1.8	-41
Information and Communication	1,319	1.6	1,363	3.5	-3
Real Estate Activities and Business Services	6,094	7.5	1,361	1.8	348
Public Administration; Education; Human Health, and Social Work Activities	7,438	9.1	5,937	7.9	25
Other Service Activities	2,682	3.3	1,655	2.2	62
Total Gross Value Added at Basic Price	74,377	91.1	70,849	94.1	5
Taxes Less Subsidies on Product	7,233	8.9	4,403	5.9	64
Gross Domestic Product	81,610	100.0	75,252	100.0	8

Source: Department of Statistics, Lao People's Democratic Republic.

additional 10% for urban households, and a further 10% for those households in the top 10% of spenders. Expenditures recorded elsewhere in the LECS questionnaires were not amended. Further adjustments were made during the balancing process, in particular, to compensate for the under-recording of alcohol consumption, evident from the known value of beer production.

- The first balance produced results that did not correspond to expectations. On further examination, it turned out that the data file used for imports and exports of goods was badly corrupted. It was necessary to obtain a new version from the customs authorities and to repeat the exercise. The second balance was better, but still had deficiencies; such as, the estimates of trade margins appeared to be unreasonably low. Moreover, a comparison was made of the Lao PDR imports (according to Lao PDR customs data) with Thai exports to the Lao PDR (available from the UN Comtrade database). The mirror trade data revealed a large discrepancy, suggesting that the Lao PDR data was substantially understated.
- The Intermediate Consumption Matrix: One of the team's major challenges in constructing this matrix was unavailable data. Many assumptions were made. Even though the Viet Nam IOT was borrowed and applied as a main structure, the team also tried to compile and adjust in each commodity to ensure the matrix was relevant to the Lao PDR economy. Moreover, major sectors, such as mining, electricity, and some other manufacturing were estimated based on data direct from financial statements. However, the IO survey and study are needed to make a proper estimate in the future.

7. The Way Forward

The main priority to improve estimates of GDP and the SUT is data sources. Secondly, better methodology and capacity building are necessary. These priorities are described:

■ Data Sources and Quality

- The LSB needs to continually encourage line ministries to improve the data collection format and system.
- Comprehensive data sources are needed by opening other channels of data collection direct from provincial statistics offices, and enterprises (for some major industries). Data compilation in the provinces also needs to be improved.
- The LSB must enhance its cooperation with the Tax Department, Ministry of Finance, to get information on turnover, taxes paid, and VAT.
- The Annual Enterprise Survey (AES) must be conducted annually. This survey was stopped in 2006 due to the budgetary constraints. Fortunately, the government decided to support this survey annually, hence, the survey was conducted again in 2015.

■ Methodology

To improve the SUT in the future, the LSB should conduct research and development on the methodology, as follows:

- The AES and Annual Household Survey (AHS) need to be reviewed to find the most appropriate approach that applies to the NA. In particular, the questionnaire needs to add more detailed questions on input.
- To prepare for the 2017 SUT, the NA team will conduct a small survey to collect information on industries input expenditure. This activity will help the NA team develop manual and survey tools.

- Case studies should be conducted on the analysis of trade margins, the effect of reduced mining to GDP growth, and to investigate the real estate sector's contribution to GDP.
- The SUT time series program is also a good way for the NA team to practice and develop the methodology to estimate the SUT and GDP. In addition, this will help identify constraints to future development.
- The LSB will move forward on the analysis of GDP expenditure now that the 2015 and 2016 AHS, and 2015 AES are completed. The study on the expenditure time series will help the NA team get a better estimate for the next SUT.

■ Capacity Building

Capacity building remains the LSB's priority in its strategic plan, under the human resources development program. In the NA, most of the staff had on-the-job training during the SUT project, but only a few of the senior staff could do their work without assistance. Therefore, capacity building is still needed to prepare for the next SUT, particularly on:

- Basic and intermediate levels on the NA (through e-learning),
- SUT construction and GDP rebasing,
- SUT time series,
- Training on transforming from the SUT to IOT,
- Data cleaning and analysis.

L. Malaysia

The Department of Statistics Malaysia (DOSM) compiled the first SUT for reference year 2005, supported by the ADB's RETA 6483. Since then, Malaysia has embarked on the compilation of SUTs once every 5 years. The recent available SUT for Malaysia is 2010. The 2005 SUT was compiled based on the 1993 SNA, while the 2010 SUT partially adopted recommendations in the 2008 SNA.

In conjunction with the compilation of the SUT, the DOSM is also responsible for compiling the Malaysia IOTs. To date, Malaysia has compiled IOTs for reference years 1978, 1983, 1987, 1991, 2000, 2005, and 2010. The first four IOTs were derived from the Final National Account (FNA), and the following three were derived from the SUT.

Apart from that, the DOSM compiled the IOT Update for reference years 2007 and 2012. The DOSM also published its first publication of IOT Regional 2010. Both the IOT Update and IOT Regional are limited to main stakeholders only.

The Economic Indicators Division (EID) of DOSM as the compiler of SUTs was appointed to participate in RCDTA 8838. The EID was supported by three sections: IO Section, Distribution and Use of Income Accounts and Capital Account (DUIACA) Section, and Macro Economic Indicators Section.

The IO Section is further divided into three units: IO National (two officers), IO Update (three officers), and IO Regional (three officers). Since the compilation of SUTs was comprehensive, the task involved officers from the IO Section and other sections.

1. The Current System of National Accounts

a. Recent National Accounts

The GDP of Malaysia is compiled quarterly and annually following the recommendations of the 2008

SNA. The economic activities are compiled based on the Malaysia Standard Industrial Classification 2008 (2008 MSIC) which adopts the ISIC Revision 4. The economic activities are aggregated into agriculture (13 subsectors), mining and quarrying (3 subsectors), manufacturing (24 subsectors), construction (4 subsectors) and services (40 subsectors).

The NA are compiled by three approaches: production, expenditure, and income approach. The data sources for each approach were as follows:

Production Approach. The data was mainly from censuses and surveys conducted by the DOSM, and secondary data from other agencies.

Expenditure Approach. The data was from household and expenditure surveys, government statistics, censuses and surveys conducted by the DOSM, and external trade statistics.

Income Approach. The data was from censuses and surveys conducted by the DOSM and secondary data from other agencies.

b. Existing Supply and Use Tables

The latest SUT chose 2010 as the reference year, which was compiled and balanced at 1,176 commodities and 1,200 industries. The SUT was compiled based on the Economic Census 2011 (reference year 2010) and other economic surveys not covered by the census. Secondary data obtained from other agencies was also used.

c. Existing Input-Output Tables

The 2010 IOT was the latest available IOT with 124 commodities and 124 industries. The compilation of the tables was based on the 2008 SNA. As recommended in the 2008 SNA, research and development (R&D), financial intermediation

services indirectly measured (FISIM), and weapons system were redefined. The tables used the noncompetitive type framework, consisting of three sections: intermediate input, final demand, and primary input.

The symmetric 2010 IOT adopted the industry technology assumption to avoid the existence of negative elements in the matrix structure. Two types of symmetric tables are described as follows:

The derivations of *activity by activity* tables (A_i) are as follows:

$$A_i = B * D \quad \text{eq. (1)}$$

Where:

$$B = A * \hat{g}^{-1} \text{ (input coefficients)}$$

$$D = M * \hat{q}^{-1} \text{ (market share coefficients)}$$

$$A_i = (A * \hat{g}^{-1}) * (M * \hat{q}^{-1})$$

While for *commodity by commodity* tables (A_C):

$$A_C = B * M \quad \text{eq. (2)}$$

$$A_C = (A * \hat{g}^{-1}) * M \quad \text{eq. (3)}$$

Notations:

A = commodity by activity absorption matrix

M = activity by commodity make matrix

g = the vector of activity output

q = the vector of commodity output

\hat{g} = the diagonal matrix of activity output

\hat{q} = the diagonal matrix of commodity output

2. The 2010 Supply and Use Table at Current Price

Starting 2005, the Malaysia SUT has been compiled every 5 years in line with the Economic Census. Thus, the reference year is chosen based on the reference year the Economic Census is available.

The Malaysia 2010 SUT was compiled and balanced at the most possible detailed level with 1,176 commodities based on the Malaysia Classification of Product by Activity (MCPA) 2009 in concordance with CPC Version 2.0, and 1,200 industries based on the MSIC 2008 in concordance with ISIC Revision 4. Other classifications used in this compilation of the SUT were COICOP, COFOG, COPNI, SITC, and HS. These classifications were mapped and converted to the MCPA 2009. The SUT was valued at purchasers' prices, and the IOT at basic prices.

3. Data Sources and Methods

a. Supply Side

Domestic Productions by Industry was compiled at basic prices and, thus, valuation was done to arrive at purchasers' prices. Data by industry for each commodity was obtained mainly from the Economic Census 2011 (Reference Year 2010) and annual surveys, i.e., the Annual Census of Crude Oil and Natural Gas Mining 2011 carried out by the DOSM. Secondary data from other government agencies, such as taxes, subsidies, and other administrative published data were also used. The compilation of domestic production by sector was as follows:

Agriculture, Fishery, and Forestry Sector data was gathered from government agencies. Data by specific industry and commodity was compiled at basic prices (ex-farm prices). The data sources were as follows:

- Data on crops was from the Ministry of Agriculture and Agro-Based Industry, Malaysian Palm Oil Board, Malaysian Rubber Board, National Kenaf and Tobacco Board, Malaysian Pineapple Industry Board, and Malaysian Cocoa Board.
- Data on livestock production was from the Ministry of Agriculture, aligned with the Department of Veterinary Services.
- Data on fisheries was from the Ministry of Agriculture aligned with the Department of Fisheries Malaysia.
- Data on forestry and logging was from the Department of Forestry Peninsular Malaysia, Department of Forestry Sabah, Department of Forestry Sarawak, and Malaysian Timber Industry Board.

Mining and Quarrying Sector data on crude petroleum, condensate and natural gas was from the Annual Census of Crude Oil and Natural Gas Mining 2011. Data on other mining and quarrying was from the Economic Census 2011.

Manufacturing Sector data on domestic production for manufacturing sector was from the Economic Census 2011.

Electricity, Gas, and Water included the generation, transmission, and distribution of electricity power and water collection, treatment and supply. Domestic production data for this sector was from the Economic Census 2011 and other agencies' annual reports.

Construction Sector data on domestic production of construction of buildings, civil engineering, and specialized construction activities in the Construction sector was from Economic Census 2011.

Wholesale and Retail Trade Sector data was from the Quarterly Distributive Trade Survey 2010, then reconciled with the structure of the Census of Distributive Trade 2009.

Finance and Insurance Sector consists of all resident institutional units engaged in financial intermediation or providing auxiliary financial activities closely related to financial intermediation. This sector includes the Central Bank, other banks, other financial corporations, and insurance. Data for Financial sector was from the Economic Census 2011, Central Bank report, and companies'

statements of accounts. Output for the financial institutions was measured as value of services charged, normally as fees plus implicit service charge by different rates of interest to borrowers and lenders. Meanwhile, output for Insurance sector was calculated as the excess of premiums received over claims paid. The implicit service charges that form a major component of the financial intermediation output is called FISIM. It covers asset and liabilities in which financial intermediaries (e.g., commercial banks, investment banks, Islamic banks, and offshore banks) rendered FISIM on (i) stock of loans, (ii) stock of deposits, (iii) interest received on loans, and (iv) interest paid on deposits.

Ownership of Dwellings. Domestic production of ownership of dwellings was estimated using the user cost method as recommended by the Guidelines for the User Cost Method to Calculate Rents for Owner-Occupied Housing International Comparison Program (ICP), published by the World Bank in 2010. The data was from the HES 2009–2010, and Population and Housing Census 2010.

Services Sector. Data on domestic production for other services sectors such as hotel and restaurant, transport and communication, real estate, and business and private services was from the Economic Census 2011.

Government Services Sector was compiled by levels of the federal government, state government, local government, and statutory bodies. The public services, defense, education, health, social security and welfare services, housing, community, and social and economic services were included in this sector. The information was derived from government accounts. The domestic production of the government services sector was estimated using the cost approach, i.e., the sum of intermediate consumption, COE, consumption of fixed capital, and other taxes less subsidies on production.

Imports of Goods and Services data was from the external trade statistics 2010. Imports of goods were valued at CIF basis, that is, the value of the goods in the market at the statistical or customs frontier of the importing country, including all charges for transport and insurance while in transit,

but excluding the cost of unloading from the carrier unless borne by the carrier.

Meanwhile, data for import of services was from BOP statistics 2010 which are the Quarterly Survey of ITS conducted by DOSM, and the International Transactions Information System (ITIS) from the Central Bank.

Trade and Transport Margin percentage for each commodity was from the *Trade and Transport Margin Survey 2010*. Margins were estimated based on the method as recommended in the Eurostat Manual of Supply, Use, and Input-Output Tables (2008 Edition) published by the European Commission.

Taxes Less Subsidies on Products by commodity (domestic and import) was from government records. Meanwhile, data on subsidies by commodity was from the Ministry of Finance.

b. Use Side

Intermediate Consumption by Industry was from the Economic Census 2011 (reference year 2010), except for (i) agriculture, fishery, and forestry; (ii) mining and quarrying; (iii) financial; (iv) wholesale and retail trade; (v) ownership of dwellings; and (vi) government services.

Agriculture, Fishery, and Forestry Sector was estimated based on the input-output ratio from the Economic Census, while the domestic production data was from the economic census and other agencies.

Mining and Quarrying Sector. Data on intermediate consumption for crude petroleum, condensate, and natural gas was from the Annual Census of Crude Oil and Natural Gas Mining 2011. Data on other mining and quarrying was from the Economic Census 2011.

Wholesale and Retail Trade data was from the Quarterly Distributive Trade Survey 2010 which was then reconciled with the structure of the Census of Distribution Trade 2009.

Finance and Insurance Sector. Data on intermediate consumption for this sector was from

the Economic Census 2011, Central Bank reports, and companies' statements of accounts.

Ownership of Dwellings data was from the HES 2009–2010, consisting of materials for the maintenance and repair of the dwelling, services for the maintenance and repair of the dwelling (including materials), and insurance connected with the dwelling.

Government Services Sector data was compiled by levels of federal government, state government, local government, and statutory bodies. The information was derived from government accounts by commodity and detailed government services activities.

Household Consumption Expenditure data was from the HES 2009–2010. The data was compiled based on 1,176 commodities of the MCPA 2009, which were in concordance with the COICOP.

General Government Consumption Expenditure data was from the Accountant General's Department of Malaysia. The data was further distinguished by level of government: federal government, state government, local government, and statutory bodies. The data was compiled based on 1,176 commodities by the MCPA 2009, which was in concordance with the COFOG.

Nonprofit Institutions Serving Households data was from the Economic Census 2011. The data was compiled using COPNI, which was then mapped to the MCPA 2009. The data was classified into nine categories: (i) housing, (ii) health, (iii) recreation and culture, (iv) education, (v) social protection, (vi) religion, (vii) political parties, (viii) labor and professional organizations, (ix) environmental protection, and (x) services, and were estimated using the cost approach.

Gross Fixed Capital Formation data by type of assets, such as buildings and other construction, transport equipment, information and communications technology, machinery and equipment, and furniture and fittings was from the Economic Census 2011. The Gross Fixed Capital

Formation was estimated by calculating the sum of (i) new imported capital goods, (ii) used Malaysia's assets, and (iii) built/self-produced less assets sold.

Changes in Inventories were estimated by calculating closing stock less opening stock. Value of stock, such as fuel and lubricant, materials, supply and spare parts were from the Economic Census 2011.

Acquisition Less Disposal of Valuables has yet to be compiled in the Malaysia SUT due to data unavailability.

Exports of Goods data was from the External Trade Statistics. Data on exports of goods was mapped from SITC (nine-digit) and HS to the 2009 MCPA. Exports of services were from BOP statistics 2010.

4. Balancing Process

Balancing of supply and demand was done manually using related indicators and other information at column vector by 1,176 commodities at purchasers' prices. All available information regarding supply, i.e., domestic production, imports, trade margin, transport margin, taxes and subsidies were included. Meanwhile, the use table consists of intermediate input, household consumption, nonprofit institutions serving households, government consumption, gross fixed capital formation, changes in inventories, and exports. The flow of the balancing process was as follows:

a. Uses of Value Added

Compensation of Employees was the total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period. The data was from the Economic Census 2011 and administrative reports from government agencies.

Taxes Less Subsidies on Products and Production by types of commodity was from the Accountant General's records. Meanwhile, data subsidies by types of commodities were from the Ministry of Finance.

Consumption of Fixed Capital data was aligned with the *Capital Stock Statistics 2010*. The SUT 2010 was the first compilation that included data on depreciation.

Operating Surplus was the difference between value added and the sum of COE, consumption of fixed capital, and other net taxes on production.

5. Main Results and Findings

a. Supply Side

Total supply at purchasers' prices of the Malaysian economy in 2010 was ringgit (RM)2,676.4 billion (2005: RM2,124.4 billion) increased at 4.7% a year. The total supply of goods and services was mainly contributed by domestic production RM2,074.2 billion (77.5%), followed by imports RM582.0 billion (21.7%), and taxes less subsidies on products RM20.2 billion (0.8%).

Domestic production increased with an average annual growth of 5.3% to RM2,074.2 billion from RM1,603.9 billion in 2005. Manufacturing was the main contributor for domestic production with RM901.1 billion (43.4%), followed by services with RM851.2 billion (41.0%). For services, wholesale and retail trade recorded the highest contribution with RM202.5 billion (9.8%), followed by transport and communication with RM161.6 billion (7.8%).

Out of the total imports of RM582.0 billion, the imports of goods registered RM535.6 billion (92%) while the imports of services recorded RM46.4 billion (8.0%).

b. Use Side

Total use in 2010 was RM2,676.4 billion in which RM1,269.0 billion (47.4%) was IC, while RM1,407.4 billion (52.6%) was final consumption. The intermediate input recorded an increase of 3.0% on average for the period of 2005 to 2010 while final consumption grew at the rate of 6.4% annually. Final consumption comprises private consumption, government consumption, gross fixed capital formation, changes in inventories, and exports.

Private consumption consists of household final consumption expenditure and nonprofit institution serving household consumption expenditure. The total private consumption was RM418.8 billion in which the largest contributor was services with RM232.0 billion (55.4%).

Government consumption recorded RM106.5 billion where consumption on government services had the highest value of RM105.3 billion (98.9%) compared to business and private services with RM1.2 billion (1.1%).

Table 31: Supply Table, Malaysia, 2010
(billion ringgits)

Products	Domestic Production	Imports	Trade Margin	Transport Margin	Taxes on Products	Subsidies on Products	Total Supply at Purchasers' Prices
1 Agriculture, Forestry, and Fishery Products	123.9	20.5	15.7	1.3	1.5	0.4	162.5
2 Mining and Quarrying	107.2	29.1	4.8	0.4	0.0	-	141.6
3 Manufacturing	901.1	471.3	140.9	11.8	26.0	11.9	1,539.1
4 Constructions and Construction Services	90.8	1.8	-	0.0	-	-	92.6
5 Electricity, Town Gas, Steam, and Hot Water	44.5	5.4	-	-	0.0	-	49.8
6 Wholesale and Retail Trade	202.5	0.5	-161.4	-	-	-	41.6
7 Accommodation, Food, and Beverage Services	47.2	0.0	-	-	0.9	-	48.1
8 Transport and Communication	161.6	17.0	-	-13.5	2.3	-	167.3
9 Financial Services	121.7	2.9	-	-	0.7	-	125.3
10 Real Estate and Ownership of Dwelling	48.8	0.0	-	-	0.0	-	48.8
11 Business and Private Services	94.7	28.4	-	-	1.2	-	124.4
12 Government Services	130.1	5.2	-	-	0.0	-	135.3
13 Total	2,074.2	582.0	-	-	32.6	12.4	2,676.4

- = magnitude equals zero, 0 = magnitude is less than half of unit employed.
Source: Department of Statistics Malaysia.

Gross Capital Formation comprised gross fixed capital formation (GFCF; with RM182.6 billion) and changes in inventories (with RM13.8 billion). Manufacturing had the highest share of GFCF with RM112.0 billion (61.3%), followed by construction with RM58.7 billion (32.1%).

Total exports of goods and services was RM685.7 billion; RM641.1 billion (93.5%) was goods; and RM44.5 billion (6.5%) was services. Manufacturing was the largest contributor to exports with RM571.2 billion (83.3%).

c. Value Added

The total value added in 2010 was RM805.2 billion. The main contributor was the services sector with RM426.0 billion (52.9%), followed by manufacturing with RM184.9 billion (22.9%), and mining and quarrying with RM89.2 billion (11.1%).

Wholesale and retail trade had the highest contribution to the services sector with RM112.4 billion (13.9%), followed by finance and insurance with RM73.8 billion (9.2%), and government services with RM70.5 billion (8.8%).

6. Meeting the Challenges

The DOSM had no major support issue for the SUT compilation. The management and other agencies provided full cooperation during the compilation process.

Table 33: Value Added, Malaysia, 2010
(billion ringgits)

Industry	Value Added	Share (%)
1 Agriculture, Forestry, and Fishery Products	77.0	9.6
2 Mining and Quarrying	89.2	11.1
3 Manufacturing	184.9	22.9
4 Constructions and Construction Services	28.0	3.5
5 Electricity, Town Gas, Steam, and Hot Water	21.7	2.7
6 Wholesale and Retail Trade	112.4	13.9
7 Accommodation, Food, and Beverage Services	19.6	2.4
8 Transport and Communication	58.0	7.2
9 Financial Services	73.8	9.2
10 Real Estate and Ownership of Dwelling	24.3	3.0
11 Business and Private Services	45.6	5.7
12 Government Services	70.5	8.8
13 Total	805.2	100.0

Source: Department of Statistics Malaysia.

Implementation of 2008 SNA. The 2010 SUT has yet to fully comply with the 2008 SNA in goods for processing and estimating output produced for own final use by including the return to capital. However, the 2010 SUT partially adopted the recommendations outlined in the 2008 SNA, such as estimation of R&D, FISIM, and weapons system. R&D, previously treated as an intermediate input, is now compiled as GFCF. FISIM which used to be calculated using the interbank interest rate was now calculated using the reference rate. Weapons system is now classified as GFCF rather than as an intermediate input.

Trade and Transport Margin was currently not available. The structure of domestic production is used to estimate the domestic trade margin, and the structure of imports was used to estimate the imported trade and transport margin.

Table 32: Use Table, Malaysia, 2010
(billion ringgits)

Products	Intermediate Consumption	Private Consumption	Government Consumption	Gross Fixed Capital Formation	Changes in Inventories	Exports	Total Use at Purchasers' Prices
1 Agriculture, Forestry, and Fishery Products	116.0	26.8	-	3.8	0.5	15.3	162.5
2 Mining and Quarrying	96.7	0.1	-	-	-0.4	45.1	141.6
3 Manufacturing	689.1	153.0	-	112.0	13.8	571.2	1,539.1
4 Constructions and Construction Services	21.8	6.8	-	58.7	-	5.3	92.6
5 Electricity, Town Gas, Steam, and Hot Water	38.6	10.8	-	0.2	-	0.3	49.8
6 Wholesale and Retail Trade	5.3	35.6	-	-	-	0.7	41.6
7 Accommodation, Food, and Beverage Services	12.1	36.0	-	-	-	-	48.1
8 Transport and Communication	98.4	43.8	-	-	-	25.1	167.3
9 Financial Services	82.5	36.6	-	-	-0.0	6.2	125.3
10 Real Estate and Ownership of Dwelling	29.7	19.1	-	-	-	-	48.8
11 Business and Private Services	76.1	23.2	1.2	7.9	-0.2	16.2	124.4
12 Government Services	2.7	27.0	105.3	-	-	0.3	135.3
13 Total	1,269.0	418.8	106.5	182.6	13.8	685.7	2,676.4

- = magnitude equals zero, 0 = magnitude is less than half of unit employed.
Source: Department of Statistics Malaysia.

The Trade and Transport Margin Survey 2009 only provided the percentage share of margin by commodity. Thus, the estimation of trade and transport margin was based on recommendations outlined in the Eurostat Manual of Supply, Use and Input–Output Tables (2008 edition) published by the European Commission.

Taxes and Subsidies by commodity were from government records (taxes) and the Ministry of Finance (subsidies). Estimation on detailed information of taxes and subsidies was done using the input structure from the Economic Census.

Development of Integrated System. Since the 2010 SUT was compiled manually, i.e., on a stand-alone basis, the compilation process was time-consuming, especially during data extraction and compilation, data coding, data reconciliation, and balancing. Thus, the DOSM plans to compile the future SUTs based on a centralized system that integrates multiple stages during the process. The system is to provide data at a detailed level, such as by district, state, ownership, and institution. The capability of the system will expedite the compilation of IOTs, GDP, DUICA, among others.

The Number of Subject Matter Experts on SUT and IOT are limited. Expertise is needed to expand SUTs and IOTs into new areas, such as Trade in Value Added (TIVA) and Global Value Chain (GVC).

7. The Way Forward

Starting 2005, the DOSM has compiled and published SUTs every 5 years to provide benchmark final national accounts estimates for the NA. The DOSM expects to come up with a SUT and IOT for 2015 as the reference year, in compliance with the 2008 SNA.

The DOSM compiled the biennial IO Updates for reference years 2012 and 2014 between the benchmark IO 2010 and 2015. The upcoming regional IOT for reference year 2015 will be compiled subsequently after the completion of the benchmark SUT. Leveraging from this project, the DOSM plans to compile the IOT annually.

M. Maldives

The RCDTA 8838 project was undertaken in Maldives by the National Accounts and Economic Analysis Section (NAEA) of the National Accounts and Economic Statistics Division (NAES) of the National Bureau of Statistics (NBS). The NBS, headed by the chief statistician, is subordinate to the Ministry of Finance and Treasury and reports directly to the Ministry and the Senior Policy Executive. Within the Bureau, the NAES, along with the Price and Economic Statistics Section (PES) headed by a statistician, serves as country coordinator for this project.

Throughout the duration of RCDTA 8838, the unit had on average two staff, an assistant statistician (post-graduate level) and an assistant statistical officer (higher secondary education qualification level). Due to the staff shortage, the division head worked along with the NAEA staff in compiling the SUT. The PES staff also gave its input.

1. The Current System of National Accounts

a. Recent National Accounts

The current base period of Maldives' GDP is 2003. In April 2011, GDP was rebased to 2003 as the reference year, from the previous base year of 1995. Since rebasing of GDP to 2003, the guidelines of the 1993 SNA are broadly followed in preparing national accounts (NA), nonetheless, gaps remain in implementation. The current framework Macroeconomic Budget (MEB), consisting of a system of spread sheets and equations, is used to compile the annual NA in the 2003 base year series. The spreadsheets include monthly volume indicators; data from the financial statements of enterprises; price indices such as PPI, CPI, CMI; and unit-value indices of imports and exports. The actual government budget is also incorporated in the framework to estimate the production of government administration, health, education, and social services. The MEB enables compilation of GDP and value added by industry at current and constant prices using single deflation method, through the production approach.

With regards to the scope of implementation, at the beginning of the RCDTA 8838 project, the NAES only produced four of the seven MRDS tables. The biggest shortcoming in the scope of implementation is the lack of annual GDP by expenditure approach, both at current and constant prices. Although, GDP by expenditure approach was prepared under the new framework, it was not published due to concerns over its reliability, and consistency with other statistics. Conceptual compliance gaps, such as the allocation of FISIM to intermediate consumption and final consumption, also need to be addressed to strengthen the compilation of the NA. The deficiencies in human resource capacity and the paucity of business statistics are the most significant factors that hinder the progress of the NA in meeting the requirements of the 1993 SNA.

b. Existing Supply and Use Tables

The NBS has the experience of involving itself in the compilation of SUTs for the country for the years 1995 (pilot), 1997, 2003, and 2007. The latest 2007 SUT was, in fact, compiled entirely by the staff of the SDDNP as part of ADB's RETA 6483 project with guidance from ADB. The base year of the current GDP estimates was derived from the 2003 SUT, the third compilation of its kind for Maldives.

c. Existing Input-Output Tables

An IOT depicts inter-industry relations of an economy and shows how the output of one industry is an input to every other industry. The first IOT for Maldives' economy, commissioned by ADB, was for the year 2007.

2. The 2014 Supply and Use Table at Current Price

The NBS chose 2004 as the reference year for the SUT due to economic stability in the major economic indicators and the comprehensive set of data availability. While 2013 was the year the economic survey was conducted, due to unavailability of a business register, the data raised to the national level may have a sampling bias. On the other hand, 2014 was a better choice considering the availability of employment data from the Census

2014, international market prices of fish from the Ministry of Fisheries and Agriculture, more financial accounts of the companies from the Ministry of Economic Development, along with the improved administrative data from Maldives Inland Revenue Authority. In addition to the availability of data, as the NBS was seeking to present the most realistic picture of the economy, the latest year possible that would reflect economic structure better would be 2014 rather than 2013.

a. General Description

The SUT is a basic balanced framework that combines supply estimates of domestically produced and imported goods and services in the economy, with the allocation of these products for final uses (household and government consumption, capital formation, and exports) as well as for intermediate uses of production industries.

b. Breakdown of Industries and Products

The SUT for Maldives is a 51 x 40 matrix, with 51 product categories in the rows under the CPC Version 2 and 40 different industries under the ISIC Revised 4 codes. The reference year chosen was 2014, as more data and economic indicators were available for that year.

3. Data Sources and Methods

a. Supply Side

Domestic Production by Industry was predominantly taken from annual accounts and administrative data from Maldives Inland Revenue Authority (MIRA). In addition to these data sources, the Economic Survey 2013 (2013 ES), government budget and fisheries cost, and earning survey 2015 were used to estimate the output and the input. For the estimation of the output of some industries, more than one source of data was used to fill the data gaps.

For industries such as air transport, electricity, water supply, programming and broadcasting activities, telecommunications, computer programming and information, manufacture of

other nonmetallic mineral products, manufacture of other transport equipment, postal and courier activities, financial intermediation and insurance, data was from the annual accounts of the enterprises engaged in these activities.

However, in the estimation of output and inputs, rather than depending entirely on annual accounts, administrative data of MIRA was used to make it more comprehensive for larger industries. For industries such as resorts, other accommodation services, wholesale and retail trade, and construction, the level of output was determined by the tax data, while the input and output ratios were derived from the annual accounts data, which was later used to determine the level of inputs, COE, and consumption of fixed capital.

For domestic production, the economic survey (ES) was used to estimate the output and input of processing and preserving of fish, manufacture of other food products, manufacturing of beverages, manufacture of textiles, wearing apparel and leather goods, manufacture of products of wood and products of wood, printing and services activities related to printing, manufacture of furniture, other manufacturing products, food and beverage service activities, professional, scientific and technical activities, administrative and support service activities, education, health, and other services. While the 2013 ES covered 6,143 establishments, more than half of it belonged to the wholesale and retail trade sector. Data from the 2013 ES was used only where no other data source was available. Approximately 8% of GVA was computed based on the 2013 ES.

In addition, actual government expenditure data for 2014 was from the government budget for 2016 to estimate the government production in the supply side. To compute the government output, the initial step was to calculate an estimate for consumption of fixed capital. The government consumption of fixed capital was assumed at 5% of the total government capital formation. The resulting figure for consumption of fixed capital (CFC) plus the wages and salaries, gave a figure for value added. Finally, the gross output was calculated to equate the sum of value added and intermediate consumption.

The agriculture sector had the least available data. Although the Ministry of Fisheries and Agriculture (MOFA) collects data on the quantity, price, and value of agricultural products brought from other islands to sell in the Male' Local Market this data cannot be used as there is no estimate on how much of the total production is sold in the Male' Local Market and how much of the total sales in the local market is captured by the ministry. In addition, as there is minimal data on agriculture covered in the 2013 ES, the commodity flow approach was used. That is, the output of this sector was assumed to be the difference between the total use (intermediate and final) and the total supply (imports and the agricultural secondary output of other industries).

Imports of Goods and Services was from external trade data. The monthly customs data was available in electronic format from Maldives Customs Services. In the database, products were classified under the 2012 HS. Monthly import of goods was available by country of origin for four categories of users (government, tourism sector, public sector enterprises, and private sector enterprises). The products were converted to CPC Version 2 with a three-digit code using the HS 2012 and CPC 2.0 Version bridge.

The import of services was from the BOP prepared by Maldives Monetary Authority (MMA). The subcategories of imports of services given in the BOP were transport, travel, and other. Since these were too broad to be included in the SUT under CPC codes, the import of services was divided into categories using the 2003 SUT ratios.

Trade and Transport Margin was not available in the ES. Therefore, for the SUT compilation, trade margin by products was derived from the annual accounts. Annual accounts of large wholesalers and supermarkets were combined and coded into SNA for this purpose. The trade and transport margin for each of the CPC categories was derived from these annual accounts. This was then coded to the CPC two- to three-digit codes.

Taxes Less Subsidies on Products covered import duties and goods and services tax (GST). The import duties, disaggregated by HS product codes were available from the customs database. The

duties were allocated to their respective products according to CPC two- to three-digit codes. GST is an ad valorem tax charged on the value of goods and services supplied in Maldives from 2 October 2011 onward. Within the scope of GST, it makes a clear distinction between suppliers of tourism goods and services (TGST) and suppliers of other (general) goods and services (GGST). Registration for GST is compulsory if the value of taxable supplies of a business exceeds rufiyaa (Rf)1 million per annum. The rate of GGST was 6% per annum for 2014 while the rate for TGST sector was 8% from January to October 2014 and from 1 November 2014 onward, the rate increased to 12%.

The subsidies the government gives were mostly allocated to state-owned enterprises producing energy (STELCO) and Male' Water and Sewerage Company (MWSC). Subsidies were also given to the State Trading Organization (STO), a public company engaged in the import, wholesale, and retail of staple food products. The subsidies were allocated to their respective CPC product category.

CIF/FOB Adjustment on Imports was made to avoid double counting of insurance and freight. Import data from customs was recorded in cost, insurance, and freight (CIF) values. This means the cost of insurance and freight was included in the values given. As the services of transport and insurance were already recorded elsewhere in the SUT, this led to a double-count. For the compilation of BOP, MMA estimated the freight and insurance services of imported goods. These amounts were entered as negative figures in the CIF/FOB adjustment on imports column in the supply matrix.

b. Use Side

Intermediate Consumption by Industry data compiled in the use side was largely from the 2013 ES. First, all the establishments were divided and allocated to their respective industries and classified according to the ISIC. The expenditure on intermediate inputs, such as raw materials, electricity, water, fuel, etc. under each industry were then allocated to products using the CPC two to three-digit codes. As the product detail level required by the SUT was not available in the 2013 ES, in the initial stage of

compilation, in cases where a specific expenditure item could not be classified to a certain CPC code, the expenditure item was coded as "U," i.e., "Unspecific Product." Later, these "U" products were allocated to different inputs using the commodity flow approach.

For industries, such as agriculture and real estate, where input structure was not available, the input structure of the 2003 SUT was used. The intermediate consumption for the government sector was from the actual recurrent expenditure data from the 2014 government budget and classified into CPC codes.

Household Consumption Expenditure data was from the Household Income and Expenditure Survey (HIES) 2009–2010, the most up-to-date source available on income and expenditure of households. The survey was conducted in Male' in 2009 (October–December) and in the Atolls in 2010 (March–May and August). A sample size of 2,060 households was selected for the survey, representing 4.5% of all local households in the administrative islands. The 2010 HIES was raised to 2014 levels, by adjusting for the rate of inflation and population size. The disaggregated product level data was allocated according to CPC two to three-digit codes.

General Government Consumption Expenditure data was from the government budget. Actual budget figures for 2014 were obtained from the 2016 budget. Included in individual goods and services are expenditure by general government for health services including public health, recreation, culture and religion, education, social security and welfare services, housing, and sewerage services. Included in collective government consumption expenditure were the provision of security and defense, public administration, public research and development, maintenance and improvement of law and order, general administration, including the setting and enforcement of policies, standards and regulation of public health, education, etc.

Nonprofit Institutions Serving Households was included in the final consumption expenditure of households. The 2013 ES did not include data of nonprofit institutions serving households. Thus, there was no separate column for the final consumption expenditure of NPISH.

Gross Fixed Capital Formation was measured based on the fair assumption that nearly all capital goods and most construction materials were imported. Therefore, to measure the GFCF, imports data from the national customs database was used. This method of indirect estimation through imports, was also used in the earlier SUTs created for Maldives.

As mostly construction activities were carried out in the capital, Male', it was assumed that the majority of housing units built in Male' was for real estate. In addition to the construction of residential units, construction of several resorts and guest houses was ongoing. Thus, approximately 85% of the construction was assumed to be capital formation.

In addition to capital goods and construction, the output of the local ship building industry from the supply side of the SUT was added to GFCF for transport equipment.

Changes in Inventories for a year is the difference in value of stated inventory from a year to the previous year (i.e., 2013–2014). The data source for the compilation of inventory was the administrative data of the tax authority (MIRA). The Business Profit Tax form of MIRA provided opening and closing stock values by industry breakdown. For the changes in inventories of the financial sector, data from balance sheets of financial sector annual accounts was used.

Exports of Goods and Services data was available from Maldives Customs Authority (MCA) and MMA. Custom data was available in electronic format classified by the 2012 HS for goods. Each product with CPC codes was in concordance with the HS Bridge 2012. Initially, exports of services were taken solely from the BOP statistics published by the MMA. Particularly significant is the export of travel services, a broad category that includes the export of accommodation and food services (resorts) as the main item.

c. Value Added

Compensation of Employees—including wages, allowances, material benefits, and medical

allowance—was based on the data of the 2013 ES, 2014 census, and annual accounts. The survey data was raised for the whole economy. Based on the ES, average compensation of employees per worker was computed by industry. For sectors where the complete sector was estimated based on annual accounts, COE was directly from the financial accounts. On the other hand, in the absence of complete coverage of the sector, estimates of the compensation were based on the number of employees and average compensation of employees by sector.

Taxes Less Subsidies on Products and Production was directly taken from 2014 government budget. Since government provides subsidies to SOEs, the amount of subsidy the government provides was allocated to the sector where the SOE operates. For example, as food subsidy was provided to the State Trade Organisation (STO), the amount of food subsidy was allocated to the wholesale and retail trade sector.

Consumption of Fixed Capital data was mainly sourced from annual accounts. However, for government, this was assumed as 5% of total capital formation.

Operating Surplus was computed as a balancing item, with the GVA less compensation and net taxes.

4. Balancing Process

Manual balancing was carried out to balance the SUT. During manual balancing, changes in inventories for services and perishable goods were set (close) to 0. The adjustment process involved changing other components of use or supply, where adjustments were made depending on the strengths and weaknesses of the various source statistics. If large adjustments were necessary, the estimates of the whole sector were revisited to double-check the possible errors and estimation problems.

5. Main Results and Findings

This section of the 2014 SUT report provides an insight on the findings and results of the 2014 SUT.

Table 34 shows the distribution of gross output, intermediate inputs, value added, and percentage share of the industries. The total value of domestic production in the economy was Rf110,588 million. The value of intermediate inputs used to derive this gross output was approximately Rf60,697 million and the total GVA for 2014 was Rf49,891 million. The net taxes of products accounted for Rf6,184 million. Thus, the Gross Domestic Production was valued at Rf56,074 million.

The 2014 SUT depicted the changes that took place in the structure of the economy. Of the percentage share of 2014 GDP, 5.3% accounted for the primary industry, 8.3% accounted for the secondary industry, and 5.3% accounted for the tertiary industry. Thus, the percentage share of the three industries combines was 89.0% of the GDP at market price. The percentage share of net taxes on products was 11.0% of the GDP.

In percentage share, accommodation and food services was the largest sector contributing up to 25.0% of the total GDP. For production, the electric power generation, transmission, and distribution sector was significant, with gross output of over Rf2,951.3 million. However, since a state-owned

enterprise (STELCO) provides electricity at a subsidized price, the value addition of this sector was very low as the output was computed on cost basis.

For the total supply of goods and services at purchasers' prices, 68.9% of the goods and services were produced domestically, with services accounted for 54.7% of the total; while AFF accounting for 3.7%, and industry accounted for 10.5%. Of the services provided, nearly a third of the output was supplied by the accommodation and food services sector.

Maldives is a heavily import-dependent country where over a quarter of the total goods and services supplied is imported. Prior to the fiscal reform in 2011, with the huge volume of imports, import duty was one of the major sources of tax revenue. However, the introduction of the GST, a type of ad valorem tax, increased taxes on products. Thus, in 2014, 4.0% of the total goods and services supplied at purchasers' prices were net taxes on products (taxes less subsidies on products).

In share in the use side, exports were the largest final demand component with 30.1% of use of goods and services. Among the exports, processed fish and tourism services were the major goods and services.

Table 34: Distribution of Gross Output, Intermediate Inputs, and Value Added by Industry, 2014
(million rufiyaa)

ISIC	Sector/Industry	Gross Output	Intermediate Inputs	Gross Value Added	Value Added Share (%)
	Primary	6,031	3,038	2,993	5.3
A	Agriculture, Forestry, and Fishing	6,031	3,038	2,993	5.3
	Secondary	17,312	12,643	4,669	8.3
C	Manufacturing	4,330	3,214	1,116	2.0
D	Electricity, Gas, Steam, and Hot Water Supply	2,996	2,517	480	0.9
E	Water Supply, Sewerage, Waste Management, and Remediation Activities	825	427	397	0.7
F	Construction	9,161	6,485	2,676	4.8
	Tertiary	87,245	45,016	42,229	75.3
G	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	10,902	5,707	5,195	9.3
H	Transport and Storage	9,441	5,676	3,766	6.7
I	Accommodation and Food Service Activities	38,829	24,813	14,015	25.0
J	Information and Communication	3,427	1,814	1,613	2.9
K	Financial and Insurance Activities	2,864	661	2,203	3.9
L	Real Estate Activities	5,418	1,291	4,127	7.4
M	Professional, Scientific and Technical Activities	1,229	384	844	1.5
N	Administration and Support Activities	2,201	471	1,730	3.1
O	Public Administration and Defense, and Compulsory Social Security	6,742	2,369	4,372	7.8
P	Education	2,067	370	1,697	3.0
Q	Human Health and Social Work	2,114	610	1,504	2.7
R&S	Arts, Entertainment and Recreation, and Other Service Activities	2,012	849	1,163	2.1
	Gross Value Added	110,588	60,697	49,891	89.0
	Taxes Less Subsidies on Products			6,184	11.0
	Gross Domestic Product			56,074	100.0

Source: National Bureau of Statistics - National Accounts and Economic Statistics Division, Maldives.

For the total use of goods and services at purchasers' prices, 38.7% was for inter-industry use or intermediate consumption. Maldives' economy was dominated by the service sector, hence, a share of 28.8% of the total use of goods and services, while industry accounted for 8.2%; and AFF accounted for 2.1%. Final consumption expenditure of the households and nonprofit institutions serving households added 14.1% of the total use of goods and services.

With the ongoing expansion phase of the tourism industry and the booming housing market, gross fixed capital formation added 11.3% of the total use of goods and services. Government, as the largest provider of employment and producer of the public goods and services, consumed 5.0% as the final consumption expenditure. With the limited data available of changes in inventories, the share of total goods and services used as changes in inventories and valuables was 0.4%.

a. Analysis of Gross Value Added and Intermediate Consumption

This part of the report aims to analyze the gross value added ratios (GVARs) and intermediate consumption ratios (ICR) by sector. The most challenging part of compiling the SUT is the insufficient breakdown of intermediate input structure.

As for the agriculture sector, the input structure used was from the 2003 SUT since sufficient product details of the intermediate inputs were not available in the 2013 ES. Although in Maldives, people do not grow trees for forestry purposes, they cut trees on uninhabited islands, to be used in the manufacturing industry (such as boat building) and in construction. But this was not captured in the 2013 ES due to the limited number of people involved and the small scale of the activity was carried out. Since forestry is an informal activity carried out in Maldives by individuals, unpaid family members, and friends, no intermediate input was estimated for this sector, hence, no rating for the ICR.

Data used to derive the input breakdown of the fisheries sector was from the Cost and Earning Survey of the Ministry of Fisheries and Agriculture.

Since the efficiency and performance of the fishing vessels differs based on the size of the vessel used for fishing, the ICR used and the data was raised based on the number of vessels by size used for fishing. The ICR of the fisheries sector was 0.58. Cost of fuel was the highest intermediate input used in the sector which covers up to 75% of the total input costs. Other significant inputs include spending on telecommunication.

Table 35: Gross Value Added and Intermediate Ratio by Industry

Industry	GVAR	ICR
Primary	0.46	0.54
Agriculture	0.72	0.28
Forestry	1.00	-
Fishing	0.42	0.58
Secondary	0.22	0.78
Manufacturing	0.29	0.71
Electricity, Gas, Steam, and Hot Water Supply	0.01	0.99
Water Supply, Sewerage, Waste Management, and Remediation Activities	0.46	0.54
Construction	0.24	0.76
Tertiary	0.49	0.51
Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	0.58	0.42
Transport and Storage	0.37	0.63
Accommodation and Food Service Activities	0.36	0.64
Information and Communication	0.44	0.56
Financial and Insurance Activities	0.66	0.34
Real Estate Activities	0.90	0.10
Professional, Scientific and Technical Activities	0.86	0.14
Administration and Support Activities	0.70	0.30
Public Administration and Defense, and Compulsory Social Security	0.52	0.48
Education	0.73	0.27
Human Health and Social Work	0.64	0.36
Arts, Entertainment and Recreation and Other Service Activities	0.48	0.52
Total Gross Value Added	0.45	0.55

- = magnitude equals zero, GVAR = gross value added ratio to output, ICR = intermediate consumption ratio to output.

Source: National Bureau of Statistics - National Accounts and Economic Statistics Division, Maldives.

The GVAR of the manufacturing industry was 0.26 while the ICR of the industry was 0.74. The GVAR of the manufacturing industry was very much influenced by the lower GVAR of the fish preparation industry. Since Maldives is surrounded by sea, and fish and fish products are the major export commodity of the country, preparation of fish and fish products is the main manufacturing activity. Fish products are manufactured with a handful of large-scale producers and small-medium scale manufacturers in the atolls. The ICR of this sector was 0.11 and is considered low as labor-intensive methods are used in fish processing.

As shown in the preceding Table 34, the electricity sector had the lowest GVAR of 0.06. This is because the electricity tariff is fixed and the Government of Maldives heavily subsidizes the sector. Although water supply is also a subsidized sector, the GVAR of this sector was 0.48. Unlike the electricity sector, the government subsidizes only the public water meters.

The GVAR of the construction industry fell since the last SUT compiled in 2007. This was mainly due to the inflated input prices and the construction companies not being able to increase the GVAR as much as the increase in the input prices.

Unlike many other countries, Maldives does not have many companies specializing in the wholesale trade only. Large companies engaged in wholesaling are also involved in retail trade activities. The GVAR of this sector, 0.48, was marginally above the average of the GVAR of the total services sector (0.47) and the overall GVAR (0.44).

Sectors such as transportation and accommodation and food servicing had much lower GVARs compared to the other services sectors.

6. Meeting the Challenges

- **Breakdown of Output and Intermediate Consumption.** Another challenge was the data limitation of the breakdown of output and IC. Minor and negligible industries, such as coral and sand mining, the industry were completely ignored due to data shortcoming. Some of the data shortcomings were addressed by relying on the previous SUTs published for Maldives. This included agriculture, land transport, construction, and resorts.
- **Household Final Consumption Expenditure.** The latest HIES was done in 2009 and 2010. It was assumed that the consumption pattern would be similar and, thus, the only adjustment was to the levels using population estimates and price variations using inflation.
- **Fixed Capital Formation and Changes in Inventories.** The government's fixed

capital formation was readily available in the government budget. However, challenges remained in the estimation of fixed capital formation of the private sector. Thus, for the estimation of fixed capital formation the imports of capital goods, and output of construction and the boat building industry were used.

- **Trade and Transport Margins.** For each product, financial statements were used to estimate the trade and transport margin.
- **Resource Constraints.** In the development of the 2014 SUT, the biggest challenge was the lack of staff to undertake the work, and the limited knowledge and experience of the current staff in the compilation of SUTs. Although Maldives has been associated with ADB for a long time, and ADB has funded the development of the country's NA, staff turnover has been a key issue in retaining the knowledge and experience within the organization. Even though the NBS was part of the RETA 6483, due to the high staff turnover, the NBS was unable to retain a single employee who worked on the project. Also, in the past, Maldives worked on three SUTs, but extensive reliance on foreign consultants and poor transfer of knowledge, along with the changes in SNA recommendations since then, meant that the process of compiling this SUT was a bit more challenging than expected. Two staff, on average, worked throughout the compilation of SUTs.

7. The Way Forward

With the fiscal reform in 2011 widening the tax base, Maldives faces many challenges in estimating the economic growth using the 2003 base year for constant prices. Thus, for this exercise, the NBS is not to produce alternative estimates of GDP, but to inform and improve the NA. Therefore, the 2014 SUT is an invaluable input to be used as a benchmark to rebase GDP to 2014. It is also a step forward in implementing the 2008 SNA recommendations.

This exercise boosted experience and increased knowledge on NA compilation as a whole. It also helped in assessing data quality and data gaps in NA compilation.

Compilation of SUTs requires skilled manpower and technical resources. Thus, recruiting and training is a key issue for annual SUT compilation. Therefore, the way forward is to compile annual SUTs so the knowledge and experience is retained in the NBS.

N. Mongolia

The National Statistics Office (NSO) is a centralized statistical agency under the Ministry of Justice. The NSO is responsible for collecting, processing, monitoring, disseminating short- and midterm official statistics, and conducting censuses and surveys. Under the Law on Statistics, article 7, NSO is responsible for compiling SUTs, and IOTs every 5 years, and the midterm program to develop Mongolia's official statistics for strategic planning purposes; compile the annual SUT and IOT; and update the estimation of annual and quarterly GDP based on the SUT results.

The NSO has 11 departments, including the National Accounts Division of Macro-Economic Statistics Department responsible for compiling national accounts (NA), price statistics, macroeconomic statistics, and environmental statistics and accounts. Currently 15 staff work in the NA division.

During August 2010–December 2014, the NSO implemented MONSTAT or the twinning partnership project. The MONSTAT project availed of grants and credits from the World Bank between 2010 and 2014. Project partners were the NSO of Mongolia, Federal Statistical Office (FSO) of Germany, Statistics Korea and World Bank (WB) funding. One of the components of the MONSTAT project was upgrading statistical operations, including NA, price statistics, population and housing census, and economic and social statistics. Under the project on NA, the methodologies for institutional sector accounts were implemented based on experts' recommendations, and modernizing the concept to compile SUT and IOT. Objectives were to estimate the non-observed economy (NOE) by OECD manual, and compiled the SUT and IOT for the 2010 performance in line with the 2008 SNA.

Mongolia also participated in the International Monetary Fund's (IMF) Statistics Department's Program on the implementation of the SNA and the International Comparison Program (ICP) funded by the Government of Japan–Japan Administered Account for Selected IMF Activities, 2010–2013.

1. The Current System of National Accounts

a. Recent National Accounts

National accounts are a system of accounts and balance sheets that provide a broad and integrated framework to describe an economy, whether of a country or a region.

The scope and coverage of NA are (i) all resident entities engaging in economic activities; (ii) a nonobserved economy; (iii) housing services in which owner-occupiers provide for themselves; (iv) personal and domestic services produced for their own use by households employing paid staff. The base year for the existing GDP series was 2010, based on the 2010 SUT. The NSO used the standard classifications, such as ISIC Revision 4, CPC Version 2, COICOP, COFOG, COPNI, HS, and the classification of nonfinancial assets. GDP was compiled by production, expenditure, and income approaches. The GDP estimates at current prices were derived from pilot and final SUTs. Constant price GDP was derived from current price GDP using deflators.

The scope of NA countries' compilation can be assessed through a set of six milestones supplemented by three data sets describing (i) the minimum set of accounts that needs to be compiled (MRDS), (ii) a recommended set of accounts, and (iii) a desired set of accounts.

Mongolia compiled the production account, generation of income account, allocation of primary account, secondary distribution income, and use of incomes, capital accounts, and financial accounts for all institutional sectors. The NSO used the following tables from the annual NA questionnaire and submitted these to the UNSD:

- Table 1.1 GDP by expenditure at current prices.
- Table 1.2 GDP by expenditure at constant prices.
- Table 1.3 Relations among product, income, savings, and net lending.
- Table 2.4 Value added by industries at current prices (ISIC Revision 4).
- Table 2.5 Value added by industries at constant prices (ISIC Revision 4).
- Table 2.6 Output, gross value added, and fixed assets by industries at current prices (ISIC Revision 4).
- Table 3.1 Government final consumption expenditure by function at current prices.
- Table 3.2 Individual consumption expenditure of households, NPISHs, and general government at current prices.
- Table 4.1 Total economy (S.1).
- Table 4.2 Rest of the world (S.2).
- Table 4.3 Nonfinancial corporations (S.11).
- Table 4.4 Financial corporations (S.12).
- Table 4.5 General government (S.13).
- Table 4.6 Households (S.14).
- Table 4.7 Nonprofit institutions serving households (S.15).
- Table 5.2 Cross-classification of gross value added by industries and institutional sectors (ISIC Revision 4).

The NSO also compiled quarterly GDP by production and expenditure approaches, both current and constant prices, and regional GDP at current prices annually.

Compliance with the 1993 and 2008 SNA Concepts.

In the 2008 SNA compared with 1993 SNA, there were 44 main changes. Some changes implemented in the 2010 SUT were as follows:

- Non-observed economy survey, 2010 (N1 to N7 framework estimated).
- FISIM estimated by new methodology, allocated to users.
- General government CFC (depreciation, not by PIM method).
- Weapons system classified in fixed asset according to the asset classification.
- Goods for processing abroad, calculated as service charges.
- Production tax estimations clarified, royalty and resource rents excluded.
- Meat production and slaughtering estimated in manufacturing from agriculture.
- Adopted financial assets classification.

b. Data Sources

The estimations of GDP by production and income approaches were compiled using the results of annual livestock census, crop estimates, annual reports of enterprises, data from household socioeconomic survey, general government annual revenue and expenditure statements from the Ministry of Finance (MOF), banking and financial sector statements from the Central Bank and financial regulatory commission, price statistics and other indicators for the calculation of the GDP at constant prices, information from the “Taxpayers Database” of the General Department of Taxation; and non-observed economic survey (Household Unincorporated Enterprises producing for the Market (HUEMs), artisanal mining, illegal production, and intentional distortion of business accounting) results.

For the GDP by expenditure approach were the household socioeconomic survey, general government annual revenue and expenditure statements, annual report on activities of NPISH, foreign trade statistics, BOP, and the livestock census.

c. Existing Supply and Use Tables

The NSO compiled the SUT and IOT every 5 years as stated by the Law on Statistics of Mongolia. Information from the 2005 SUT, in line with the 1993 SNA, was used in compiling the 2008 SUT under the RETA 6483. The benchmark SUT and IOT for 2010 was compiled in 2013 under the project MONSTAT supported by the FSO and funded by the WB and IMF program on the implementation of the SNA and the ICP funded by the Government of Japan. After the 2010 SUT, the NSO compiled the annual SUT for 2011–2013.

The SUT compiled by a three-digit CPC and ISIC or 311 products and 203 industries. The SUT aggregated into 68x 55, 68 x 48, 48 x 32, 32 x 20, 20 x 20, and tables are available on the website.

The GDP estimates at current prices are derived from pilot and/or unbalanced (or results of surveys and estimates) and final annual SUTs. Results of the base 2010 SUT and published official estimates for 2010, and GDP by the production and income approaches were updated by 15.9%; and the GDP by expenditure approach by 15.2%.

After compiling the annual SUT, the difference between GDP based on estimates and GDP revised by the SUT was 0.3% in 2013, and 1.1% in 2014 (Table 38).

d. Existing Input–Output Tables

Compilation of the IOT is a long-standing tradition in Mongolia; and was compiled for 1966, 1970, 1977, 1983, and 1987, based on the MPS. The NSO compiled experimental SNA-type IOTs for 1997 and 2000 but the 2005 IOT was the first to be derived from a 2005 SUT as recommended by the SNA. The industry-by-industry IOT was derived from the SUT 55 x 55 based on fixed product sales structure assumption.

2. The 2014 Supply and Use Table at Current Price

a. General Description

The NSO compiles the annual SUT. In 2015, NSO compiled the SUT for 2014. The size of the detailed matrix was 311 products and 203 industries. The SUT aggregated into 68 x 55, 68 x 48, 48 x 32, 32 x 20, and 20 x 20. The classification system used includes relevant international statistics standards: ISIC revision 4, CPC Version 2, COICOP (HH cons.), COFOG (Government cons.), COPNI (NPISH), HS (export, import), classification of nonfinancial assets (GFCF). The SUT compiled both basic and purchasers' prices.

b. Breakdown of Industries and Products

The NSO aggregated and disseminated the SUT by sizes: 68 x 55, 68 x 48, 48 x 32, 32 x 20, 20 x 20; or by size CPC Version 2: two-digit and ISIC Revision 4 two-digit.

3. Data Sources and Methods

a. Supply Side

The following are sources of data and estimation methods of the components in the supply table: domestic production of industries, import of goods and services, trade and transport margins, taxes and subsidies, and CIF/FOB adjustment on imports.

Domestic Production by Industry

Agriculture. Agricultural output by type of crops, livestock, in physical terms, was from reports of the production households and enterprises and annual livestock census. For livestock, the following survey results were used, such as yield survey of livestock, producer price survey for agricultural products, and survey on costs for agricultural activities. The value of the output was calculated as the amount of production multiplied by the corresponding average prices.

Other Industries. The output of industries, excluding the financial sector, was estimated according to the Annual Business Survey of enterprises. For estimation of output, also used were the annual reports of nonprofit organizations, estimates of non-observed economy, and estimates of owner-occupied dwellings.

Banking and Other Financial Institutions. The output of banks was obtained from the financial reports of commercial banks, which were compiled during the quarterly survey of the Central Bank. The output of other financial institutions, such as savings and credit cooperatives; nonbank financial institutions; money lenders; insurance, broker, and securities companies was from financial reports compiled by the financial regulatory commission. The estimates for FISIM were calculated on the basis of the Central Bank's statistics, such as loan reports and mortgage loan reports of banks.

Public Services. The output of general government was estimated based on budget performance reports from the MOF.

Imports of Goods and Services data was prepared based on foreign trade data. The BOP was the source of data on commodities that do not pass through customs, and the source of data on imports of services.

CIF/FOB Adjustment on Imports were estimated based on a 27% adjustment factor on insurance and freight from the BOP. The insurance and transportation costs were deducted from CIF type imports of goods and incorporated into the imports of services, and imports of goods were reflected in FOB type valuation. But in the SUTs, imports of goods and services were estimated based on a CIF type valuation. Imports of goods were estimated directly from a CIF type valuation for foreign trade data, and 27% of insurance and transportation costs were deducted from imports of services. In accordance with the guidelines of the SNA, both imports and exports should be recorded at FOB values. Thus, imports should include the cost of transport and insurance in foreign companies, but not the cost of these services by national companies.

Trade and Transport Margins were divided among the agricultural and nonservice industries. The total trade and transport margins were adjusted to the total output of trade and transport industries (including expenses for transport of goods which were paid for separately and not included in the price of the goods).

The benchmark SUT used a special survey result. Annual updating used ratios from the benchmark year. The NSO compiled only use-side trade and transport margins.

Taxes Less Subsidies on Product was from tax and custom authorities, and subsidies from the Ministry of Finance. VAT allocation by products was based on nondeductible VAT, just as the trade and transport margin used survey results. The allocation of excise taxes and subsidies on products were based on reports from the MOF. The breakdown of VAT, sales taxes on imports, and customs was directly from the customs authority file, which included a breakdown of those taxes by commodities.

b. Use Side

The following are sources of data and estimation methods of the components in the use table: intermediate consumption by industries, household consumption expenditure, general government consumption expenditure, nonprofit institutions serving households, gross fixed capital formation, changes in inventories, acquisition less disposal of valuables, and exports of goods and services.

Intermediate Consumption by Industry. Data sources for compiling were the same for domestic production by industry. The benchmark year used a special survey for compiling the SUT, where IC was detailed.

Household Consumption Expenditure was from household socioeconomic survey data, foreign trade statistics, and other industry survey data.

General Government Consumption Expenditure (Individual and Collective) was from general government consumption expenditure based on analyses of budget performance reports.

Nonprofit Institutions Serving Households were estimated based on annual survey data.

Gross Fixed Capital Formation was estimated based mainly on Annual Business Surveys of Enterprises; agricultural statistics data; financial reports of enterprises on capital formation; data on imports of machinery, equipment, and vehicles; data of general government on scope of their investment and construction statistics.

Changes in Inventories were estimated based on stock of agriculture and Annual Business Surveys of Enterprises.

Acquisition Less Disposal of Valuables was estimated based on acquisition less disposal of valuables from the Central Bank.

Exports of Goods and Services were estimated based on foreign trade and BOP data.

c. Value Added

Compensation of Employees is the total remuneration in cash or kind payable by an enterprise to an employee in return for work done. For estimation of compensation, the sources of data used were the same with the estimation of output of industries. Also, to check compensation, labor data and average salaries by industries were used.

Taxes and Subsidies were from the MOF and detailed data by enterprises or by industries from tax and custom authorities.

Depreciation data was obtained from surveys, and estimates were the same as the estimation of output. For general government depreciation, data was from the MOF.

Operating Surplus was the income from production by incorporated and unincorporated enterprises. The operating surplus data was from surveys, and the estimates were the same as the estimation of output. Meanwhile, operating surplus was the residual of GO and GVA.

4. Balancing Process

The compilation and balancing of the SUT is a complex process, involving coordinating and balancing estimates based on different methods and statistical systems.

The first version of the SUT was constructed based on NA data, and an initial column of differences between total supply and uses by product was calculated. In general, total supply of certain products should be iteratively calculated if the total use is more reliable and vice-versa. Also, the differences were grouped with intermediate uses, on the assumption they were derived mainly from errors in estimates of inputs, which were less reliable than estimates of final uses. When estimates of outputs in industries were revised, revisions were introduced in the intermediate uses matrix, and trade and transport margins. All balancing procedures were manual.

- Balancing for each industry: value added = income
- Output–intermediate use = compensation of employees + other taxes on production–other subsidies on production + gross operating surplus/mixed income, i.e., $GDP (P) = GDP (I)$
- Balancing for each product: supply = use
- Gross output + imports = intermediate consumption + final consumption expenditure + gross fixed capital formation + changes in inventories + exports

i.e., $GDP (P) = GDP (E)$

5. Main Results and Findings

In 2014, total supply was togrog (MNT)56,058.8 billion, of which 73.7% was domestic production, 22.6% was imports of goods and services, and 3.7% was taxes less subsidies on products.

Table 36: Composition of Supply Table, 2014
(billion togrogs)

Supply	Value	Share (%)
Domestic Production	41,298	73.7
Agriculture	4,178	7.5
Industry	20,168	36.0
Services	16,952	30.2
Import	12,686	22.6
Taxes Less Subsidies on Products	2,075	3.7
Total Supply	56,059	100.0

Source: National Statistics Office, Mongolia.

In 2014, 37.7% of total supply was used for IC, 27.7% for final consumption, 13.9% for gross capital formation, and 20.7% for exports.

Table 37: Composition of Use Table, 2014
(billion togrogs)

Use	Value	Share (%)
Inter Industry Use	21,146	37.7
Agriculture	1,213	2.2
Industry	13,167	23.5
Services	6,766	12.1
Households and Nonprofit Institutions Serving Households	12,588	22.5
General Government Consumption Expenditure	2,893	5.2
Gross Fixed Capital formation	6,351	11.3
Changes in Inventories and Net Valuables	1,467	2.6
Exports of Goods and Services	11,613	20.7
Total Use	56,059	100.0

Source: National Statistics Office, Mongolia.

6. Meeting the Challenges

The following are the main issues:

- The special survey on inputs is conducted at 5-year intervals. For the annual compilation of the SUT, the input structure is compared and revised to the benchmark year.
- For the annual SUT, the NSO does not estimate the gross output by market and nonmarket output, and production for its own use.
- Due to data limitations and experiences, the NSO still does not compile trade and transport margins, nor matrices for the supply side.
- For balancing the SUT, the NSO staff's knowledge related to the compilation of the IOT and SUT is very important.

7. The Way Forward

Integration of the SUT with the NA is very useful. The main advantage of the SUT framework is it makes use of all available information and at the end of the balancing process, it allows improving of the existing NA estimates. The NSO started the compilation of the annual SUT in 2013.

The midterm programs for developing official statistics of Mongolia for 2016–2020 related to the SUT compilation includes the following:

- Compilation of the annual SUT and IOT, update of annual and quarterly GDP, and estimation of institutional sector accounts based on the SUT results;
- Development of the annual SUT at constant and/or previous year prices;
- Compilation of the benchmark SUT and IOT for 2015.
- Revisions of NA data.

Table 38: Comparison of Supply and Use Tables and Published Estimates
(billion togrog)

	2012		2013		2014	
	Supply and Use Tables	Published National Accounts	Supply and Use Tables	Published National Accounts	Supply and Use Tables	Published National Accounts
Industry / Activity						
Agriculture, Forestry, and Fishing	1,879	1,979	2,572	2,604	2,965	2,973
Mining and Quarrying	2,743	2,517	2,849	2,966	3,661	3,754
Manufacturing	1,249	832	1,672	1,708	1,951	1,803
Electricity, Gas, Steam, and Air Conditioning Supply	234	232	271	271	314	313
Water Supply; Sewerage, and Remediation Activities	73	45	78	78	87	86
Construction	838	251	980	979	989	1,090
Wholesale and Retail Trade; Repair of Motor Vehicles	2,231	1,467	2,267	2,124	2,545	2,424
Transportation and Storage	894	851	844	836	1,109	982
Accommodation and Food Service Activities	186	139	206	202	197	195
Information and Communication	380	374	414	402	492	490
Financial and Insurance Activities	584	581	782	798	1,042	1,030
Real Estate Activities	957	957	1,162	1,070	1,495	1,466
Professional, Scientific, and Technical Activities	424	130	447	438	504	484
Administrative and Support Service Activities	178	193	213	193	211	245
Public Administration and Defense, and Compulsory Social Security	699	573	789	789	907	907
Education	745	650	855	855	996	976
Human Health and Social Work Activities	317	273	359	359	412	412
Arts, Entertainment, and Recreation	87	60	87	84	98	93
Other Service Activities	138	51	149	145	177	180
Net Taxes on Products	1,854	1,858	2,179	2,220	2,075	2,075
Gross Domestic Product	16,688	14,013	19,174	19,118	22,227	21,976
Main Expenditure Items						
Final Consumption	11,105	9,368	13,279	13,174	15,481	15,542
Household and Nonprofit Institutions Serving Households Consumption	8,848	7,472	10,699	10,594	12,588	12,649
Government Consumption	2,257	1,896	2,580	2,580	2,893	2,893
Gross Capital Formation	9,329	8,960	10,215	10,055	7,818	7,299
Gross Fixed Capital Formation	7,529	7,358	7,529	7,635	6,351	5,568
Changes in Inventories and Net Acquisition of Valuables	1,799	1,602	2,687	2,421	1,467	1,731
Net Exports	-3,746	-3,740	-4,320	-3,903	-1,072	-943
Exports	7,272	7,085	7,457	7,651	11,613	11,648
Imports	11,017	10,824	11,777	11,555	12,686	12,591
Gross Domestic Product	16,688	14,588	19,174	19,326	22,227	21,898
Value Added Components						
Compensation of Employees	4,394	3,896	4,980	5,025	5,853	5,839
Consumption of Fixed Capital	1,087	823	1,206	1,215	1,708	1,708
Net Taxes on Production and Imports	1,881	2,558	2,250	2,192	2,190	2,190
Operating Surplus/Mixed Income, Net	9,327	6,736	10,739	10,687	12,478	12,239
Gross Domestic Product	16,688	14,013	19,174	19,118	22,227	21,976

Source: National Statistics Office, Mongolia.

O. Nepal

The Central Bureau of Statistics (CBS) is a central statistical organization of the Government of Nepal regulated by the Statistical Act 1958 and under the direct supervision of the National Planning Commission Secretariat. The CBS, as mandated by the act, has been engaging in the compilation and publication of NA statistics for the last 4 decades. The National Account Section (NAS) under the CBS is responsible for the compilation and publication of macroeconomic aggregates. To overcome the technical issues in producing and

compiling the national accounts (NA) statistics, a technical committee was formed under the chairmanship of the deputy director general of the CBS. The same committee is also responsible for the entire SUT compiling process. Thus, this committee provides technical assistance to the technical working group (TWG) which is formed in the NAS. The members of the TWG critically studied and compiled various data sets to produce the 2010–2011 SUTs. The director general and deputy director general of the CBS supervised the entire process. ADB, under the RCDTA 8838 project, also provided important technical support.

1. The Current System of National Accounts

Compilation of NA statistics started in the early 1960s following the 1953 SNA recommendations. Since then, the CBS has been publishing the key macroeconomic aggregates statistics regularly. Currently, the CBS publishes the NA following the 1993 SNA with the base year 2000–2001. The CBS as the main custodian for preparing NA statistics produces the gross value added (GVA) at both current and constant prices by industrial classification. The GVA and related estimates are available for 15 major industrial classifications. Various censuses and surveys are the main data sources of NA statistics but administrative data sources are also crucial. Nepal follows the concepts, guidelines, and other recommendations of the 1993 SNA in its NA compilation process. Along with this, the CBS also estimates GDP by both expenditure and Income approaches, with minor adjustments. The production approach is the predominant approach for compiling GDP. However, both the expenditure and income approaches for measuring GDP are constrained by the residual factor. It means that changes in stocks and operating surplus/mixed income are residually estimated.

The specific data sources for agriculture and fisheries are the respective ministries' administrative records, the decennial sample census of agriculture, and the Nepal Living Standards Survey (NLSS). Data on mining is collected mostly from the Department of Mining and Geology. The information for quarrying activities is derived by using the commodity flow approach. Data on manufacturing industries is collected via the census of manufacturing establishments (CME) every 5 years. For small manufacturing establishments (SSME), the CBS conducts surveys every 10 years, and this is a key data source. Similarly, for unorganized household manufacturing, data is from the living standards surveys and, to some extent, from the population census as well. Administrative records, financial statements, and reports of the respective ministries and departments are the main data sources for industries such as electricity, gas, and water. Some small-scale surveys on these industries are also data sources. The data for construction is mostly

computed by using the commodity flow approach. Other major data sources for the manufacturing sector are censuses and surveys on manufacturing establishments; foreign trade statistics from the Department of Customs and the Central Bank; data from the Department of Roads and living standards survey, etc.

Tradable volume is estimated in aggregate from the agriculture output of the agriculture sector, manufacturing output from the manufacturing industry, and imported goods from customs data. Trade margin surveys and distributive trade surveys are the major data sources for further mathematical computations for this industry. Profit and loss accounts are the major data sources for the hotel and restaurant industry. Besides these, benchmark surveys, living standards surveys, population censuses, and reports from the tourism board are also crucial data sources for this industry. Major data sources for the transport industry are benchmark surveys, living standards survey, lifetime surveys of vehicles, and administrative records from the Department of Transport. Data sources for storage service are the profit and loss account of the Nepal Transit and Warehouse Company and benchmark surveys. Data sources for the communication industry are the financial statement of the respective telecom companies, and the benchmark survey by the CBS. For financial intermediation, information were collected from the Central Bank report published monthly. Data sources for the real estate industry are the administrative records of land registration offices and the benchmark survey.

The administrative records of the Financial Comptroller General Office (FCGO) are the main sources for the compilation of the government sector value added. Along with the FCGO information, the survey of private hospitals, survey of private education, and survey of nonprofit institutions are also used for the education, health and other community and social services sector.

a. Existing Supply and Use Tables

In addition to macroeconomic indicators, Nepal published the first SUT in 2013 choosing 2004–2005 as the reference year. The first SUT was

prepared based on the benchmark survey years 2004–2005 when around 40 different surveys, censuses, and studies were conducted. Using the statistics from these surveys and studies along with the administrative data, the CBS prepared a matrix of 215 x 53 for gross output, 169 x 53 for intermediate consumption, and 346 x 11 for final demand. The CBS used the published aggregates as the control total for the production approach aggregates and independently estimated for the expenditure category aggregates. The ISIC 3.1 for industry classification, CPC 1.1 for product classification, and HS scheme for international trade classification were followed. Finally, the published SUTs were limited to the 51 x 32 matrix. The SUTs tried to classify the economic activities by three-digit groups. But most of the activities were merged, thus, there were 32 industrial three-digit groups in the matrix. Similarly, most of products were disaggregated to the two-digit classification whereas some products of industries such as agriculture, furniture; transport, and FISIM were disaggregated to the three-digit classification. During compilation, output was measured in basic prices and intermediate consumption (IC) in purchasers' prices.

Domestic products and imports were the supply components, and IC and final use were the use components of the SUT. Most of the indicators, such as output, IC, government consumption, NPISH consumption, GFCF, etc. in the SUT were similar to the published figures, whereas some indicators, such as household consumption, were estimated independently by using various surveys. Similarly, the data of imports and exports of goods was collected from the Customs Department of Nepal, and the data of services was collected from BOP from the Central Bank of Nepal. For the import and export of goods, a CIF/FOB adjustment was performed. And change in stocks was independently estimated.

While compiling SUTs by using these sources, there were some data gaps even if most of the surveys were carried out during the said reference year. To overcome such discrepancies, small-scale studies were also conducted during the compilation period.

In some cases, best practices of the other economies were also observed to find the best solution to fill the data gaps.

2. The 2010–2011 Supply and Use Table at Current Price

a. General Description

The second attempt to publish the SUTs in Nepal was in 2016 for the year 2010–2011. This second series of the SUTs benefitted from and incorporated the various compiling experiences from the first SUTs. But due to the lack of an annual SUT, the GDP approaches were not integrated with the SUTs. However, compiling SUTs is supposed to be done regularly from this event. Hence, these SUTs are important in the history of NA in Nepal. In addition, the following were the main objectives of the 2010–2011 SUTs:

- to provide an exhaustive picture of the supply and use mechanics;
- to provide industry-wise supply and use in the economy;
- to expand the 1993 SNA accounting structure;
- to examine the current estimates by a detailed supply and use mechanism;
- to identify data lacks and assess data needs; and
- to develop the human resources.

Since there were several surveys in the years before and after 2010–2011 that meets the need of SUTs, 2010–2011 was taken as the reference year for the second SUTs of Nepal. Some major censuses and surveys carried out at this time: the population census in 2011, and the NLSS in 2010–2011, the Nepal Sample Census of Agriculture (NSCA) in 2011. More than 30 surveys and censuses were carried out around the said reference year, making 2010–2011 a suitable reference year for the second SUTs in Nepal. (The Distributive Trade Survey was done in 2008, close enough to the reference year.)

b. Breakdown of Industries and Products

Based on ADB's recommendation, Nepal produced the 81 x 60 SUTs following the 1993 SNA, ISIC Revision 4.0 for industrial classification, and CPC Version 2.0 for products. According to this system, all industries were broadly classified into 21 industries. Only two-digit classified industries were taken for the industry side. In some cases, some industries classified by two digits were also merged to the single industry class as their nature of productivity is similar, and based on the available data. For the CPC, the three-digit classification was used for agriculture products, while the two-digit classification was used for all other products. Hence, the final 2010–2011 SUT used the 81 x 60 matrix.

All outputs were measured in basic price, and the import of goods and services was measured using CIF/FOB adjustment. Domestic output and imports together produced total supply at basic price. Then by incorporating the trade and transport margin with net taxes on products, supply was converted to purchasers' prices. Similarly, IC, final consumption expenditure, gross capital formation, and exports were measured in purchasers' prices.

3. Data Sources and Methods

a. Supply Side

Domestic Production data sources were varied—from administrative records to enterprise financial statements. Beside these secondary sources, results of the benchmark surveys were used. Major source of the manufacturing sector were the CME 2006–2007 and 2011–2012; and the 2010–2011 NLSS. Nepal's first 2007–2008 Distributive Trade Survey (DTS) played an important role in the trade sector. Similarly, more than 30 censuses and surveys played vital roles in compiling the SUTs. Industries were reported in columns and products in rows. IC was measured in purchasers' prices. Published GO and IC were taken as the control total.

Imports of Goods and Services used basic source data from the Department of Customs. This department maintains the international trade statistics

in the Harmonized Standard (HS) classification scheme. The HS scheme was transformed into the CPC using the correspondence mechanism. The Matrix of Imports of Services is based on BOP statistics. The Central Bank of Nepal is a data source for the BOP. To adjust the CIF/FOB, information on the insurance and freight services incurred by nonresidents was taken from the BOP statement. Freight and insurance services were apportioned to imports.

Trade and Transport Margin was based on the DTS. This survey gives the detailed layout of the trade margins on dealer, wholesale, and retail levels for domestic production and imported goods. Similarly, the freight margin survey provided the freight rates for domestic products and imported goods.

Taxes Less Subsidies on Product consists of the VAT on domestic production, excise duty on some selected commodities and VAT on imports. Information on taxes is based on information provided by the Department of Inland Revenue and Department of Customs. However, due to the low disaggregation of VAT on domestic production, it was apportioned by total domestic production taking care of VAT-exempted commodities. In Nepal, the VAT rate is 13% and some commodities are VAT-exempted. Information on subsidies was based on government finance statistics.

CIF/FOB Adjustment on Imports was done separately for imports from India and other countries. The freight value up to Calcutta, India was 7.5%, and up to the border was 3% of the invoice. Similarly, the insurance value up to Calcutta as well as to the border were both 1%. These rates were from the Central Bank of Nepal.

b. Use Side

Intermediate Consumption data sources were the same as those used for domestic production. Besides these secondary sources, results of the benchmark surveys were also used. The 2006–2007 cost of production survey provided data for the agriculture sector. Censuses of manufacturing establishments, 2011–2012 and 2006–2007 were the major sources for the manufacturing sector. Nepal's first 2007–2008 DTS was used for the trade sector.

Household Consumption Expenditure was based on the 2010–2011 NLSS. However, data for purchases made directly by residents abroad was based on BOP statistics. In addition, the food balance sheet was also analyzed for the agriculture sector.

General Government Consumption Expenditure data was broken down into individual and collective government expenditure. These vectors were based on government finance statistics. Nepal's Government Finance Statistics were not maintained in the COFOG for the SUT base year. So, separate exercises were done to maintain the statistics in the COFOG.

Nonprofit Institution Serving Households data was based on information provided by the Survey on NGOs and international NGOs conducted in 2008–2009. Published consumption expenditure was taken as a control total.

Gross Fixed Capital Formation was estimated by the commodity flow method. The two basic mechanisms of supply, i.e., domestic supply (adjusted for exports) and imports were analyzed. Output of the construction was also adjusted.

Changes in Inventories. The CBS prepared the changes in inventories independently. In the annual estimate, it was residually estimated. It means inventories and other errors were included in this item. The new independent estimate was based on the information provided by government-owned trading corporations, other corporations, the NLSS, DTS, CME, SSME, and benchmark surveys.

Acquisitions Less Disposal of Valuables was based on the NLSS and international trade statistics.

Export of Goods and Services was prepared for both exports of goods and exports of services. The Department of Customs was the basic data source for the imports of goods. This department maintains the international trade statistics in the HS classification scheme. The HS scheme was transformed to the CPC using the correspondence mechanism. The Matrix of Exports of Services was based on BOP statistics. The data source for the BOP was the Central Bank of Nepal.

c. Uses of Value Added by Industry

Compensation was estimated for all the SUT-required industries. Data sources varied from government finance to administrative records to enterprise financial statements. Beside these secondary sources, the CBS was the result of benchmark surveys. Censuses of manufacturing establishments, 2011–2012 and 2006–2007 were the major sources of the manufacturing sector. In the subsectors of manufacturing, trade and business, compensation was apportioned by the output.

Taxes Less Subsidies on Products and Production incorporated net taxes on products and net taxes on the production process, i.e., other taxes on production. Taxes on product basically constituted VAT, excise duty, and import tax. The rate of VAT in Nepal was 13%. Government finance statistics was the major data source.

Consumption of Fixed Capital was not estimated for the SUT.

Operating Surplus/Mixed Income was residually estimated by deducting compensation and taxes less subsidies from GVA.

4. Balancing Process

The SUT was manually balanced. Output, IC, government final expenditure, and gross fixed capital formation were concomitant to the published ones. However, the great discrepancy between the published and residually estimated changes in inventories led to the need to rethink the level of published household consumption.

5. Main Results and Findings

The supply side component of SUTs showed the supply of goods and services by two supply mechanisms: domestic production and imports. As the production was valued at basic price, it was desirable to change this value into purchasers' prices. For this, supply components contained some valuation matrices: taxes and margin. Further, it was important to change the CIF imports to FOB imports. It would be better if output could be disaggregated

by market output, output for own final use, and other nonmarket output. But in this compilation, that disaggregation could not be made.

There were three important elements in the supply side:

- (i) Output matrix was established according to two parameters: rows for Product and columns for Industry.
- (ii) The imports matrix was made up of two segments: imports of goods and imports of services.
- (iii) Valuation matrices consisted of trade and transport margins and taxes less subsidies on products.

The supply table contained information by product on total domestic output at basic prices, imports at FOB, total supply at basic prices, and total supply at purchasers' prices.

The use table of the SUTs had two main objectives: (i) to understand the input structure of each industry, and (ii) to understand the use of available products and primary inputs. It consisted of matrices and vectors of IC, household consumption, government consumption, gross fixed capital formation, change in stocks, and exports of goods and services. Further, the information on the components of value added was also annexed to this side. In the use table, all transactions of products were reported at purchasers' prices.

The annexed component in the use side was the table of value added.

a. Supply Side

The output matrix reflected main and secondary production activities of industries. Further, it also showed the structure of the economy. The total gross domestic output was Nepalese rupees (NRs) 2,052 billion at basic prices. The major industry was agriculture, which is 30.4% of total gross domestic

output, followed by manufacturing at 14.1% of total gross domestic output (Table 39). The wholesale and retail trade had 10.5% of total gross domestic output. Agriculture, manufacturing, and trade were the major industries in Nepal's economy.

Main productions were reported on the diagonal while the secondary activities were off-diagonal. Looking at the production vector of the agriculture industry, it was seen that production of cereals to live animals was a main product and other business services was secondary.

Table 39: Composition of Gross Output, 2011
(million Nepalese rupees)

SN	Industries	Output	Share (%)
1	Agriculture and Forestry	623,303	30.4
2	Fishing	5,466	0.3
3	Mining and Quarrying	8,751	0.4
4	Manufacturing	289,004	14.1
5	Electricity, Gas and Water	31,492	1.5
6	Construction	182,614	8.9
7	Wholesale and Retail Trade	214,907	10.5
8	Hotels and Restaurants	68,376	3.3
9	Transport, Storage, and Communications	182,706	8.9
10	Financial Intermediation	71,395	3.5
11	Real Estate, Renting and Business Activities	157,203	7.7
12	Public Administration and Defense	33,070	1.6
13	Education	92,741	4.5
14	Health and Social Work	24,727	1.2
15	Other Community, Social, and Personal Service Activities	66,473	3.2
Total Output at Basic Price		2,052,228	100.0

Source: Central Bureau of Statistics, Nepal.

Imports constituted 17% of total supply. Major imports were transportable goods (34.5%) such as products of wood, chemicals, rubber, plastic, glass, etc.; followed by metal products, machinery, and equipment (27.9%). Taxes on products were derived separately from imports, VAT, and excise. Manufacturing commodities contributed significantly to taxes. Domestic agriculture output was VAT-exempt; the tax figure shown in agricultural commodity in SUTs was from imports.

Trade margins earned by traders and the freight margin by freight service providers were estimated for each product. Traders had significant margins from agricultural products. Almost 45.6% of margins originated from agricultural products.

b. Use Side

The use side of the SUTs is important for the analysis of input structure. Like the supply table, main and secondary products do not matter on the use side. Manufacturing industry shared the highest proportion (27%) of IC, followed by the agriculture industry, with almost 19% of total IC. Manufacturing, agriculture, construction, and hotel industries were major industries using a variety of commodities as IC. However, it is better to analyze the cost structure by commodities. Manufacturing, agriculture products, and refined petroleum were the major commodities used in IC.

The lowest IC output ratio was in the trade and agriculture sectors, whereas the highest ratio was in the manufacturing and hotel sectors.

Secondary sectors including manufacturing, construction, electricity, and gas and water had the highest share in IC, at 42%. Tertiary or service sectors also consume 39% of intermediate inputs (Table 40).

Table 40: Composition of Intermediate Inputs, 2011 (million Nepalese rupees)

SN	Industries	Value	Share (%)
1	Primary sectors	150,619	19.0
2	Secondary sectors	319,016	42.0
3	Tertiary sectors	292,450	39.0
Total Intermediate Inputs at Purchasers' Price		2,052,228	100.0

Source: Central Bureau of Statistics, Nepal.

IC, final consumption, capital formation, and exports were the use components of the economy. Out of total use, the highest share was for final consumption expenditure (53.6%), followed by intermediate use (29%). Exports were only 4.4% and total capital formation was 12.8% of total use. Household consumption expenditure had the highest share (86.7%) in final consumption expenditure, followed by general government consumption (11.7%). Similarly, fixed capital formation had the highest share of total capital formation. Changes in inventories had 13.2% of total capital formation, while acquisition of valuables had no share. Likewise, the share of export of goods (54.1%) was more than export of services (45.8%) out of total export.

6. Meeting the Challenges

a. Implementation

Nepal had limited NA estimation, only for production-dominant current accounts. However, there were some macroeconomic estimates from the expenditure and income approaches. Similarly, Nepal prepared the first SUT of the year 2004–2005 that provides additional synergy to realize the need of various accounts and continuation of the annual SUT. Planners and policy makers seek disaggregated level economic indicators to make policy. Besides, support from the international community also played a vital role to implement the SUTs compilation project. Thus, there is high-level government support for this project and it is the one of the CBS' priority projects.

b. Data Limitation

Nepal learned a lot from the first SUTs. So several surveys and studies were carried out to provide the required data for the 2010–2011 SUT. Large-scale activities such as the population census, census of manufacturing establishments, and national sample census of agriculture also provided the required data. But there were still some data limitations during the SUTs compilation. The major data limitations and mitigations are summarized below.

Breakdown of Output and Intermediate Consumption. The fundamental limitation in breakdown of output and IC was that the coding of survey data was not compatible with the CPC Version 2.0. Thus, a large number of other items was a burden to reallocate to the respective products. In the government sector's output and IC, the item code was also not compatible with the CPC Version 2.0. For the livestock and forestry sector, there were no recent surveys. All limitations were resolved by mitigation measures such as recoding, applying expert views, conducting small studies, and applying ratios from other or old sources.

Household Final Consumption Expenditure.

There was no alternative source for the NLSS 2010–2011 to estimate the HFCE. As mentioned earlier, data from the NLSS was also coded

incompatibly with CPC Version 2.0. Thus, information from the NLSS could not be directly used in the SUTs. Manual coding was done to disaggregate according to the need of the SUTs. Along with this, output from different surveys, censuses results, and administrative data from the supply side, such as the NLSS figures, were used to verify the use side.

Fixed Capital Formation and Changes in Inventories.

Fixed capital formation was estimated using the commodity flow method. The output of the construction sector was the major data source for GFCF. The main problem during compilation was distinguishing the imported commodities (machinery and spare parts) as either used as IC, machinery, or household final consumption. To mitigate these deficiencies, household consumption data from the NLSS was used to verify final household consumption. By observing the nature of goods, experts determined whether the goods were for IC, capital formation, or consumption.

The NLSS provided the change in inventory data for the agriculture sector and the census on manufacturing establishments provided the change in inventory for the manufacturing sector. For other sectors, reliable data sources were lacking. By applying the agriculture and manufacturing sector scenarios, adjustments were done for other sectors as well.

Trade and Transport Margins. There was no data limitation for the trade sector but some problems arose for transport margins. The freight rate was known but the total distance was unknown. To solve this problem, two assumptions were applied. First, for imported goods' aggregate distance from the capital city, Kathmandu, to the midport point, Birjung, was assumed and freight margins were computed accordingly. Second, for domestic goods, manual adjustment was applied by studying the production point and destination of use point. This was a difficult though.

Taxes and Subsidies. There was no COFOG classification for the government expenditure in 2010–2011. Thus, expenditure was converted to the COFOG classification in the SUTs year and thus, the figures in the SUTs varied with the published figures. The next limitation on taxes was the CPC tax that was not available for the domestic tax. The VAT rate was applied to the total output and manual adjustment was done for some commodities to compute tax. Industry subsidies were also not available. By using the COFOG classification and budget allocation of government, subsidies were allocated.

Informal Economy. Informal accounts were compiled based on the NLSS and Labor Force Survey. From these surveys, sectors not registered and without hired employees were supposed to be part of the informal sector. Others in the informal sector were considered part of the formal sector due to the lack of available data. It was believed that the NLSS results for the informal sector estimation might be deviated due to the inadequate sample size for such a rare occurrence.

c. Resource Constraints

The Government of Nepal ensured the basic resources. Nepal missed participating in the SUTs orientation seminar due to the big earthquake in 2015. The team requested that an international consultant travel to Nepal to train them, but this did not happen. The second limitation for the resource sector was a lack of human resources. The technical working group had only five officials that completed the entire compilation project with difficulty because they were so few for such a big job.

7. The Way Forward

Having completed the second project on SUTs, the CBS announced its strategic plan for the NA to continue the annual compilation of SUTs. To achieve this, the CBS proposes to conduct some surveys and studies in the future. For example, the

National Economic Census is planned for 2018. After the economic census and regular SUTs, the CBS will construct the IOT. In addition, the team's technical competency will be enhanced with the support of international institutions starting this year. These jobs will learn the various approaches of GDP compilation as well as the 2008 SNA implementation. The immediate need of NA in Nepal is benchmarking and rebasing. The CBS plans to rebase its NA statistics in the near future and do quarterly estimates regularly too. Another priority project of the CBS is the survey on capital formation, to produce the accumulation account. The cost of production survey on the agriculture sector is planned for next year. Developing the IOT, the social accounting matrix, and accumulation account are future goals of Nepal's NA.

To address the current resource gap, the CBS developed an intersector coordination committee and coordinates with the international community. Restructuring the NA section is urgent, so the CBS has been conducting organization and management surveys, and other measures to strengthen the section.

P. Pakistan

The history of SUTs in Pakistan goes back to 1984–1985 when SUTs were prepared with the assistance of Dutch experts. With the departure of the Dutch experts, the Pakistan Bureau of Statistics (PBS) could not continue this important activity. Project RCDTA 8838, initiated by ADB enabled the PBS to initiate the important task of compilation of SUTs for 2010–2011. This project enabled the staff of the National Accounts Wing to have a better understanding of SUT compilation procedures although detailed data sets were not available for 2010–2011. The results reflect that 89% of total supply came from domestic sources while share of imports was only 9%, indicating that Pakistan's overall domestic output largely came from industrial goods and services. IC (42%), household expenditure (39%), capital formation (7%), and exports (7%) combined accounted for the largest use of total supply. Government consumptions were 5%, of which 30% was on individual expenditure on health and education, and 70% on collective services.

8. Appendix

Table 41: Comparison of Level of Supply and Use Tables with Published Estimates
(million Nepalese rupees)

Description	2005 ^a			2011 ^a		
	Supply and Use Tables	Published National Accounts	Difference (%)	Supply and Use Tables	Published National Accounts	Difference (%)
Output	914,090	914,088	-	2,052,228	2,052,228	-
Imports of Goods	156,908	145,718	7.7	393,631	388,371	1.4
Imports of Services	28,742	28,036	2.5	61,687	61,687	-
Intermediate Consumption	347,507	347,509	-	762,085	762,086	-
Household Consumption	513,213	459,530	11.7	1,217,418	1,022,126	19.1
Government Consumption	52,453	52,453	-	165,126	130,917	26.1
Nonprofit Institution Serving Households Consumption	9,319	9,319	-	21,604	22,987	-6.0
Gross Fixed Capital Formation	117,540	117,539	-	292,731	292,730	-
Changes in Stocks	11,266	38,368	-70.6	44,850	226,538	-80.2
Exports of Goods	59,956	59,956	-	62,566	68,702	-8.9
Exports of Services	18,211	26,002	-30.0	53,013	53,013	-

^a For the fiscal year ending 15 July.
Source: Central Bureau of Statistics, Nepal.

1. Current System of National Accounts

a. Recent National Accounts

GDP in Pakistan was estimated as per guidelines provided by the SNA 2008. For GDP estimation by activities (current and constant prices), the production approach was applied. For some activities, especially for nonmarket activities, output was measured as the sum of primary incomes (GVA) and IC. This is commonly also subsumed under the “income approach” though for parts of GDP only. The expenditure approach was rudimentary as only some of the summands (collective consumption, capital formation, and export minus imports) were calculated independently while the biggest summand (private consumption) was calculated as residual vis-a-vis the GDP measured through the production approach.

b. Sector Estimates of GDP

Note that the compilation of GVA (output minus IC) practically used a more detailed economic classification called the Pakistan Standard Industrial Classification (PSIC 2010), derived from the respective ISIC. GDP was computed by a combination of production, income, and expenditure methods. The production method was applied to compute value added in agriculture, mining and quarrying, manufacturing, electricity and gas distribution, transport, storage and communication, wholesale and retail trade, finance and insurance, and ownership of dwellings; whereas the income method was used to work out income accruing from general government and services sectors. The expenditure method was used to estimate value added in construction based on gross fixed capital formation (GFCF) made and its value added coefficient.

c. Expenditure on Gross Domestic Product

Final consumption expenditure of household and NPISH, collective consumption expenditure of the general government, GFCF, changes in inventories and acquisition and disposal of valuables, exports and imports were the components of this approach. General government consumption expenditures were well documented and available from the budget

documents. GFCF was calculated in full detail. The estimation was according to public and private sectors. The other dimension of estimation was by industry and by type of assets. Export and import data of merchandise was available from the external trade section of the PBS. Data on export and import of services and net factor income from rest of the world was available from the BOP statistics of the State Bank of Pakistan (SBP). Ratios were applied for the estimation of changes in inventories. Final household and NPISH consumption expenditure were calculated as residual.¹⁹

d. Existing Supply and Use Table

The history of SUT in Pakistan goes back to 1984–1985 when the first SUTs were prepared as a pilot activity with the assistance of Dutch experts under the Improvement of National Accounts Statistics (INAS) project. The second SUTs were developed for the year 1989–1990, and the third for the year 1990–1991. With the departure of the Dutch experts, and shifting of priorities to other activities, the PBOS (then the Federal Bureau of Statistics) could not continue this important activity.

2. The 2010–2011 Supply and Use Table

In December 2014, ADB approved a project RCDTA 8838 for the participating countries with the objective to help the regional countries to develop their SUT based on concepts of the 2008 SNA. Pakistan was one of the project’s 19 participating countries. After the inception meeting in December 2014, a workshop of resource persons on compilation of SUTs was held in Thailand in June 2015. During the workshop, the participating countries were informed of the SUT framework and importance of the 2008 SNA, CPC Version 2, and ISIC Revision 4. This project enabled the PBS to initiate the important task of compiling the SUT for 2010–2011. The year 2010–2011 was selected for two reasons. Firstly, the project RCDTA 8838 required the participating countries to develop SUTs for the year 2010–2011 onward. This RCDTA 8838 was the extension of RETA 6483. The RETA

¹⁹ Pakistan Bureau of Statistics. 2013. *National Accounts of Pakistan Change of Base from 1999–2000 to 2005–2006.*, Islamabad. April 2013. pp. 5–7.

6483 project enabled the participating countries to develop SUTs for the year 2005–2006. Pakistan was not part of that project. Secondly, the PBS already planned to develop SUTs for 2005–2006 and 2015–2016 since both were base years for the NA base. This project enabled the staff of the National Accounts Wing to have a better understanding of SUT compilation procedures. In this context, the PBS decided to become part of this project even though detailed data sets were not available for 2010–2011.

a. Size of Supply and Use Table

The template provided by ADB had the flexibility of arranging the data of the CPC and ISIC levels at various levels. Products could be entered from the one-digit level to the five-digit level. Similarly, industries could be entered from the one-digit level to the four-digit level. As a first step, the available data was incorporated in the template at the five-digit level, however, in many cases, because detailed data was not available, data had to be adjusted to higher levels. Keeping in mind the availability of data, it was decided to prepare a SUT of size 54 x 42, i.e., 54 products and 42 industries. Products vary from two-digit to five-digit depending upon the data availability.

Three concepts of prices prevail in an economy: basic prices, producers' prices, and purchasers' prices. The supply side of the SUT, its output, is compiled at basic prices, then converted to purchasers' prices by including trade and transport margins, and taxes less subsidies on products. CIF/FOB adjustment of imports was also done in the supply side of the SUT.

The PSIC 2010 is the reference national classification of productive activities. It is parallel to the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4. All developments of ISIC Revision 4 have been incorporated in it. It is a much-improved tool for classification and international data comparison.²⁰ The structure of the 2010–2011 SUT was based on the PSIC 2010 Revision 4. The Central Product

Classification (CPC) Version 2 is the classification of goods and services used for products and services.

b. Breakdown of Industries and Products

The NA of Pakistan were compiled on ISIC Revision 4 and CPC Version 2, so the classification of industries and products was relatively easy. To identify manufacturing industries, the four-digit classifications of industries from the 2005–2006 Consumer Monthly Index (CMI) was used. However, the 2005–2006 CMI was based on ISIC Revision 3.1 while the SUT was compiled using ISIC Revision 4. Thus, bridging between ISIC Revision 3.1 and ISIC Revision 4 was done to properly code the industries. Similarly, to identify the products, bridging was between CPC Version 1.2 and CPC Version 2. For the government final consumption expenditure, bridging was between COFOG and CPC Version 2. And for imports and exports of goods and services, bridging was between the HS code and CPC Version 2.

3. Main Results and Findings

a. Supply Side

The SUT for Pakistan showed that domestic production for FY 2010–2011 was 89% of total supply at purchasers' prices; imports, 9%; and taxes less subsidies on product, just over 2%. Within domestic production at basic prices, industrial goods accounted for 40%; services, 41%; and AFF products, 19%. These ratios indicate that the overall domestic output of Pakistan largely came from industrial goods and services.

Of the 19% share of AFF products in the domestic output, agriculture accounted for 18.5%; forestry and lodging products, 0.4%; and fishing, 0.1%. In industry, electricity, gas, and water (8%) and mining (1.8%) had smaller shares, while manufacturing goods (27%) and construction (2.8%) had higher shares. In manufacturing, clothing and leather products (7.8%) and food products (7.4%) were the main activities. In services in Pakistan, the main services products were trade (12.4%), public administration (4%), and other services (24.6%).

²⁰ Pakistan Standard Industrial Classification (All Economic Activities) PSIC Revision 4 (2010). Government of Pakistan Statistics Division Federal Bureau of Statistics.

b. Use Side

Intermediate consumption (IC) (42%), household expenditure (39%), capital formation (7%), and exports (7%) combined accounted for the largest use of total supply. Government consumptions was 5%, of which 30% was on individual expenditure on health and education, and 70% on collective services.

The products of AFF were mostly for inter-industry use (67%) as compared to final use (33%), comprising household expenditure (30%), exports (2%), and capital formation (1%). The inter-industry use of these products was mainly in food processing, and accommodation, hotel and restaurant industries; besides its use as input in the form of seeds. The products of industrial activities were relatively less used as IC (41%), in comparison to their final use (59%), exports (10%), household consumption (37%), and capital formation (13%). The products of services were also used less for IC (26%), as compared to final use (74%), comprising mainly household consumption (51%), government consumption (17%), and exports (5%).

For GDP, the principal final expenditures were HFCE (84%), and capital formation (15%). The government final consumption expenditure (GFCE) accounted for 10%, with net exports share in GDP being -5%. Exports had a share of 14.5% in GDP while imports' share was 19.6% of GDP, indicating a trade deficit of 5%.

HFCE in Pakistan showed that households spend somewhat equally on AFF products (16%), industries (49%), and services (35%). However, if food products and beverages from manufacturing were included, the share of food-related items in the household consumption would go up to almost 35%.

Exports consisted predominantly of industry products (75%), followed by services (19%). Clothing products and yarn were Pakistan's principal exports followed by grain mill products, including husked rice. In AFF products, which constitute about 6% of exports, the major contributors were wheat, cotton, and fruits. As in the case of exports, imports of Pakistan showed a similar trend: a predominant share of industry products (86%), AFF products (7%), and services (6%). Crude petroleum

was the principal import in mining. Cotton, oil seeds, and spices were the principal imports in AFF; while metal products, machinery, and equipment, petroleum products, chemical products and food products were the main imports in industries, and in services, which were mainly related to community social and personal services.

c. Value Added

The shares of the three broad industry groups were 26% of GVA at basic prices for AFF, 21% for industry, and 53% for services. This was a somewhat different picture than the output profile of products, mainly due to higher IC in industrial activities as compared to other activities.

The value added in the activities of AFF amounted to 72% of output at basic prices; in services, 67%; and in industry, 28%, with an overall value added ratio of 53%. This implies a much lower IC level of 47% of output in Pakistan. The IC of AFF was about 28% of output, and that of services is 33%.

The ratio of COE to GVA was 36% in AFF, 32% in industries, and 23% in services, with an overall ratio of 28%. These ratios were on the lower side, and indicated that agriculture and services activities were performed largely by the self-employed in the informal sector.

4. Meeting the Challenges

a. Implementation

The history of compilation of SUTs in Pakistan goes back to the early 1980s and 1990s, but the compilation work was discontinued for several reason. However, the need and importance of SUTs remained a point of discussion in the country. With ADB's introduction of the RCDTA project, the PBS management saw an opportunity to restart this long delayed work. Thanks to the vision of higher management and the young team of professionals in the National Accounts Wing, the compilation of the 2010–2011 SUT became possible. The PBS management already prioritized the compilation of SUTs as it plans to prepare the SUTs for 2005–2006 and 2015–2016, which are the base years for the NA.

b. Data Limitations

The foremost data limitation was that the broader set of census or surveys was not available for 2010–2011 and the team had to rely mostly on the censuses, surveys, and studies conducted in the previous years, particularly during 2005–2006, the base year for NA. The team faced problems while compiling the use side of industries in the bifurcation of inventories as these were compiled based on fixed ratios. On the supply side, it was not possible to separate the trade and transport margin due to data constraints. Users of the 2010–2011 SUT must keep these limitations in mind when making inferences. The informal economy was captured in bits and pieces in different industries, but a large part of the informal economy remained out of the compilation of NA due to the lack of reliable and continuous data.

c. Resource Constraints

The National Accounts Wing of PBS had a human resource constraint because the staff was limited and was involved in many other activities.

5. Lessons Learned

During the project, the following lessons were learned:

- Frame the questionnaires for the censuses, surveys, and studies with the data requirements of the SUTs in mind.
- Ensure the collection of information based on the PSIC and CPC classifications in all censuses, surveys, and studies.
- Certain weak areas were identified during the project, such as:
 - Lack of an input–output structure of industries, particularly manufacturing, mining, construction, etc.;

- The trade and transport margin should be compiled separately; and
 - Inventories should be reassessed on the bases of certain surveys and/or studies.
- Effort should be made to compile the share of new emerging industries in the economy, such as e-commerce and e-trade.

6. The Way Forward

This was the first SUT compiled by the NA staff in the last 20 years. Also, although detailed data sets were not available, the PBS management decided to compile the SUT for 2010–2011 through the ADB project so the staff would learn concepts and with the experience gained, would be able to compile more detailed SUTs for 2005–2006 and 2015–2016. The PBS is planning to prepare the SUT for 2005–2006 as the benchmark and compile a time series from 2005–2006 to 2010–2011 as part of the next project. It is hoped that after completing the next phase, the PBS will be able to make the annual SUT an integral part of regular annual NA.

Q. Sri Lanka

The Department of Census and Statistics (DCS) is the national statistics office of Sri Lanka under the Ministry of National Policies and Economic Affairs, responsible for collection, compilation, and dissemination of all relevant statistics timely and accurately for making informed decisions. Statistics compiled by the department include demographic, socioeconomic, and environmental conditions of the country using data collected through censuses, surveys, and administrative data collected by other departments and ministries. The National Accounts (NA) division of the DCS is responsible for compiling quarterly and annual NA estimates including GDP and other macroeconomic indicators, as well as SUTs and symmetric input and output tables (SIOTs) for the country.

1. The Current System of National Accounts

a. Recent National Accounts

In compiling NA, Sri Lanka followed a combination of the 1968 SNA- and 1993 SNA until year 2015, using 2002 as the base year. In 2011, with the assistance of ADB and the IMF, a project to rebase NA was implemented.

b. Scope and Coverage

Sri Lanka's economy was subjected to many changes from 2002 to 2010. These changes included emerging new economic activities, closing of unproductive economic activities, changes in consumption patterns of the society, etc. The end of internal conflicts in 2009 after 30 long years, the impact of the tsunami in 2004 and other environmental hazards that occurred during this period also contributed to these changes. Therefore, the scope of rebasing was to capture the real economic scenario of the country in the NA estimates to make the right decision for Sri Lanka's economy. Expansion of the production boundary covering the whole country with novel economical activities, adoption of the 2008 SNA, introducing new versions of other classifications, and inclusion of more accurate data sets enhanced the compilation of NA estimates for Sri Lanka.

c. Base Year

An in-depth study considering some macroeconomic indicators, such as money supply, interest rates, and inflation rates was done before selecting the new base year. The new trends in socioeconomic parameters and recommendations in the 2008 SNA were also well thought-out in selecting the new base year. By considering all these factors, the new base year selected was 2010, the best fit for the volume measures in NA estimates in the following years.

d. Level of Detail

The project to rebase NA was done in 2011, with a target of base year revision from 2002 to 2010, and

implementing recommendations of the 2008 SNA to the national system. In this process, the following improvements were made:

- Base year change;
- Implementation of United Nations System of National Accounts 2008 (2008 SNA);
- Expansion of production boundary;
- Accomplishment of new versions of international classifications (ISIC Revision 4, CPC Version 2, COICOP, COFOG, etc.);
- Application of sector classification;
- Inclusion of economic activities engaged by households;
- Enclosure of more accurate data sources;
- Preparation of SUT; and
- Preparation of IOT.

This rebasing process was completed in 2015. Consequently, the DCS of Sri Lanka issued NA estimates at the 2010 base year from the first quarter of 2015.

e. Classifications Used

Internationally recommended classifications were used in the compilation and data dissemination processes of the new system, as follows:

- ISIC Revision 4: This was localized as the Sri Lanka Standard Industrial Classification (SLSIC) which was more customized to Sri Lanka's economic activities,
- CPC,
- COICOP,
- COFOG, and
- Sector Classification.

2. The Supply and Use Table 2011 at Current Price

a. General Description

The new base year for the NAS of Sri Lanka was 2010 as per request of ADB to prepare the SUT for the latest year after 2010, with an objective of setting a regional SUT for Asia. The DCS decided to construct a SUT for 2011 by using data from various sources and the ratios calculated for the 2010 and 2006 SUTs.

Table 42: Description of Supply and Use Table, 2011

Supply and Use Table Reference Year	2011
Technical Assistance	Asian Development Bank: RCDTA 8838
Size of the matrix	273 product and 176 industry
International Standard used	2008 System of National Accounts
International Classifications	
Economic activities (industries)	International Standard Industry Classification, Rev. 4
Products (goods and services)	Central Product Classification (CPC), Rev. 2
Household Final Consumption Expenditure	Classification of Individual Consumption by Purpose and CPC
Government Final Consumption Expenditure	Classification of the Functions of Government and CPC
International Trade Statistics	Harmonized System and CPC
Valuations	
Output	Basic Price
Intermediate Consumption	Purchasers' Price
Gross Value Added	Basic Price
Gross Domestic Product	Market Price

CPC = central product classification, ISIC = international standard of industries classification.

Source: Department of Census and Statistics, Sri Lanka.

b. Breakdown of Industries and Products

The 2011 SUT was prepared according to recommendations of the 2008 SNA. The ISIC Revision 4 was used to classify the industries and CPC Revision 2 was used to classify products in the SUT inevitably matched with ADB's requirements given in correspondence tables. Consequently, bridging was needed.

3. Main Results and Findings

The GDP estimated by three approaches is presented in Tables 6, 7, 8 according to the values obtained

from the 2011 balanced SUT. These aggregates are considered control totals because these numbers were already published in annual estimates.

Table 43: Gross Domestic Product by Production, Expenditure, and Income Approaches, 2011
(Sri Lanka rupees)

National Accounts Items	Value	Share (%)
Production Approach		
Agriculture, Forestry and Fishing	637,567	8.8
Mining	153,772	2.1
Manufacturing	1,330,067	18.4
Electricity, Gas and water	85,484	1.2
Construction	451,714	6.3
Wholesale and Retail sale, Transportation, Accommodation	1,746,884	24.2
Information and Communication	37,819	0.5
Financial and Insurance	283,544	3.9
Real Estate	350,090	4.8
Professional and Scientific Services	135,904	1.9
Public Admin and Defense,	740,119	10.3
Other Services	686,140	9.5
Taxes Less Subsidies on Products	580,002	8.0
Gross Domestic Product	7,219,106	100.0
Expenditure Approach		
Household Consumption	5,144,879	71.3
Government Consumption	617,918	8.6
Gross fixed capital Formation	1,896,225	26.3
Valuables and Changes in inventories	512,349	7.1
Exports of Goods and Services	1,508,565	20.9
Less: Imports of Goods and Services	-2,460,830	-34.1
Gross Domestic Product	7,219,106	100.0
Income Approach		
Compensation of Employees	1,884,086	26.1
Taxes less Subsidies	604,731	8.4
Gross Operating Surplus	4,730,273	65.5
Gross Domestic Product	7,219,106	100.0

Source: Department of Census and Statistics, Sri Lanka.

In the production approach, the share of value added generation of total manufacturing industries was 18.4% of the total GDP. The share of household final consumption expenditure was 71.3% of the total expenditure. The share of income generation in gross operative surplus was 65.5%, and COE was 26.1% to total income generation for 2011.

From the total supply in 2011, 78.9% was generated by total domestic production of the country. Out of the total usage, household spent 35.7% for their final consumption needs. The economic activities of the country used 32.8% as IC.

4. Meeting the Challenges

As the preparation of the SUT is a tedious task in National Accounting, the DCS also met challenges in this process. The DCS took the necessary actions to resolve the issues so it could accomplish the task. The Annual Survey of Industries (ASI) was the major data source for IC of industrial activities. Several other administrative data, the results of ad hoc studies by the DCS, and the findings of research studies were used to derive the IC matrix for some industries.

Although, the SUTs and SIOTs are widely used for policy making in the world, Sri Lanka still uses it only partially due to the limited knowledge on the proper interpretation and analysis of the numbers in the SUT and the SIOT.

a. Data Limitations

Breakdown of Output and Intermediate Consumption. Currently, the ASI covers only the activities of manufacturing, mining and quarrying, electricity and gas, and sewerage and water. The unavailability of a trade and transport survey was a major data issue, for example, in the ASI, the data related to IC categories at disaggregated levels was not collected. Therefore, even for manufacturing activities, the breakdown of IC was not satisfactory. Hence the DCS plans to conduct a new survey on trade and services with the expansion of ASI from 2017. It is hoped that with this, the preceding problems will be solved.

Household Final Consumption Expenditure (HFCE). The DCS conducts the Household Income and Expenditure Survey once every 3 years. Therefore, for the years between, the benchmark ratios were applied to derive the HFCE.

Fixed Capital Formation and Changes in Inventories. The current lack of censuses or surveys that cover all economic activities was a major issue in estimating Gross Fixed Capital Formation and Changes in Inventories. The DCS conducted an Economic Census in the year 2013–2014 covering all economic activities, and these will be available in 2017.

Trade and Transport Margins. Due to unavailability of trade and transport survey, trade and transport margins could not be calculated directly for relevant products. Therefore, producers and purchaser prices and the results of related studies were used to calculate the required trade and transport margins.

Allocation of FISIM. Deposits data was not available by industries, hence, allocation of FISIM throughout industries and final uses was done by only using the loan distribution of banks and other finance companies.

Informal Economic Activities. Household economic activities represent a large part of Sri Lanka's informal economy. In the previous system, the household sector was not fully captured in the GDP. The labor input method (LIM) was used to calculate the contribution of households under the new system. Own consumption data of agricultural crops in households was not available through any source of data.

Improvements of the Resources. The staff of the National Accounts Division of the DCS needs to be increased, and a separate team must be organized to prepare the SUT and SIOT in this division as it is a time-consuming. The facilities and equipment of the DCS' National Accounts Division, such as personal computers (laptops and desktops with larger screens and external hard disks) need to be improved to increase the efficiency of the officers.

5. The Way Forward

Compiling the SUT and SIOT is not a regular activity in Sri Lanka's system of NA. The 2010 SUT can be considered the first benchmark SUT for Sri Lanka's economy. According to the SNA recommendations, the base year of Sri Lanka's NA system will be changed every 5 years, and the benchmark SUT will be prepared for each base year. As the SUT is a solid tool to cross-check estimates of the three approaches of compiling NA estimates, it can be used to identify data gaps and limitations of the source data. Preparing the benchmark SUT for the

base year before publishing a new series of GDP will be helpful to improve the accuracy of the NA estimates. For the years between, the SUT can be prepared using benchmark coefficients, final demand, and value added estimates. Preparing the SUT for the years between is also necessary.

A revision policy was introduced in the new National Accounting Framework with the new (2010) base year. This will enable the revision of the estimates with the availability of final source data. In the future, it is expected that the final revisions be done with the estimates of benchmark or nonbenchmark SUTs. Then the gross value of output (GVO) and the IC may not be considered as the control totals and, therefore, the accuracy of the GDP estimates will be improved by eliminating data gaps and the limitations of the source data which are identified using the SUTs.

R. Taipei, China

The Department of Statistics (DS) with seven sections in the Directorate General of Budget, Accounting and Statistics (DGBAS) of Executive Yuan is in charge of statistical regulations and standards, statistical administration and management, social indicators statistics, price statistics, national accounts (NA) statistics, economic forecast, input-output (IO) statistics, and statistical information service. Two sections are in charge of compiling the NA and IO: the NA section with 19 members, responsible for compiling the GDP by expenditure; and the industry IO accounts section with 18 members, responsible for estimating GDP from the production and income sides and compiling the IOTs as well. The industry IO section participated in the RCDTA 8838 project and SUT compilation.

1. The Current System of National Accounts

a. Recent National Accounts

The quarterly GDP was estimated using the production and expenditure approaches; while

the annual GDP was estimated using the income approach, as recommended by the 2008 SNA. The breakdown of economic activities was categorized per the Standard Industrial Classification System of the People's Republic of China (SICS) Revision 9 (2011), as adopted from the ISIC Revision 4, with 19 industries during quarterly release and 63 industries for annual GDP by the production and income approaches. The main data sources for benchmark GDP on production was the Industry and Service Census (ISC) conducted by the Department of Census, DGBAS.

The data for income approach was mainly sourced from the ISC, Earnings and Productivity Statistics, Turnover and Employee's Movement Survey, Yearly Report of Taipei, China's Agriculture, financial report of corporations, and administrative data for government services.

The unit of measure used was in millions of NT dollars (NT\$) on GDP at current prices and chained-dollars with 2011 as the reference year; but GDP on the income side was at current prices only. The schedule of publication of estimates of the NA was as follows:

- Advance estimates for the reference quarter are released 1 month after the end of the reference quarter.
- Preliminary estimates for the reference quarter and the revised estimates for the previous quarter are released 7 to 8 weeks after the end of the reference quarter.
- Annual revision: The revisions of the latest 2 years will be released in November.
- Quinquennial revision: Comprehensive revision is carried out every 5 years, including changing the reference-year of chained-dollars and retracing all the time series (the present reference year is 2011).

The released tables of NA compliance with the 2008 SNA recommendations are shown in Table 44.

Table 44: Minimum Requirement Data Set, 2008 System of National Accounts

Number in NAQ	Scope of Table	Annual	Quarterly
1.1	Expenditures of the GDP, Current Prices	✓	✓
1.2	Expenditures of the GDP, Chained dollars	✓	✓
2.1	Value added and GDP by Industry, Current Prices	✓	✓
2.2	Value added and GDP by Industry, Chained dollars	✓	✓
2.3	Value Added Components by Industry, Current Prices	✓	tT
1.3/4.1	Accounts for the Total Economy (Until net lending)	✓	...
4.2	Rest of the World Accounts (Until net lending)	✓	...

GDP= gross domestic product, NAQ = national accounts questionnaire.
Source: Department of Statistics, Taipei,China.

b. Existing Input-Output Tables

Taipei,China's IOTs has been compiled by many different agencies. The first IOT was released in 1960 developed by Professor Hsing, Mo-Huan for the 1954 IOT. The second IOT was the 1955 IOT, compiled by the Council of Agriculture, Executive Yuan. For 1961 to 1979, the IOTs on a commodity-by-commodity (C x C) basis were regularly produced every 2 or 3 years for benchmark years ending in 1 and 6 as well as nonbenchmark years ending with 4 and 9 by Ex-Council for Economic Planning and Development, Executive Yuan. Since 1981, the DS of DGBAS, Executive Yuan compiles the IOTs.

In 2009, the first commodity-by-industry (Cxl) IOT was published for the 2006 benchmark IO and completely integrated with the NA based on the 1993 SNA. At the same time, the DS started to compile the annual C x I based on the 2006 IOTs and stopped compiling the nonbenchmark CxC (years ending in 4 and 9).

In 2014, the integration of the 2011 benchmark IOT and NA were completed in compliance with the 2008 SNA. The 2011 benchmark IOT with 526 commodity items (five digits) by 166 commodity groups (three digits) and smaller size IOT with 166 x 166 and IOT with 52 x 52 were also released. For the C x I IOT, 52 commodities by 63 industries were released to be consistent with the activities of the NA.

In 2015, the updated annual C x I for 2012–2014 were produced and reconciled with the new GDP figures on the basis of the 2008 SNA. In November 2016, C x I was renewed for 2014, and the table was produced for 2015.

c. Supply and Use Tables

There was no SUT compiled for Taipei,China since there were no domestic output tables (make matrices) in the NA. The 2006 and 2011 SUTs were reclassified from the 2006 and 2011 C x I to meet the criteria under the RETA 6483 and RCDTA 8838. Since the benchmark IOTs were consistent with the NA, there was no difference between the SUT and NA (Table 45).

Table 45: Comparison of Supply and Use Table and Published Estimates
(million NT dollars)

Production Approach		
Industry	Supply and Use Tables	Published National Accounts
Agriculture, Forestry and Fishing	245,783	245,783
Mining and Quarrying	17,174	17,174
Manufacturing	4,102,225	4,102,225
Electricity, Gas, Steam and Air Conditioning Supply	126,013	126,013
Water Supply, Sewerage, Waste Management and Remediation Activities	96,943	96,943
Construction	383,053	383,053
Wholesale and Retail Trade	2,443,613	2,443,613
Transportation and Storage	398,441	398,441
Accommodation and Food Service Activities	329,048	329,048
Information and Communication	461,781	461,781
Financial and Insurance Activities	915,039	915,039
Real Estate Activities	1,211,679	1,211,679
Professional, Scientific and Technical Activities	314,750	314,750
Administrative and Support Service Activities	204,890	204,890
Public Administration and Defence; Compulsory Social Security	1,054,319	1,054,319
Education	667,152	667,152
Human Health and Social Work Activities	410,855	410,855
Arts, Entertainment and Recreation	123,269	123,269
Other Service Activities	379,268	379,268
Gross Value-Added	13,885,295	13,885,295
Tax Less Subsidies on Products	426,905	426,905
Gross Domestic Product	14,312,200	14,312,200
Expenditure Approach		
Main Expenditure Items	Supply and Use Tables	Published National Accounts
Household Consumption Expenditure (include NPISH)	7,798,976	7,798,976
Government Consumption Expenditure	2,167,595	2,167,595
Gross Fixed Capital Formation	3,346,945	3,346,945
Changes in Inventories	35,921	35,921
Exports of Goods and Services	10,419,700	10,419,700
Less Imports of Goods and Services	9,456,937	9,456,937
Gross Domestic Product	14,312,200	14,312,200

continued on next page

Table 45 continued

Income Approach		
Value Added Components	Supply and Use Tables	Published National Accounts
Compensation	6,463,779	6,463,779
Taxes Less Subsidies on Production	348,208	348,208
Gross Operating Surplus	7,073,308	7,073,308
Gross Value-Added	13,885,295	13,885,295
Tax Less Subsidies on Products	426,905	426,905
Gross Domestic Product	14,312,200	14,312,200

NPISH = nonprofit institutions serving households.
Source: Department of Statistics, Taipei, China.

d. The 2011 Supply and Use Table at Current Price

The latest reference year for national accounts and IOTs is 2011. To meet the requirement of the SUT under the RETA 8838, a 166 x 166 CxI IOT was compiled but not published. Since the commodity sectors do not entirely follow the ISIC and CPC, the correspondence of sectoring of IOTs to the ISIC or CPC was very complex, hence, the three classifications had to be compared one by one. After comparing the industry classification for the IOT with ISIC Revision 4.0, and the commodity classification with CPC Version 2.0, these were aggregated into 51 commodities and 36 industries, to let the two-digit ISIC be classified into the same industry sector of the SUT, and the three-digit CPC be classified into the same commodity item of the SUT. The output of the SUT was valued at producers' prices, while the intermediate inputs and final demands of all sectors are valued at purchasers' prices, the same as the valuations of C x I.

2. Data Sources and Methods

a. Supply Side

Domestic Production by Industry was estimated for the benchmark year 2011, and mostly based on the ISC, except the industries or products not covered by the census. Gross output was measured at producers' prices for goods and services produced for sale on the market at economically significant prices.

Agriculture, Forestry, Fishing and Animal Husbandry data was obtained from the Yearly Report of Taipei, China's Agriculture and Taipei, China

Fisheries Yearbook which are conducted by the Council of Agriculture, Executive Yuan, and the Fisheries Agency. Information about the harvesting value of corps, number slaughtered and increase in population of livestock, and production value of fishery was used to measure the output. Using the administrative data, the subsidies of reforestation programs, and the final financial accounts of related agencies, the output of forest products was calculated to encompass products such as logs, firewood, bamboo, and reforestation.

Since by-products and subsidiary products were also part of industry's output, the value was measured using the related annual reports mentioned above or estimated as a certain proportion of the main product output.

Mining and Quarrying Sector estimate was based on the ISC, in addition to the ISC, data from the Annual Statistical Report of Minerals, Enterprise Annual Income Tax Return, and demand side's figures were also used estimate production of mining and quarrying.

Manufacturing Sector covered all production activities and processes which could be mechanical, chemical, or just using simple tools or machineries. The supporting services of manufacturing, such as repair and installation of machineries and equipment, were also included in this sector. Output of manufacturing was measured by multiplying average unit price with production quantity, and was coupled with changes in the value of work-in-process products. Goods and services produced by producers for their own IC were also included in the output and input of the manufacturing sector. The ISC was the main source of data for estimation, with the Annual Industrial Production Statistics (Ministry of Economic Affairs), annual financial report of corporations, and Enterprise Annual Income Tax Return as the supplemental data.

Electricity, Gas, and Water Sector consists of generating electric power and steam, providing gas, and the distribution activities to consumers. The water supply and remediation services sector covered the activities of clean water supply, waste collection, treatment, and disposal, material recovery

and remediation services. All the data for estimating output were derived from the ISC, Annual Industrial Production Statistics, and annual financial report of corporations.

Construction Sector. Regardless of whether the works were completed or in progress, the value of works put in place during the benchmark year was defined as the output of construction, excluding the value of land on which the building stands. New dwellings or extensions to dwellings and maintenance by households were from the Survey of Family Income and Expenditure, conducted by the Department of Local Statistics, DGBAS. The Government Final Accounting Reports were also part of data to estimate public construction.

Service Sectors outputs were based on its gross revenue, except for wholesale and retail trade where output was measured by trade margins (sales receipts minus the cost of goods sold). For nonmarket producers, such as the nonprofit institutions serving households (NPISHs) and public administration services, the output was based on their costs; output of the owner-occupied housing services was imputed by average dwelling house rents; for the insurance service, output of insurance was estimated as the sum of costs plus an allowance for “normal profit;” and reinsurance was treated as direct insurance in accordance with the 2008 SNA. All those service sectors might use different sources of data as well, such as the Street Vendors Survey conducted by the Department of Census, DGBAS, and governments’ final accounting reports, annual financial report of corporations, Enterprise Annual Income Tax Return from the Ministry of Finance (MOF), and administrative data about telecommunication, financial and insurance, human health, etc.

Imports of Goods data was from the customs statistics, published by the MOF, in accordance with the Harmonized Commodity Description and Coding System (HS). This was reclassified in the commodity sectors of IOT to estimate the import goods at CIF prices.

Imports of Services data sources were from the BOP compiled by the Central Bank, and from the external transactions account of the NA. Some

items’ values of import services were measured based on specific categories of BOP, such as transportation, travel, communication, construction, insurance, finance, computer, information, royalty, license, other business services, personal, cultural and recreational services, and government services. To avoid double-counting, the freight and insurance services provided by nonresidents were subtracted from the import of service, since these were included in the CIF import goods.

CIF/FOB Adjustment on Imports. Since the disaggregated figures of imports of goods, based on the customs statistics, were recorded at CIF, the freight and insurance service provided by nonresidents was subtracted from the import of services to avoid double-counting. However, there was no demonstration of CIF/FOB adjustment on imports in the SUT.

Trade and Transport Margin estimates were based on the commodity flow method. Trade margins were estimated from the ISC by computing the margin rates under different distribution channels and products, the distribution ratios of target consumers for products, and the ratios of purchase value of materials and supplies from a variety of sources. As for the transport margins, the information was mainly extracted from the Commodity Flow and Freight Rates Survey, published by the Ministry of Transportation and Communication. The transport margins were estimated from commodities’ average freights through different kinds of transportation.

Taxes Less Subsidies on Products were estimated in accordance with related tax statistics, compiled by the MOF.

b. Use Side

Intermediate Consumption by Industry included all the nondurable goods and services used in the process of production by industries within the benchmark year. The durable supplies, with low value and not capitalized, should also be treated as the input of the production. For the benchmark year, most data of IC is from the ISC, except the industries not covered by the census. For the industries not in the coverage of the economy census, the related data sources taken to

compute output were also used for estimating inputs of industries. Using the details of information from the data, raw materials, supplies inputs, and expenditures for all sectors were estimated to get the whole picture of production techniques.

In addition, parts of data about IC were from other sources. For agriculture activities, estimation could be derived from the Production Cost and Income of Farm Products survey, which was conducted by the Council of Agriculture Executive Yuan, and fishery economic surveys, done by the Fisheries Agency. As for the public administration sector, the Expenditure of Government Agencies Survey, which is investigated by DGBAS in the benchmark year, was regarded as an important source to measure the IC.

Import of goods statistics was also a useful source to estimate or recheck the value of IC for industries using many import products for the production activities, such as manufacturing, construction, electricity, and gas sectors. On reconciliation, the input structure was improved as the effect of supply–demand checking, and data consistency between sectors.

Household Consumption Expenditure was based on the data of the ISC, the survey of Family Income and Expenditure, as well as other related statistics data. Nonprofit institutions serving households were included in the structure of the consumption and classified in the commodity sector of other service activities. The value was estimated based on the specific survey on nonprofit organization.

Adjustment for purchases by residents and nonresidents in the household final consumption expenditure was made according to the Survey of Visitors Expenditure and Trends in Taipei, China, Survey of Travel by Republic of China Citizens, from the Tourism Bureau, the Ministry of Transportation and Communications, and BOP.

General Government Consumption Expenditure (Individual and Collective)

estimates were based on the government's annual budget and final accounting reports. Data was lacking to separate this into GCE for individual and GCE for collective by commodities. Social security funds were

classified in the government sector in accordance with the 2008 SNA.

Nonprofit Institutions Serving Households does not appear as a separate item in the use table since it is under household consumption expenditure.

Gross Fixed Capital Formation. The expenditures for R&D by private and public sectors were recognized as fixed capital formation as recommended in the 2008 SNA. The data of related assets changes and expenditure of R&D data was from the ISC, National Science and Technology Survey, conducted by the Ministry of Science and Technology, and Government Financial Accounting Reports to estimate the fixed capital formation. Using the commodity flow approach, fixed capital categories can be classified to different commodity items, whether the capital goods are domestic or imported.

Changes in Inventories data was from the ISC, the data of the beginning-of-year and end-of-year values of finished goods, work-in-process, merchandise, and materials and supplies were collected. Then, the data was adjusted by the inventory valuation adjustment (IVA) procedure to estimate the inventory changes of all commodities.

Acquisition Less Disposal of Valuables. Gold bars (nonmonetary gold) were treated as valuables as inventories, when they were not used primarily for production or consumption and were acquired and held as stores of value.

Export of Goods data was from the customs statistics according to the HS categories. This was reclassified into the commodity sectors of IOT to estimate the composition of exports at FOB.

Export of Service was from BOP and the external transactions account of the NA. The way for estimating export of services was similar to import of services.

c. Uses of Value Added

Compensation by industry in the benchmark year was from the ISC and Earnings, and Productivity Statistics. Data from various surveys, such as the Yearly Report of Taipei, China's Agriculture,

Turnover and Employee's Movement Survey, annual financial report of corporations, government's final accounting report, etc., was also useful to measure compensation for different industries.

Taxes Less Subsidies on Products and Production was estimated per the ISC and related taxes statistics.

Fixed Capital Consumption was estimated based on the stock of fixed assets and the expected average economic life of the different goods categories, and was estimated using the perpetual inventory method.

Operating Surplus was a balancing item in the IOT framework; it was still necessary to refer to the ISC and other related data from various agencies to check whether it was reasonable.

3. Balancing Process

The 2011 SUT was the reclassification of the benchmark IOT, and the balancing of IOT was reviewed under the most specific items. According to all references, first, target values were established

for total values for output, IC for each industry, and total values for each final use vector (column total) by cross-checking with the NA. Then, values were predetermined for certain components such as export by product, households and government consumption expenditure by purpose, and gross fixed capital formation by category. Finally, the commodities output, the IC of all sectors, and the commodities composition in final expenditure sectors were adjusted until the demand and supply were balanced.

4. Main Results and Findings

a. Supply Side

The composition of the supply side was dominated by domestic production. For 2011, domestic production amounted to NT\$34,977 billion or provided 79% of the total supply at producers' prices. Based on the one-digit aggregate level by industry, 53.5% of domestic production came from manufacturing, followed by the wholesale and retail trade, up to 10.0% (Table 46). The top five industries with the highest outputs were (i) manufacturing, (ii) wholesale and retail trade,

Table 46: Supply Side by Industries and by Product, One-Digit, 2011
(billion NT dollars)

1 digit	Industry	Domestic Output at Producer's Price	Group	Products	Domestic Output at Producer's Price	Imports of Goods and Services	Total Supply at Purchasers' Price
A.	Agriculture, Forestry, and Fishing	561	1	Agriculture, Forestry, and Fishing	518	174	692
B.	Mining and Quarrying	29	2	Mining and Quarrying	50	1,541	1,591
C.	Manufacturing	18,724	3	Manufacturing	17,406	6,770	24,176
D.	Electricity, Gas, Steam, and Air-Conditioning Supply	644	4	Electricity, Gas, Steam, and Air-Conditioning Supply	751	5	756
E.	Water Supply Activities	209	5	Water Supply Activities	42	1	43
F.	Construction	1,382	6	Construction	1,377	0	1,378
G.	Wholesale and Retail Trade	3,481	7	Wholesale and Retail Trade	4,138	55	4,193
H.	Transportation and Storage	1,090	8	Transportation and Storage	1,088	199	1,287
I.	Accommodation and Food Service Activities	655	9	Accommodation and Food Service Activities	671	226	897
J.	Information and Communication	859	10	Information and Communication	468	36	504
K.	Financial and Insurance Activities	1,323	11	Financial and Insurance Activities	1,302	50	1,353
L.	Real Estate Activities	1,531	12	Real Estate Activities	1,610	13	1,623
M.	Professional, Scientific, and Technical Activities	548	13	Professional, Scientific, and Technical Activities	1,205	105	1,309
N.	Administrative and Support Service Activities	291	14	Administrative and Support Service Activities	735	207	943
O.	Public Administration and Defense; Compulsory Social Security	1,401	15	Public Administration and Defense; Compulsory Social Security	1,380	4	1,383
P.	Education	815	16	Education	801	21	821
Q.	Human Health and Social Work Activities	671	17	Human Health and Social Work Activities	583	3	586
R.	Arts, Entertainment, and Recreation	194	18	Arts, Entertainment and Recreation	238	45	283
S.	Other Service Activities	568	19	Other Service Activities	613	2	616
	Grand Total	34,977		Grand Total	34,977	9,457	44,434

Source: Department of Statistics, Taipei, China

(iii) real estate activities, (iv) public administration and defense, compulsory social security, and (v) construction (Table 46). Television and communication equipment, basic metals, chemicals, trade, and real estate were the most important sectors.

For 2011, imports of goods and services accounted for NT\$9,457 billion, 87% for import of goods. Although imports of goods and services only constituted 21% of the total supply at producers' prices, it still played an important role for some industries. Due to demand for semiconductors, chemicals, and fibers industries, manufacturing products was the largest sector of imports with NT\$6,770 billion, or 71.6% of total imports. The top five commodities with the highest import values were (i) manufacturing, (ii) mining and quarrying, (iii) accommodation and food service activities, (iv) administrative and support service activities, and (v) transportation and storage (Table 47).

To balance the supply table and use table, each commodity in the supply table was measured at purchasers' prices by adding trade and transport margins, and taxes less subsidies of each product. Total valuation adjustment was only NT\$427 billion since the trade and transport margins were just distributed to respective commodities on which the margin was incurred. Total supply of the entire economy based on purchasers' prices was NT\$44,861 billion.

b. Use Side

Contributed by the development of the manufacturing sector, industry IC absorbed 47% of the total supply or NT\$21,091 billion, and the exports of goods and services accounted for 23% of all uses or NT\$10,420 billion; radio, television and communication equipment and apparatus, basic chemicals, basic metals and machineries, were all important exports. Exports have been the engine of economic growth.

Based on the one-digit aggregate level, the manufacturing sector was the most exported

commodity with a value of NT\$9,080 billion or 87.1% of total exports, followed by the wholesale and retail trade reaching 5.2% of total exports due to the contribution of merchandising. The top five commodities with the highest export values were (i) manufacturing, (ii) wholesale and retail trade, (iii) transportation and storage, (iv) accommodation and food service activities, and (v) professional, scientific, and technical activities (Table 47).

Table 47: Top Five Export of Goods and Services, 2011 (billion NT dollars)

No.	Commodity	Value	Percentage %
1	Manufacturing	9,080	87.1
2	Wholesale and Retail Trade	541	5.2
3	Transportation and Storage	377	3.6
4	Accommodation and Food Service Activities	113	1.1
5	Professional, Scientific, and Technical Activities	100	1.0

Sources: Department of Statistics, Taipei,China.

As for the other final demands to total uses, household consumption expenditure was 17% or NT\$7,799 billion, gross capital formation was 8% or NT\$3,383 billion, and government consumption was around 5% or NT\$2,168 billion.

Looking at the five most used commodities for the rest of final demands, manufacturing was the top for the household consumption (Table 48), basically for food commodities, and was number one in commodities as GFCF with NT\$1,445 billion due to the capitalization of machinery and equipment (Table 49). Public administration and defense was the highest commodity for government consumption, with 37.5% concentrating on education and health activities (Table 50).

Table 48: Top Five Household Consumption by Commodity, 2011 (billion NT dollars)

No.	Commodity	Value	Percentage %
1	Manufacturing	2,980	38.2
2	Real Estate Activities	1,176	15.1
3	Financial and Insurance Activities	610	7.8
4	Accommodation and Food Service Activities	546	7.0
5	Agriculture, Forestry, and Fishing	476	6.1

Sources: Department of Statistics, Taipei,China.

Table 49: Top Five Gross Capital Formation by Commodity, 2011 (billion NT dollars)

No.	Commodity	Value	Percentage %
1	Manufacturing	1,445	42.7
2	Construction	1,154	34.1
3	Professional, Scientific, and Technical Activities	586	17.3
4	Real Estate Activities	159	4.7
5	Information and Communication	26	0.8

Sources: Department of Statistics, Taipei, China.

Table 50: Top Five Government Consumption by Commodity, 2011 (billion NT dollars)

No.	Commodity	Value	Percentage %
1	Public Administration and Defence; Compulsory Social Security	1,218	56.2
2	Education	415	19.2
3	Human Health and Social Work Activities	396	18.3
4	Manufacturing	101	4.6
5	Arts, Entertainment, and Recreation	12	0.6

Sources: Department of Statistics, Taipei, China.

c. Value Added

GVA, amounting to NT\$13,885 billion, was mainly attributed to manufacturing industries for 29.5% of total value added, or NT\$4,102 billion, and the whole and retail trade for 17.6% or NT\$2,444 billion. The top five industries with the highest value added were (i) manufacturing, (ii) wholesale and retail trade, (iii) real estate activities, (iv) public administration and defence; compulsory social security, (v) financial and insurance activities (Table 51). For all sectors combined, operating surplus net accounted by 34% and COE is 47% of total value added.

Table 51: Top Five Value Added by Industry, 2011 (billion NT dollars)

No.	Industry	Value	Percentage %
1	Manufacturing	4,102	29.5
2	Wholesale and Retail Trade	2,444	17.6
3	Real Estate Activities	1,212	8.7
4	Public Administration and Defence; Compulsory Social Security	1,054	7.6
5	Financial and Insurance Activities	915	6.6

Sources: Department of Statistics, Taipei, China.

Meeting the Challenges

d. Lack of Information for Intermediate Inputs for Annual Input-Output Tables

The CxC IOTs have been regularly published since 1964 in Taipei, China and the annual CxI IOTs have been published since 2006. Although administrative data is available annually, abundant information of intermediate input is only available during census years and it is relatively difficult to compile IOTs and SUTs during noncensus years. The input composition for the most recent year and the price index for each commodity in consideration of inflation to estimate the initial input composition are used.

e. Need for Automatic Balancing

Since all the balancing of annual IOTs was done manually, like benchmarks, and annual IOTs needed to be revised to be consistent with the annual revised NA, it was very laborious and time-consuming to balance the tables. There is a need to find an automatic method, such as the adjusted RAS, to do the balancing.

5. The Way Forward

IOTs (CxC and CxI) provide the comprehensive framework for transactions of economics. Taipei, China already compiles both kinds of IOTs consistent with the NA. However, there are still some challenges to work on.

The balancing of benchmark CxI IOTs was done after balancing the CxC IOTs. The balancing sequence will be changed in the next benchmark year. On the other hand, the gross output is valued at producers' prices in the current NA, to comply with the SNA's suggestion and to compare with other countries; hence, the output will be valued at basic prices in the future. As for the annual CxI IOTs, although the domestic output tables (make matrices) are just the working sheets now, the annual SUTs will be published in the future.

Notes on SUTs:

- The ratios of trade and transport margins of the crude petroleum and natural gas, and water sectors are low since the crude petroleum and natural gas were mainly directly imported by the intermediate consumer and the producer sold water directly to the user.
- Most of the products sold to the final consumer, such as the households, were distributed by supply chains of various distribution channels, so the trade and transport margin ratios of related products, such as agricultural, fishery, food and beverage products were high.
- The vector of household final consumption expenditure includes final consumption of NPISHs.
- Government consumption expenditure could not be broken down into "individual" and "collective."
- The GVA ratio of the manufacture of basic metals was relatively low because steel products produced by producers for own use were also included in the output and input of this manufacturing sector. It is common for the steel industry to use one of its own products as inputs for another product.
- For the sector of the manufacture of coke, refined petroleum products, and chemicals and chemical products, the GVAR was relatively low from using one of their own products as inputs to another product, as well as, because of the high price of oil.
- Most of Taipei, China's water transportation firms are container freight carriers. Influenced by the decrease in freight rates, soaring bunker prices, and the relatively high expense of transportation supporting services, the GVAR of water transport was low.

S. Thailand

This compendium adopts the supply and use tables (SUTs) technique to help eliminate statistical discrepancy between the product and expenditure approaches in the national accounts (NA). The data used is mainly from the NA compilers as control totals and sector levels, including gross output and value added which are classified into both activities (ISIC) and products (CPC). In addition, expenditure side data must provide product-wise detail at the same level as the supply side, covering private and government consumption expenditures, capital formation, and imports and exports. A different price measurement was adopted in compliance to the SUT framework in the system of national accounts (SNA), or the output of domestic products at basic price while use of products at purchasers' prices. In compiling SUTs, most of efforts contribute to data manipulation, including classification mapping and sector breakdown. Manual balance is principally applied by checking and verifying data from various sources and leaves little to automatic balance. From the results, it was found that gross output added in the 2012 SUT was slightly higher than the published version, whereas the gross value added (GVA) was lower than the published version. The results showed that the SUT framework could not allow discrepancies between supply and demand as shown in the NA published version, so all discrepancies must be eliminated in the SUTs, which is principally allocated into intermediate consumption (IC). Finally, a distortion was found in the structure of tax on products that harmed the service sector. After removing taxes on products, the service sector was more efficient per unit value added generation compared to other sectors.

1. The Current System of National Accounts

a. Recent National Accounts

Thailand's SNA comprises all three approaches. Production and expenditure approaches are for both quarterly and annual bases along with nominal and real measurement. The nominal values at current market price, and the real values at 2002 chained baht. Meanwhile, the income approach is only

for the annual basis. Thailand recently followed the 2008 SNA 2008 recommended by the UN. The economic activities were compiled based on Thailand's Standard Industrial Classification (TSIC) conforming with ISIC Revision 3. There are two levels of subsectors in Thailand's gross domestic product (GDP) publication, the broad 16 subsectors, and the finer 65 subsectors: 9 for agriculture, 8 for mining, 23 for manufacturing, 2 for construction, and 23 for services. Gross output is available only on an aggregate level, along with taxes and subsidies on products, IC, and main components of value added such as compensation of employees (COE) and consumption of fixed capital.

The data for GDP compilation was from various sources: agricultural production survey; mining production report; industrial production census and manufacturing survey; service business survey such as for hotels and business; and administrative secondary data. Household final consumption expenditure (HFCE) was benchmarked from the socioeconomic survey and sales report. Government final consumption is mainly from the government budgetary report. External trade statistics were from the Customs Department and balance of payment (BOP).

b. Existing Supply and Use Tables

The latest 2012 SUTs were compiled at the detailed level of 353 commodities and 598 industries. Compilation was consistent with the 2014 GDP series version and 2010 IOT benchmark structure. The 2012 SUT was the second available for Thailand's NA which followed the previous table of the 2007 SUTs. The 2012 and 2007 SUTs were close on sector coverage. The 2012 SUTs improved on the deficiencies in 2007, with focused improvements in data collection, manipulation, and compilation.

c. Existing Input Output Table

Thailand compiles IOTs every 5 years on a benchmark since 1975 with the standard size of 180 x 180 of inter-industry linkages; and the latest available table was for 2010. Thailand's IOT comprises seven supporting tables covering (i) purchaser price table, (ii) wholesale trade margin table, (iii) retail trade margin table, (iv) transport

cost table, (v) producer price table, (vi) import value table, and (vii) domestic value table.

2. The 2012 Supply and Use Tables at Current Price

The benchmark year 2012 was chosen for compiling the Thailand's second SUTs (the previous one was the 2007 SUT) because the 2012 SUTs will be used as the structural data set for economic modeling in substitution of the IOT. The 2012 SUTs lie between the 2010 IOT and the upcoming 2015 IOT.

In compiling the 2012 SUTs, the production sectors of both supply and intermediate uses were set up at the most detailed level as available in Thailand's National Accounts (TNA) system. In the supply table, production activities were classified based on the Thailand International Standard Industrial Classification (TSIC 3.0) which produce industrial activity output for each product (Thailand Central Product Classification or TCPC 2.1). Imports of goods and services, trade and transport margins, and taxes less subsidies on products were also classified by the TCPC at 353 items. For the use table, total intermediate uses for each industrial activities and value added originated from the production account in TNA. The 2010 IOT was used for disaggregating intermediate uses of each industry into products along with value added component disaggregation. Household final consumption, originally classified by Classification of Individual Consumption by Purpose (COICOP), was transformed into the TCPC. Government final consumption by five types of expenditure and 10 broad level sectors of Classification of the Function of Government (COFOG), along with individual and collective dimensions, were reclassified into government production and consumption of the government, respectively. Gross fixed capital formation by types of asset was also reclassified into the TCPC. Change in inventory was disaggregated into the TCPC. Exports of goods and services were also reported by the TCPC.

a. Supply Table

Gross output and GVA available from TNA were measured at producers' prices with 555 TSIC

activities. The SUT working team mapped and converted into 353 products of TCPC along with mapping to the IOT sector. Converting TSIC to TCPC seemed appropriate the converting one TSIC to one TCPC, and many TISCs to one TCPC. For the case of one TSIC to many TCPCs, the SUT team needed to break down one TSIC into many subcodes. Moreover, the sectors involving government production were disaggregated for reconciling with the government final consumption expenditure. Therefore, the number of TSIC items was expanded to 598 sectors, including reserved sectors. To make basic value of output and value added, firstly, the structure of value added components was applied from the 2010 IOT to decompose GVA into four components: (i) COE, (ii) operating surplus, (iii) indirect tax and subsidy on products, and (iv) consumption of fixed capital. Secondly, tax and subsidy on products were removed from the output of each TSIC activity at the TCPC product level, so that the new gross output table enables measurement at basic price. Meanwhile, tax on product and subsidy on product items that are by row were summed up to the correspondent columns, then the control total from TNA was used to update value and finalize columns of tax on product and subsidy on product. In the same way, the trade and transport margin (TTM) vector from the 2010 IOT was applied for calculating TTM columns in the SUTs and, again, the control total was applied from the trade and transport output service from TSIC activities. Imported goods were tabulated from customs statistics by converting the 2012 HS into TCPC's 353 products; while imported services were available from BOP with 10 main items of extended balance of payment on services (EBOPS). The exported services column was applied from the IOT to decompose 353 service products into TCPC.

b. Use Table

The intermediate use of TCPC products and components of value added by each activity were calculated by applying the IOT structure to its correspondent control totals. However, each component of value added after removing taxes and subsidies on products, namely, COE, operating surplus, and consumption of fixed capital is not controlled by each TSIC activity level, but at the

total activity level. Private consumption expenditure was available at the most 4-digit code of COICOP with 395 items and was converted into TCPC's 353 products. Private consumption expenditures were also available for subcolumn vectors: (i) HFCE, (ii) household consumption on imported goods, (iii) direct purchase abroad by resident, (iv) direct purchase by nonresidents in the domestic market, and v) final consumption of nonprofit institution serving household (NPISH).

The government final consumption expenditure (GFCE) has three available dimensions in the TNA: (i) by five types of expenditure, (ii) by COFOG's 10 sectors, and (iii) by individual and collective dimensions. The government sector produces nonmarket outputs, except for purchase by households and enterprises items. Therefore, output of the government sector is measured from the cost side method by adding up total cost, which must be equal to government consumption. In the 2012 SUT, the government sector was independently balanced before setting up the SUTs. Therefore, the government sector is present in the most detailed version of the 2012 SUT. For capital formation, the construction item needed to be consistent with the output of construction in the supply table. Only two items (public and private construction), could not match to the TCPC. The SUT working team requested more details on construction (five types of assets) from the capital formation compiler which led to expanding the TSIC code. For the equipment item, the structure of gross fixed capital formation was applied from the 2010 IOT, and the same for change in inventory. Exported goods were tabulated from customs statistics by converting the 2012 HS version into the TCPC's 353 products. Exported services were originally from the BOP. The 10 main EBOPS items were disaggregated into 353 products by applying the exported services column in the 2010 IOT.

3. Main Results and Findings

a. Supply Side

Based on the supply table, total gross output at basic price in 2012 values was baht (B)30,423 billion which increased by 1.43% in comparison

to the B29,993 billion published in the National Income of Thailand series version 2014. For the finer level, outputs of some sectors were intact, namely (i) fishing, (ii) mining and quarrying, (iii) hotels and restaurants, (iv) financial services, (v) public administration, (vi) education, and (vii) health and social work. Changing sectors were mainly found among the sectors of (i) wholesale and retail trade (reduced by 2.50%), and (ii) transport, storage, and communication (reduced by 10.14%). The reduction was reallocated into the business service sector, with an increase of 37.46%.

The structure of gross domestic output for the following sectors in the supply table was as follows: agriculture (6.1%), manufacturing (46.6%), and service (47.3%). It was slightly different from the published TNA, which was 6.3% for agriculture, 47.7% for manufacturing, and 46.0% for service. The output share of manufacturing sector was reduced from 47.7% to 46.6%, and the service sector rose from 46.0% to 47.3%, implying new activity in the service sector. An increase in service output was used as IC in the manufacturing sector, leading to a fall in value added in the manufacturing sector and rising value added in the service sector.

b. Use Side

In Table 23, GVA at basic price in the 2012 SUT is B10,888 billion, lower than the B11,124 billion published in the TNA, and B12,349 billion for the producers' prices value. The GDP at basic price and producers' prices can be obtained only in total value and no breakdown by sector was available in the TNA. The structure of value added shows that Thailand's main contributors is the service sector (62.0%), followed by the manufacturing (26.4%) and agricultural (11.6%) sectors. In comparison to the published TNA, GDP at producers' prices in the service sector is 56.6% of total GDP, followed by manufacturing sector (30.5%), and agricultural sector (12.9%). After removing taxes on products from value added (GDP) the share of the service sector was higher than the published TNA. Principally, if other factors were constant, higher share means higher per unit value generation thus implying higher efficiency. In this case, service was more efficient in GDP generation than other sectors. In GDP generation, it may be postulated that taxes on product policy distorts Thailand's economy favoring the agricultural and manufacturing sectors, but harming the service sector.

Table 52: Comparison of Gross Output, Supply and Use Table and Published Thailand's National Accounts, 2012
(billion baht)

	Supply and Use Tables		Published National Accounts		Difference
	Value	(%)	Value	(%)	%
Agriculture	1,846	6.1	1,883	6.3	-2.0
Manufacture	14,184	46.6	14,306	47.7	-0.9
Service	14,393	47.3	13,804	46.0	4.3
Total	30,423	100.0	29,993	100.0	1.4

Source: National Economic and Social Development Board - National Accounts Office, Thailand.

Table 53: Comparison of Value Added, Supply and Use Table and Published Thailand's National Accounts, 2012
(billion baht)

	Supply and Use Tables		Published National Accounts			
	Basic Price	Share (%)	Basic Price	Share (%)	Producers' Price	Share (%)
Agriculture	1,262	11.6	1,255	11.3	1,593	12.9
Manufacture	2,876	26.4	3,106	27.9	3,766	30.5
Service	6,750	62.0	6,763	60.8	6,990	56.6
Total	10,888	100.0	11,124	100.0	12,349	100.0

Source: National Economic and Social Development Board - National Accounts Office, Thailand.

4. Meeting the Challenges

The problems in SUTs compilation was mainly the lack of detailed data, especially in the service sector, such as in nonresident consumption of goods and services. To solve this problem, the SUTs working team applied the previous study as a structural base for detailed decomposition. However, it would be better to update the structure regularly by conducting more recent surveys and using new survey results for the SUTs compilation. This would make the SUTs consistent and more relevant to Thailand's economy. Another problem was the revision policy. The SUTs compilation faced decision making for cut-off on data release from stakeholders, thus, delaying the SUTs' timeline. During the period the SUTs were compiled, many data sources revised their statistics, especially for the BOP, the most important part of the SUTs. The BOP not only appeared in the supply table as an import item, but had to be reconciled with the domestic production on transport service and direct consumption of goods and services for nonresidents. Therefore, decisions could only be made based on the availability and completeness of data.

5. The Way Forward

The 2012 SUTs was compiled using data available from the TNA; gross output, value added, and each final demand component. The structure of the 2012 SUT was aligned to the 2010 IOT structure. The SUTs were initialized and reconciled with the most detailed sector level available in the TNA in the hope that the detailed production structure of 598 activities could support analytical purposes such as the firm heterogeneity analysis. This was then converted into the standard size designed by ADB. The 2012 SUT eliminated discrepancies in the TNA by principally allocating in the IC of industrial activities which reduces GDP in the product approach and makes it equal to the expenditure approach.

The finding is that a distortion exists in Thailand's economy in the per unit value added generation. After removing taxes and subsidies on products, the service sector generates a higher per unit GDP compared to other sectors. However, suggestions

were not offered since imposing a tax policy has many ramifications, such as income distribution and inequality alleviation policies, which are beyond the scope of this study.

After finalizing the 2012 SUTs, the SUT working team will continue the second phase by compiling annual SUTs. The team's plan is to compile the SUTs annual series starting from 2007 to 2015. Then the team will compile quarterly SUTs starting from the first quarter of 2015 to the first quarter of 2017.

T. Viet Nam

The General Statistical Office (GSO), under the Ministry of Planning and Investment, is the central statistics organization of Viet Nam. In addition to the GSO, there are statistical units in the ministries (the ministerial-level), and government agencies such as the People's Supreme Court, and the People's Supreme Procuracy of Viet Nam. The GSO is organized vertically from the central level down to local levels. Its structure consists of the GSO's headquarters, the provincial statistics offices, and the district statistics offices. A director general heads the GSO, and is supported by three deputy directors general, several directors, deputy directors, experts, and staff. The SNA Department (SNAD) of the GSO is headed by a director, and has three deputy directors and 15 statisticians. The SNAD is responsible for compiling the national accounts (NA) for Viet Nam.

The SNAD is also responsible for compiling the IOTs and the SUTs. It also serves as the GSO's arm in implementing the RCDTA 8838. Constructing the SUT and the IOT is mainly the SNAD's responsibility, with support from other departments such as Agriculture, Forestry and Fishery, Industry, Construction and Investment, and Trade and Service; as well as provincial and city, statistical offices, the Ministry of Finance, and the State Bank. These departments, offices, and ministries provide data of gross output; exports; imports; budget expenditure; results of the household survey; results of the nonagriculture, forestry, and fishery business, households, enterprises, administrative, and management units.

1. Current System of National Accounts

Prior to 1989, the compilation of Viet Nam's NA was based on the Material Product System, a standard approach for former members of the Council for Mutual Economic Assistance. After 1989, the UN SNA was adopted as the conceptual basis for the NA. Over the years, Viet Nam received considerable technical assistance (TA) from many international agencies for developing and improving the country's NA.

The SNAD currently compiles the following: (i) annual GDP estimates at current and constant prices by production and expenditure approaches, and current accounts for all institutional sectors, including the rest of the world; (ii) quarterly GDP estimates by production and expenditure approaches, and (iii) the IOTs. In compiling these accounts, the SNAD compiles IC data and some components of gross capital formation. The GDP estimates using the production approach are treated as firm estimates. For the benchmark years when the IOT is compiled, the GDP is estimated by the production, income, and expenditure approaches. The GDP data by production approach is calculated at the basic prices.

The GSO releases summary statistics of NA through the *Statistical Yearbook*.²¹ A separate publication containing detailed data on the NA, particularly the quarterly GDP estimates, is in *Report on Socio-Economic Situation in Viet Nam*. The two main methodological documents on SNA statistics are:

The Sources and Methods, 2003 and the *Method to Calculate Main Indicators in Quarterly National Accounts in Viet Nam, 2003*.

NA estimates are released initially toward the end of the reference period, with no time lag: for quarterly accounts, toward the end of the last month of the quarter; and for the annual estimates, in September of the current year. The estimates undergo several revisions before they are released as a final one.

2. Supply and Use Framework

In 2013, Viet Nam conducted an input-output survey for compiling the IOT for 2012. The survey followed the concepts and definitions recommended in the 1968 and 1993 SNA. The 2012 IOT was based on a square make and use matrices (164 commodities and 164 industries), although the final IOT was for 164 x 164 commodities. The previous IOTs were of different sizes, with the previous one for 2000 at 112 x 112.

The SNAD compiled IOT from the make and use matrices as recommended in the 1968 SNA, which to a large extent, followed the 1993 SNA recommendation. Viet Nam compiled the make and use matrices as an intermediate step to construct IOTs. This procedure was essentially adopted for the 2012 SUT compiled under RCDTA 8838.

The 2012 SUT of Viet Nam has 164 industries and 164 commodities. The classifications used for compiling the SUT adopted the Viet Nam Standard

Table 54: Benchmark Input-Output for Viet Nam

Reference Year	Size	Type/Valuation	Methodology
1989	54 x 54		
1996	97 x 97		
2000	112 x 112	Competitive/Current price	Direct full survey, compiled from the Make and Use matrices
2007	138 x 138		
2012	164 x 164		

Source: Ministry of Planning and Investment - General Statistical Office (GSO), Viet Nam.

²¹ General Statistics Office. 2016. Statistical Yearbook of Vietnam 2015. Ha Noi: Statistical Publishing House. http://www.gso.gov.vn/default_en.aspx?tabid=515&idmid=5&ItemID=16052

Industrial Classifications which is consistent with other classifications such as the COICOP, COFOG, and COPNI, and the HS.

3. Data Sources and Methods

The survey collected information for establishing the IOT and for compiling the intermediate factor cost in 2012, and was conducted by the GSO on April 2013 with the following purposes:

- Making the 2012 IOT by three types of price: basic price, producers' price, and purchasers' price with a size of 164 x 164 product industries; and
- Based on the IOT, doing the analysis and the evaluation on production results by 164 product industries as well as the evaluation of changes in supply and demand, output structure, cost structure, the structure of aggregated demand, the structure of final domestic demand, and the effects of the components of final demand to total added value.

Details on the scope of the survey:

- Collecting information compiled by the Ministry of Finance, State Bank of Vietnam, and from the Statistics Departments of the GSO and 63 provincial and city statistical bureaus.
- The survey sample included 42 provinces and cities under the central authority. The survey units and sample size were: enterprises and cooperatives (14,704 units); the Party, the State and other organizations (3,000 units); nonagricultural, forestry, and fisheries establishments (8,245 establishments); households engaged in agriculture, forestry, and fisheries (5,846 households); and households (consumption households, 4,308 households).
- Contents of the survey include information on revenues and expenditures of the state budget, production tax, production subsidies,

export and import of goods and services; the gross output value at current prices in 2012 detailed by 164 product industries; final consumption of households by 164 product industries; gross capital formation by product industries; production costs by material and by service; and compensation of workers.

- The six types of questionnaire are questionnaire on gross production output by product industries and by economic sector in 2012; questionnaire on the results and operating costs of principal business in 2012 of all types of enterprises and cooperatives (except for credit institutions and public service units); questionnaire on operating expenses in 2012 of insurance companies, credit institutions, and public service units; questionnaire on operating expenses in 2012 of the state agencies and public service units; questionnaire on total revenues and production costs in 2012 of establishments and business households; and questionnaire on final consumption of households in 2012.
- During the survey, the GSO used the following classifications and lists:
 - Table of the 2007 economic system of Viet Nam.
 - Table of the 2010 product industry system of Viet Nam.
 - The list of exports and imports of goods.
 - The list of import tariffs.
 - The list of VAT rates.
 - The list of the Viet Nam's administrative units.
 - Timeframe of using fixed assets (issued in conjunction with the Decision No. 206/2003/QĐ-BTC dated 12 December 2003 by the Minister of Finance).

Some important information sources collected and processed for establishing the 2012 SUT and the IOT are as follows:

Taxes and Subsidies on Production were separated into product tax, and other production tax and subsidies to calculate gross production output value, value added at the basic price, and at the producers' prices. The tax rates were determined based on the input-output survey, information on the total values of production tax, and production subsidies from the state budget revenues and expenditures reported by the Ministry of Finance. Production tax was separated into import tax and other production taxes (VAT, special consumption tax, etc.); the import tax rate compared with the import value of each commodity was used to allocate import tax for IC and final consumption. Other production tax was separated into deductible VAT and nondeductible VAT of which the nondeductible VAT portion mainly belongs to establishments. Therefore, it used the rate of gross output of establishments over gross output for the allocation. This tax was allocated for both IC and final consumption. The deductible VAT tax was levied on final consumption, so it was allocated to the final consumption (excluding inventories because these parts were not levied).

Trade and Transportation Margin of each product was calculated from the survey for constructing the IOT. Transport fees were classified by five transport sectors: railway cargo transport service, road cargo transport service, pipeline transport service, inland waterway cargo transport service, and airline cargo service. Trade and transportation fees were allocated to IC and final consumption at the rate of fees over the gross output value.

FISIM and Allocation of FISIM were based on the rate of loan interest paid by each bank over the entire loan interests of the whole economy (loans for production and loans for final consumption).

Final Consumption in the Household Living Standard Survey in 2012. The survey for establishing the 2012 IOT collected information

on final consumption of households for the whole country, for urban and rural areas, and detailed by 164 product industries. Therefore, the data of final consumption from the 2012 household living standard was used as a reference information source.

a. Supply Side

The matrix shows the domestic production of goods and services at basic value: the rows matrix presents the different activities (industries), and the columns matrix shows the goods and services (commodities) produced by the respective industries. In reality, almost all establishments have secondary activities; hence, the make matrix reflects this situation, as shown by the product of off-diagonal entries, in addition to the principal product on the diagonal (in this case, the make matrix is a square matrix). Calling the make matrix "S", the relationship is:

$$S^*I = \begin{matrix} \text{vector for domestic output by industry} \\ \text{by basic prices } (X_A) \end{matrix} \quad \text{eq. (1)}$$

$$I^*S = \begin{matrix} \text{vector for domestic output by} \\ \text{commodity at basic price } (X_C) \end{matrix} \quad \text{eq. (2)}$$

Where: "I" is the identity vector.

The product tax vector was compiled indirectly using information on tax rates on products. The GDP data in Viet Nam's NA, derived from the production approach, used the basic price and must be equal to the data at the producers' prices. The import duties, which are the difference between the two valuations, are included in trade activity. Thus, all product taxes, including import duties, are accounted for in the GVA at basic prices. However, for the SUT, the GSO needs to prepare the estimates of output at the basic prices. This was done by segregating product taxes (estimated using tax rates on different products) from output at the producers' prices.

b. Use Side

This matrix shows intermediate input in the columns and intermediate demand in the rows. Following the recommendation of the 1993 SNA, the goods of

intermediate input (demand) are at the purchasers' prices. This means that row vectors of trade and transportation equal "zero."

Calling this matrix "U", the relationship is

$$U*I = \text{intermediate demand vector} \quad \text{eq. (3)}$$

$$I*U = \text{intermediate input vector} \quad \text{eq. (4)}$$

Where "I" is the identity vector.

c. Final Demand Matrix

This matrix shows the component of final demand by column and commodity by row. The components of final demand include:

- Household consumption expenditures,
- Government consumption expenditures,
- Fixed capital formation,
- Changes in inventories, and
- Exports.

Calling this matrix "Y"

$$U*I + Y*I = X_{CP} \quad \text{eq. (5)}$$

Where:

- $U*I$ = intermediate demand vector
- $Y*I$ = total final demand by commodity vector
- X_{CP} = gross output by commodity at purchaser's price vector

Where:

$$X_{CP} = X_C + T_D + T_T + T_P + M \quad \text{eq. (6)}$$

Where:

X_C is the domestic output by commodity at the basic price vector

T_D is the trade margin vector (by commodity)

T_T is the transportation margin vector

T_P is the vector of tax on products

M is vector of imports

d. Value Added Matrix

This matrix shows the factors of value added by row, and of industry by column. The factors of value added include

- COE,
- Taxes on product plus subsidies (excluding taxes on products),
- Depreciation, and
- Operating surplus.

Calling this matrix "V", the relationship is

$$V = I'*V \quad \text{eq. (7)}$$

Where:

$I'*V$ is the value added by industry vector Equation (10)

I' is the identity vector with four elements

$$\text{In conclusion, } I'*U + I'*V = S*I = X_A \quad \text{eq. (8)}$$

e. Differences with the Published Data

Viet Nam did not use the published NA statistics in the SUT compilation. Despite this, it was noted that the two sets of data largely matched, as the difference was less than 1%.

4. Meeting the Challenges and the Way Forward

Viet Nam compiled the SUT from the input–output surveys. As prescribed by the 1993 SNA, the process could be reversed by compiling the SUT first, and using it to derive the IOT. However, a key problem for Viet Nam was that the classification used for

the IOTs was different from the classification recommended by ADB for the SUT compilation. The GSO hoped to resolve this issue by changing one or the other set of classifications.

In the future, the GSO needs to switch from the 1993 SNA to the 2008 SNA, which is important for the construction of the SUT and the IOT.

Supply and Use Tables, 22 x 13

5

Economies use as much detail as possible in compiling their Supply and Use Tables (SUTs), depending on their data sources but collapsing their classification to a much smaller number of items for publication purposes. The Asian Development Bank (ADB) SUT Project team recommendation is to compile the SUT at the most disaggregated level, but the minimum requirements are 51 products and

32 industries. The most detailed tables can be accessed at (website). The detailed 22 products and 13 industries are set out in this section. Aggregations were based on the International Standard Industrial Classification of Economic Activities Revision 4.0 for the industries, and the Central Product Classification Version 2.0. Detailed versions of SUTs for the 19 participating economies can be accessed in ADB website:

Table 55: List of Benchmark Supply and Use Tables

Economy	Reference Year	Commodity by Industry
Bangladesh	2011 ^a	74 x 51
Bhutan	2014	51 x 32
Brunei Darussalam	2010	46 x 46
Cambodia	2011	60 x 60
People's Republic of China	2012	82 x 64
Fiji	2011	115 x 56
Hong Kong, China	2011	30 x 25
India	2011 ^b	140 x 66
Indonesia	2010	52 x 52
Lao People's Democratic Republic	2012	30 x 30
Malaysia	2010	68 x 86
Maldives	2014	51 x 40
Mongolia	2014	68 x 55
Nepal	2011 ^c	81 x 60
Pakistan	2011 ^a	54 x 42
Sri Lanka	2011	273 x 176
Taipei, China	2011	51 x 36
Thailand	2012	51 x 32
Viet Nam	2012	164 x 164

^a For the fiscal year ending 30 June.

^b For the fiscal year beginning 1 April.

^c For the fiscal year ending 15 July.

Table 56: Supply and Use Tables, Bangladesh, FY2011
(million taka)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		2,141,373	-	46,048	-	-	-	-	-
2 Ores and Minerals		-	162,875	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	8,248	215,820	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	575,351	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	2,298,719	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	157,534	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	138,450	-	-	-	-	-
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		-	-	278,597	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	362,643	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	581,262	-	-	-	-	-
12 Constructions and Construction Services		-	-	10,741	-	1,641,692	-	-	-
13 Wholesale and Retail Trade		-	-	37,375	-	-	1,433,621	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	282,021
15 Transport, Postal, and Courier Services		-	-	-	-	-	-	1,199,496	-
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services		-	-	-	-	-	-	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	-	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		2,141,373	162,875	4,494,967	215,820	1,641,692	1,433,621	1,199,496	282,021

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		297,929	591,467	57	-	91,561	-	103,439	-
2 Ores and Minerals		5,214	37,522	42,966	28,287	57,456	-	5,613	53,093
3 Electricity, Town Gas, Steam, and Hot Water		13,070	46,517	31,080	2,790	23,858	784	724	19,776
4 Food Products, Beverages, and Tobacco		73,532	72,475	9,900	-	392	-	37,099	3,696
5 Textiles, Apparel, and Leather Products		16,099	1,017,650	16,330	1,257	16,740	13,400	7,118	29,502
6 Products of Wood, Paper, and Printed Matter		5,142	54,378	9,779	4,492	13,822	17,229	1,500	5,859
7 Coke Oven, Petroleum, and Chemicals Products		103,752	88,402	44,107	7,718	39,085	6,253	3,611	59,132
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		2,622	38,176	14,971	5,473	301,262	5,124	6,909	5,805
10 Furniture and Other Transportable Goods, n.e.c.		-	37,104	5,679	-	19,023	10,890	5,854	9,516
11 Metal Products, Machinery, and Equipment		26,399	77,401	177,280	11,999	192,209	13,557	2,397	36,885
12 Constructions and Construction Services		22,083	34,228	12,749	1,205	157,916	15,219	4,415	54,625
13 Wholesale and Retail Trade		-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services		1,314	30,801	19,715	2,164	12,983	20,878	79	8,266
15 Transport, Postal, and Courier Services		8,774	47,502	28,453	8,175	12,903	12,690	5,059	14,641
16 Information and Communication Technology		1,760	28,507	15,345	1,296	3,269	7,932	1,701	7,011
17 Financial Services		13,182	117,247	45,026	2,354	53,938	23,837	3,063	26,241
18 Real Estate, Leasing, and Other Business Services		5,582	40,380	21,537	11,569	16,362	19,411	3,752	21,193
19 Public Administration		6,482	21,370	6,309	852	11,738	7,756	384	9,086
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		957	2,517	-	-	-	-	-	-
22 Other Services		18,767	73,267	37,642	10,296	46,457	76,432	7,662	25,852
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		622,657	2,456,911	538,924	99,927	1,070,975	251,391	200,381	390,180
26 Total Gross Value Added		1,681,591	1,016,176	428,955	115,893	570,717	1,182,230	81,640	801,891
27 Compensation		288,450	365,332	91,632	15,280	465,912	250,331	26,742	115,611
28 Other Taxes Less Subsidies on Production		-	-	-	-	-	-	-	-
29 Operating Surplus, Gross		1,393,141	650,845	337,323	100,613	104,805	931,898	54,897	686,280
30 Consumption of Fixed Capital		-	-	-	-	-	-	-	-
31 Operating Surplus, Net		-	-	-	-	-	-	-	-
32 Total Output		2,304,248	3,473,087	967,879	215,820	1,641,692	1,433,621	282,021	1,192,071

-- = magnitude equals zero, FY = fiscal year, n.e.c. = not elsewhere classified.

(continued on next page)

Table 56: Supply and Use Tables, Bangladesh, FY2011 (continued)
(million taka)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	2,187,421	337,038	-	2,524,459	625,162	-20,084	3,129,538
2	-	-	-	-	-	162,875	41,609	-	204,484	45,674	1,381	251,539
3	-	-	-	-	-	224,068	-	-	224,068	-	25,691	249,759
4	-	-	-	-	-	575,351	222,508	-	797,859	227,660	100,695	1,126,214
5	-	-	-	-	-	2,298,719	415,566	-	2,714,285	466,717	-18,391	3,162,611
6	-	-	-	-	-	157,534	47,273	-	204,807	62,191	7,626	274,623
7	-	-	-	-	-	138,450	339,861	-	478,311	105,524	28,532	612,368
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	278,597	111,661	-	390,258	104,764	24,281	519,303
10	-	-	-	-	-	362,643	987	-	363,630	99,718	212	463,561
11	-	-	-	-	-	581,262	646,907	-	1,228,168	219,981	193,894	1,642,043
12	-	-	-	-	-	1,652,433	-	-	1,652,433	-	23,971	1,676,404
13	-	-	-	-	-	1,470,996	-	-	1,470,996	-1,470,996	-	-
14	-	-	-	-	-	282,021	18,961	-	300,982	-	1,927	302,909
15	-	-	-	-	-	1,199,496	288,066	-	1,487,562	-486,396	3,306	1,004,473
16	-	193,849	-	-	-	193,849	1,970	-	195,819	-	44,256	240,075
17	394,494	-	-	-	-	394,494	5,525	-	400,019	-	11,598	411,617
18	-	-	829,439	-	-	829,439	-	-	829,439	-	5,979	835,419
19	-	-	-	408,095	-	408,095	-	-	408,095	-	-	408,095
20	-	-	-	253,731	-	253,731	-	-	253,731	-	121	253,852
21	-	-	-	244,680	-	244,680	-	-	244,680	-	246	244,926
22	-	-	-	-	1,114,461	1,114,461	40,484	-	1,154,945	-	31,734	1,186,679
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	394,494	193,849	829,439	906,506	1,114,461	15,010,614	2,518,417	-	17,529,031	-	466,976	17,996,007

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	2,772	-	3,518	2,883	1,623	1,095,248	1,911,881	-	59,737	62,672	233	3,129,538
2	2	-	1,288	35	12	231,489	15,858	-	3,958	-	-	251,539
3	4,138	4,734	694	2,032	913	151,110	98,648	-	-	-	-	249,759
4	523	1,783	388	679	10,354	210,821	912,730	-	-1,934	4,598	-	1,126,214
5	620	396	4,185	4,948	14,563	1,142,808	514,219	-	6,007	1,499,577	-	3,162,611
6	13,480	11,324	7,604	11,273	8,890	164,770	107,392	-	50	2,411	-	274,623
7	11,216	5,287	1,937	70,225	2,466	443,190	144,573	-	-2,043	26,648	-	612,368
8	-	-	-	-	-	-	-	-	-	-	-	-
9	864	6,086	502	12,749	11,771	412,314	98,227	-	87	8,675	-	519,303
10	2,519	7,057	2,125	9,281	8,740	117,789	101,726	-	242,592	1,454	-	463,561
11	6,340	4,946	3,711	9,657	7,312	570,092	144,588	-	892,040	35,324	-	1,642,043
12	5,840	3,815	20,722	3,479	5,247	341,544	-	-	1,334,860	-	-	1,676,404
13	-	-	-	-	-	-	-	-	-	-	-	-
14	8,685	10,216	6,270	4,989	9,146	135,508	161,308	-	-	6,094	-	302,909
15	5,033	7,280	3,742	14,669	6,392	175,312	815,565	-	-	13,596	-	1,004,473
16	3,630	11,148	1,946	4,173	2,848	90,566	124,630	-	-	24,879	-	240,075
17	12,558	12,479	11,148	9,605	16,269	346,949	59,867	-	-	4,801	-	411,617
18	5,755	11,655	7,195	9,951	8,961	183,301	652,117	-	-	-	-	835,419
19	985	3,033	2,137	4,356	2,199	76,686	-	331,409	-	-	-	408,095
20	-	-	-	25,646	4,012	29,658	102,928	78,090	43,177	-	-	253,852
21	-	-	-	26,056	-	29,530	147,221	53,792	14,382	-	-	244,926
22	13,060	17,799	22,225	9,802	11,351	370,613	608,078	3,548	70,881	-	133,559	1,186,679
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	98,019	119,039	101,338	236,488	133,068	6,319,298	6,721,555	466,839	128,440	2,535,354	1,824,521	17,996,007
26	157,255	275,455	728,101	755,127	896,285	8,691,315	-	-	-	-	-	-
27	26,241	96,615	47,719	499,048	44,159	2,333,074	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-
29	131,014	178,840	680,381	256,078	852,126	6,358,241	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	255,274	394,494	829,439	991,614	1,029,353	15,010,614	-	-	-	-	-	-

Table 57: Supply and Use Tables, Bhutan, 2014
(million ngultrum)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		16,573	-	-	-	-	-	-	-
2 Ores and Minerals		-	5,020	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	-	16,678	-	-	-	-
4 Food Products, Beverages, and Tobacco		5,522	-	3,203	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	1,461	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	1,431	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	5,046	-	-	-	-	-
8 Rubber and Plastic Products		-	-	523	-	-	-	-	-
9 Nonmetallic Products		-	-	7,474	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	555	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	10,450	-	-	-	-	-
12 Constructions and Construction Services		-	-	-	2,419	49,846	-	-	-
13 Wholesale and Retail Trade		-	-	-	-	-	11,008	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	3,113
15 Transport, Postal, and Courier Services		-	-	-	-	-	-	17,380	-
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services		-	-	-	-	538	-	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	-	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		22,095	5,020	30,143	19,097	50,384	11,008	17,380	3,113

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		658	-	1,821	-	3,713	-	-	652
2 Ores and Minerals		-	-	3,481	-	689	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		3	559	5,643	42	51	29	13	43
4 Food Products, Beverages, and Tobacco		547	-	79	-	-	-	7	99
5 Textiles, Apparel, and Leather Products		-	-	497	-	-	-	0	-
6 Products of Wood, Paper, and Printed Matter		-	21	925	59	114	59	52	3
7 Coke Oven, Petroleum, and Chemicals Products		505	254	2,855	797	3,518	-	100	2
8 Rubber and Plastic Products		-	56	860	24	-	-	1,645	0
9 Nonmetallic Products		-	-	103	-	7,899	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		58	80	1,361	89	6,338	33	3,601	24
11 Metal Products, Machinery, and Equipment		-	-	738	723	4,560	-	728	-
12 Constructions and Construction Services		-	300	36	100	2,500	-	5	-
13 Wholesale and Retail Trade		-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	35	11	80	206	-
15 Transport, Postal, and Courier Services		45	3	282	151	1,127	870	317	0
16 Information and Communication Technology		26	36	236	21	190	248	419	5
17 Financial Services		201	27	794	7	685	314	1,814	9
18 Real Estate, Leasing, and Other Business Services		1	142	128	131	345	801	200	226
19 Public Administration		-	166	583	-	165	105	76	3
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	15	-	-	-	1	2
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		2,045	1,644	20,438	2,179	31,904	2,537	9,185	1,067
26 Total Gross Value Added		20,050	3,376	9,705	16,918	18,480	8,472	8,194	2,046
27 Compensation		1,904	1,096	2,708	1,290	6,686	997	2,484	440
28 Other Taxes Less Subsidies on Production		0	52	109	-	945	448	9	33
29 Operating Surplus, Gross		18,146	2,228	6,888	15,627	10,848	7,027	5,702	1,573
30 Consumption of Fixed Capital		-	-	-	-	-	-	-	-
31 Operating Surplus, Net		-	-	-	-	-	-	-	-
32 Total Output		22,095	5,020	30,143	19,097	50,384	11,008	17,380	3,113

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 57: Supply and Use Tables, Bhutan, 2014 (continued)
(million ngultrum)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	16,573	3,445	-	20,018	2,615	167	22,799
2	-	-	-	-	-	5,020	431	-	5,451	1,490	262	7,203
3	-	-	-	-	-	16,678	319	-	16,997	637	-30	17,604
4	-	-	-	-	-	8,725	6,149	-	14,875	2,264	1,195	18,334
5	-	-	-	-	-	1,461	974	-	2,435	1,141	117	3,693
6	-	-	-	-	-	1,431	1,201	-	2,632	740	127	3,498
7	-	-	-	-	-	5,046	4,522	-	9,568	1,255	554	11,377
8	-	-	-	-	-	523	1,711	-	2,235	837	130	3,202
9	-	-	-	-	-	7,474	2,706	-	10,181	2,098	736	13,016
10	-	-	-	-	-	555	12,788	-	13,342	2,110	664	16,116
11	-	-	-	-	-	10,450	22,700	-	33,149	8,429	2,009	43,587
12	-	-	-	-	-	52,265	3,462	-	55,727	-	-	55,727
13	-	-	-	-	-	11,008	-	-	11,008	-11,008	-	-
14	-	-	-	-	-	3,113	-	-	3,113	-	150	3,263
15	-	-	2,242	-	-	19,622	3,366	-	22,988	-12,607	262	10,643
16	-	3,456	-	-	-	3,456	229	-	3,685	-	89	3,774
17	7,176	-	-	-	-	7,176	247	-	7,422	-	-7	7,415
18	-	132	2,621	-	-	3,291	1,063	-	4,354	-	84	4,438
19	-	-	-	13,927	-	13,927	38	-	13,964	-	-	13,964
20	-	-	-	4,071	-	4,071	2,466	-	6,537	-	-	6,537
21	-	-	-	2,706	-	2,706	555	-	3,261	-	-	3,261
22	-	-	-	-	787	787	173	-	961	-	7	968
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	7,176	3,588	4,863	20,703	787	195,359	68,545	-	263,904	-	6,516	270,419

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	-	93	38	6,975	14,613	-	-	-1,254	2,466	22,799
2	-	-	-	-	-	4,170	185	-	-	129	2,719	7,203
3	27	197	65	202	47	6,921	263	-	-	-	10,421	17,604
4	-	-	34	93	41	900	16,262	-	-	3	1,168	18,334
5	-	12	-	133	-	643	2,923	-	-	100	27	3,693
6	80	27	154	198	-	1,692	1,300	-	-	216	290	3,498
7	-	64	7	484	-	8,587	870	-	-	-140	2,059	11,377
8	3	42	-	-	9	2,640	75	-	-	-55	542	3,202
9	4	250	22	169	-	8,447	1,968	-	-	-385	2,985	13,016
10	31	112	129	126	38	12,019	856	-	-	2,820	421	16,116
11	-	61	33	-	-	6,843	3,575	-	-	20,895	12,275	43,587
12	11	256	31	2,800	-	6,040	3,334	-	-	46,353	-	55,727
13	-	-	-	-	-	-	-	-	-	-	-	-
14	4	5	280	425	51	1,098	119	-	-	-	2,046	3,263
15	226	29	168	1,320	25	4,564	727	-	-	-	5,352	10,643
16	68	11	154	191	54	1,658	2,092	-	-	-	24	3,774
17	3	8	7	579	-	4,447	2,757	-	-	-	212	7,415
18	184	162	-	523	-	2,843	1,236	-	-	351	8	4,438
19	6	59	34	74	-	1,272	670	11,659	-	-	364	13,964
20	64	-	45	234	13	355	354	5,829	-	-	-	6,537
21	-	-	-	-	-	-	555	2,706	-	-	-	3,261
22	3	1	90	106	-	217	751	-	-	-	-	968
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	715	1,297	1,252	7,750	316	82,329	55,486	20,194	-	69,034	43,377	270,419
26	6,461	2,291	3,611	12,954	472	113,030	-	-	-	-	-	-
27	1,086	498	682	12,156	212	32,240	-	-	-	-	-	-
28	1	12	37	-	39	1,686	-	-	-	-	-	-
29	5,375	1,781	2,892	797	220	79,103	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	7,176	3,588	4,863	20,703	787	195,359	-	-	-	-	-	-

Table 58: Supply and Use Tables, Brunei Darussalam, 2010
(million Brunei dollars)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		210	-	6	-	0	-	0	-
2 Ores and Minerals		-	11,434	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	-	302	-	-	-	-
4 Food Products, Beverages, and Tobacco		0	-	24	-	0	0	-	-
5 Textiles, Apparel, and Leather Products		0	-	33	-	0	0	0	0
6 Products of Wood, Paper, and Printed Matter		-	-	12	-	0	0	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	563	5,908	-	-	-	-	-
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		-	-	70	-	0	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		0	70	227	-	-	0	-	-
11 Metal Products, Machinery, and Equipment		-	-	-	-	-	-	-	-
12 Constructions and Construction Services		0	347	32	2	1,755	29	1	0
13 Wholesale and Retail Trade		23	62	129	1	84	1,286	2	9
14 Accommodation, Food, and Beverage Services		0	-	19	-	3	29	5	290
15 Transport, Postal, and Courier Services		0	-	16	-	0	0	1,020	1
16 Information and Communication Technology		-	-	-	-	-	10	0	0
17 Financial Services		-	-	-	-	-	4	-	0
18 Real Estate, Leasing, and Other Business Services		1	9	2	0	105	44	16	1
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	0	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		0	-	3	-	1	27	0	1
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		234	12,486	6,481	305	1,949	1,429	1,044	302

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		13	-	25	-	22	0	0	21
2 Ores and Minerals		0	1,263	3,117	48	33	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		1	19	36	1	5	18	4	5
4 Food Products, Beverages, and Tobacco		64	6	46	11	30	22	19	90
5 Textiles, Apparel, and Leather Products		0	5	22	0	89	7	14	1
6 Products of Wood, Paper, and Printed Matter		0	2	3	0	4	5	2	1
7 Coke Oven, Petroleum, and Chemicals Products		8	390	68	49	118	54	371	7
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		2	6	58	1	52	22	3	0
10 Furniture and Other Transportable Goods, n.e.c.		2	587	84	22	510	200	53	4
11 Metal Products, Machinery, and Equipment		-	-	-	-	-	-	-	-
12 Constructions and Construction Services		0	10	2	0	101	4	2	2
13 Wholesale and Retail Trade		0	9	5	5	9	25	7	0
14 Accommodation, Food, and Beverage Services		0	92	98	3	131	49	72	2
15 Transport, Postal, and Courier Services		1	18	3	0	8	32	58	1
16 Information and Communication Technology		1	91	21	5	63	43	23	4
17 Financial Services		4	98	52	12	69	93	69	12
18 Real Estate, Leasing, and Other Business Services		1	299	34	15	357	93	49	4
19 Public Administration		0	5	6	0	3	1	23	0
20 Education Services		0	5	6	0	2	1	1	0
21 Human Health and Social Care Services		0	8	9	0	4	2	2	0
22 Other Services		0	-	0	0	0	2	1	0
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		97	2,911	3,695	173	1,610	674	776	152
26 Total Gross Value Added		137	9,575	2,786	132	339	755	269	149
27 Compensation		100	602	143	27	246	339	140	87
28 Other Taxes Less Subsidies on Production		0	0	1	4	0	3	0	0
29 Operating Surplus, Gross		37	8,972	2,642	101	92	413	128	62
30 Consumption of Fixed Capital		22	154	103	32	14	37	32	8
31 Operating Surplus, Net		15	8,818	2,540	69	78	376	96	54
32 Total Output		234	12,486	6,481	305	1,949	1,429	1,044	302

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 58: Supply and Use Tables, Brunei Darussalam, 2010 (continued)
(million Brunei dollars)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	1	-	-	216	189	-	406	219	-7	617
2	-	-	-	-	-	11,434	33	-	11,467	39	-	11,506
3	-	-	-	18	0	320	-	-	320	-	-74	246
4	-	-	-	-	0	24	409	-	434	136	22	591
5	-	-	-	0	-	33	157	-	190	82	1	273
6	-	0	0	-	-	13	40	-	53	22	-10	65
7	-	-	-	-	-	6,471	179	-	6,650	360	-227	6,784
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	70	96	-	166	71	-	236
10	-	-	-	-	-	298	2,529	-	2,826	1,116	133	4,075
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	0	44	-	0	2,209	0	-	2,210	-	-	2,210
13	14	33	12	13	8	1,675	-	-	1,675	-1,550	-	125
14	-	0	15	0	26	387	468	-	855	-	-	855
15	-	-	1	12	-	1,050	168	-	1,218	-495	-142	581
16	-	563	0	-	-	573	62	-	634	-	-49	585
17	939	-	0	0	0	943	29	-	972	-	-	972
18	1	9	1,306	4	2	1,502	760	-	2,262	-	-	2,262
19	-	-	-	3,283	-	3,283	38	-	3,321	-	-	3,321
20	-	-	0	783	-	783	33	-	816	-	-	816
21	-	-	-	362	-	362	33	-	396	-	-	396
22	-	1	20	10	116	179	2	-	181	-	-	181
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	954	607	1,399	4,485	151	31,826	5,226	-	37,052	-	-353	36,699

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	-	93	38	6,975	14,613	-	-	1,254	2,466	22,799
2	-	-	-	-	-	4,170	185	-	-	129	2,719	7,203
3	27	197	65	202	47	6,921	263	-	-	-	10,421	17,604
4	-	-	34	93	41	900	16,262	-	-	3	1,168	18,334
5	-	12	-	133	-	643	2,923	-	-	100	27	3,693
6	80	27	154	198	-	1,692	1,300	-	-	216	290	3,498
7	-	64	7	484	-	8,587	870	-	-	140	2,059	11,377
8	3	42	-	-	9	2,640	75	-	-	55	542	3,202
9	4	250	22	169	-	8,447	1,968	-	-	385	2,985	13,016
10	31	112	129	126	38	12,019	856	-	-	2,820	421	16,116
11	-	61	33	-	-	6,843	3,575	-	-	20,895	12,275	43,587
12	11	256	31	2,800	-	6,040	3,334	-	-	46,353	-	55,727
13	-	-	-	-	-	-	-	-	-	-	-	-
14	4	5	280	425	51	1,098	119	-	-	-	2,046	3,263
15	226	29	168	1,320	25	4,564	727	-	-	-	5,352	10,643
16	68	11	154	191	54	1,658	2,092	-	-	-	24	3,774
17	3	8	7	579	-	4,447	2,757	-	-	-	212	7,415
18	184	162	-	523	-	2,843	1,236	-	-	351	8	4,438
19	6	59	34	74	-	1,272	670	11,659	-	-	364	13,964
20	64	-	45	234	13	355	354	5,829	-	-	-	6,537
21	-	-	-	-	-	-	555	2,706	-	-	-	3,261
22	3	1	90	106	-	217	751	-	-	-	-	968
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	715	1,297	1,252	7,750	316	82,329	55,486	20,194	-	69,034	43,377	270,419
26	6,461	2,291	3,611	12,954	472	113,030	-	-	-	-	-	-
27	1,086	498	682	12,156	212	32,240	-	-	-	-	-	-
28	1	12	37	-	39	1,686	-	-	-	-	-	-
29	5,375	1,781	2,892	797	220	79,103	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	7,176	3,588	4,863	20,703	787	195,359	-	-	-	-	-	-

Table 59: Supply and Use Tables, Cambodia, 2011
(million riels)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1	Agriculture, Forestry, and Fishery Products	20,703,643	-	-	-	-	-	-	-
2	Ores and Minerals	-	54,982	-	-	-	-	-	-
3	Electricity, Town Gas, Steam, and Hot Water	-	370,953	372	1,576,642	-	-	-	-
4	Food Products, Beverages, and Tobacco	2,784,272	29	4,447,806	-	-	414	-	-
5	Textiles, Apparel, and Leather Products	-	-	14,877,614	-	-	-	-	-
6	Products of Wood, Paper, and Printed Matter	60,959	-	575,928	-	-	-	-	-
7	Coke Oven, Petroleum, and Chemical Products	176,055	-	498,671	-	-	-	-	-
8	Rubber and Plastic Products	-	-	1,058,310	-	-	-	-	-
9	Nonmetallic Products	-	33,439	208,471	-	-	-	-	-
10	Furniture and Other Transportable Goods, n.e.c.	-	-	341,924	-	-	-	36	-
11	Metal Products, Machinery, and Equipment	-	-	499,674	-	-	-	-	-
12	Constructions and Construction Services	494,902	-	53,541	27,761	5,890,415	-	494,917	-
13	Wholesale and Retail Trade	-	-	-	4,137	-	8,014,744	0	473,250
14	Accommodation, Food, and Beverage Services	-	-	6	-	-	19,256	24	4,621,890
15	Transport, Postal, and Courier Services	-	-	745	-	-	100,633	4,441,092	377,724
16	Information and Communication Technology	-	-	-	-	-	-	-	-
17	Financial Services	-	-	-	-	-	-	-	-
18	Real Estate, Leasing, and Other Business Services	-	8,740	732,039	321,522	356	301,700	13,025	140,783
19	Public Administration	-	-	-	-	-	-	-	-
20	Education Services	-	-	-	-	-	-	-	7
21	Human Health and Social Care Services	-	-	-	-	-	-	-	-
22	Other Services	-	-	70,962	33,388	-	-	2	-
23	Cost, Insurance, and Freight/Free on Board Adjustment on Imports	-	-	-	-	-	-	-	-
24	Direct Purchases Abroad by Residents	-	-	-	-	-	-	-	-
25	Total	24,219,831	468,143	23,366,062	1,963,448	5,890,771	8,436,747	4,949,096	5,613,654

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishery Products	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1	Agriculture, Forestry, and Fishery Products	3,153,509	85	59,380	-	-	9,368	40,808	136,169
2	Ores and Minerals	-	17,614	-	-	-	-	-	-
3	Electricity, Town Gas, Steam, and Hot Water	129,843	625	145,127	478,411	11,681	34,709	174,891	435,969
4	Food Products, Beverages, and Tobacco	100,033	-	2,694,014	67,661	38,271	49,379	85,003	471,546
5	Textiles, Apparel, and Leather Products	-	-	9,075,070	-	-	-	-	-
6	Products of Wood, Paper, and Printed Matter	-	-	328,465	14,535	30	75,724	1	59,339
7	Coke Oven, Petroleum, and Chemicals Products	1,063,206	2,744	482,500	65,636	7,022	3,120,019	95,602	257,914
8	Rubber and Plastic Products	-	-	710,522	-	-	-	-	-
9	Nonmetallic Products	-	25,718	100,968	34,795	186	71,058	43,415	1,983
10	Furniture and Other Transportable Goods, n.e.c.	-	-	133,792	46	-	-	48,740	-
11	Metal Products, Machinery, and Equipment	-	-	293,571	737,954	1,281,880	57,752	395	96,512
12	Constructions and Construction Services	-	-	-	188,495	1,102,805	-	-	1,579
13	Wholesale and Retail Trade	-	-	-	-	-	-	-	-
14	Accommodation, Food, and Beverage Services	305,635	2,610	221,440	12,348	10,144	53,903	247,579	1,044,672
15	Transport, Postal, and Courier Services	116,984	637	542,745	28,282	225,348	44,784	1,038,861	437,858
16	Information and Communication Technology	25	6,548	137,278	8,978	65,044	26,420	58,393	124,314
17	Financial Services	287,774	3,528	19,813	10,746	2,086	34,554	30,909	29,293
18	Real Estate, Leasing, and Other Business Services	387,197	76,058	485,750	35,313	116,650	78,423	313,491	233,610
19	Public Administration	191,376	1,801	6,444	10,123	303	12,154	5,347	16,829
20	Education Services	-	-	-	-	-	-	-	-
21	Human Health and Social Care Services	-	-	-	-	-	-	-	-
22	Other Services	-	478	21,662	7,622	89	5,243	58,016	15,300
23	Direct Purchases in Domestic Market by Nonresidents	-	-	-	-	-	-	-	-
24	Direct Purchases Abroad by Residents	-	-	-	-	-	-	-	-
25	Total	5,735,581	138,446	15,458,543	1,700,947	2,861,537	3,673,492	2,241,451	3,362,889
26	Total Gross Value Added	18,484,251	329,698	7,907,519	262,501	3,029,234	4,763,255	2,707,645	2,250,765
27	Compensation	7,320,134	50,227	2,596,437	118,039	1,808,561	1,826,733	1,088,580	879,764
28	Other Taxes Less Subsidies on Production	-	97	24,442	3,479	49	4,744	970	2,528
29	Operating Surplus, Gross	11,164,116	279,374	5,286,640	140,984	1,220,624	2,931,778	1,618,095	1,368,473
30	Consumption of Fixed Capital	1,716,883	3,773	216,653	5,406	86,748	92,037	147,284	180,100
31	Operating Surplus, Net	9,447,233	275,601	5,069,988	135,578	1,133,876	2,839,741	1,470,812	1,188,373
32	Total Output	24,219,831	468,143	23,366,062	1,963,448	5,890,771	8,436,747	4,949,096	5,613,654

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 59: Supply and Use Tables, Cambodia, 2011 (continued)
(million riels)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	20,703,643	180,122	-	20,883,764	3,761,189	-	24,644,953
2	-	-	-	-	-	54,982	80,855	-	135,837	11,630	3,327	150,794
3	-	-	-	-	-	1,947,966	167,861	-	2,115,827	128,125	136,365	2,380,317
4	-	-	-	-	-	7,232,522	1,887,795	-	9,120,317	746,550	467,603	10,334,469
5	-	-	-	-	-	14,877,614	9,120,301	-	23,997,916	3,456,233	900,276	28,354,424
6	-	38,780	-	-	-	675,667	625,010	-	1,300,677	142,915	40,886	1,484,478
7	-	-	-	-	-	674,725	6,779,606	-	7,454,331	899,422	40,829	8,394,583
8	-	-	-	-	-	1,058,310	267,053	-	1,325,363	223,850	64,041	1,613,254
9	-	-	-	-	-	241,910	488,870	-	730,781	51,168	14,639	796,587
10	-	-	-	-	72,444	414,404	1,222,597	-	1,637,001	87,653	25,076	1,749,731
11	-	-	-	-	-	499,674	7,579,778	-	8,079,452	724,748	30,236	8,834,436
12	-	-	-	-	5,375	6,966,912	335,684	-	7,302,595	-	357,870	7,660,465
13	-	-	198,100	12,397	-	8,702,629	-	-	8,702,629	-8,702,629	-	-
14	-	-	19	-	-	4,641,195	968,818	-	5,610,013	-	280,849	5,890,861
15	-	-	22	-	18	4,920,234	2,871,279	-2,257,842	5,533,671	-1,530,854	327,681	4,330,499
16	-	2,058,233	-	-	131	2,058,364	162,107	-	2,220,471	-	124,556	2,345,027
17	959,467	-	-	-	-	959,467	280,628	-220,673	1,019,422	-	58,059	1,077,481
18	975	188,947	4,042,834	-	125,904	5,876,825	302,039	-	6,178,864	-	340,948	6,519,811
19	-	-	-	1,707,282	-	1,707,282	-	-	1,707,282	-	103,311	1,810,593
20	-	-	-	1,100,217	-	1,100,217	-	-	1,100,217	-	66,577	1,166,801
21	-	-	-	2,474,670	-	2,474,670	-	-	2,474,670	-	149,748	2,624,418
22	-	988	1,014	-	2,197,533	2,303,886	139,550	-	2,443,436	-	139,413	2,582,849
23	-	-	-	-	-	-	-2,478,515	2,478,515	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	960,442	2,286,947	4,241,989	5,294,567	2,401,405	90,093,103	30,981,438	-	121,074,542	-	3,672,289	124,746,831

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	-	-	-	3,399,320	17,714,807	-	-	317,323	3,213,503	24,644,953
2	-	-	-	-	-	17,614	128,024	-	-	1,199	3,957	150,794
3	6,296	108,083	325,355	187,542	79,630	2,118,162	262,155	-	-	-	-	2,380,317
4	-	35,032	122,628	34,682	25,834	3,724,084	6,172,948	-	-	168,458	268,980	10,334,469
5	-	-	-	-	-	9,075,070	1,177,091	-	-	-	18,102,263	28,354,424
6	-	9,280	1	-	317	487,693	742,953	-	-	9,384	244,448	1,484,478
7	7,619	27,405	317,235	102,723	59,137	5,608,763	2,759,839	-	-	1,074	24,906	8,394,583
8	-	-	-	-	-	710,522	608,030	-	-	23,071	271,630	1,613,254
9	0	-	2,935	167	2,369	283,593	500,104	-	-	5,274	7,617	796,587
10	-	-	-	-	6,697	189,276	650,283	-	-	737,303	172,870	1,749,731
11	1,526	132,334	28,709	1,013	114,866	2,746,512	2,580,548	-	-	2,343,690	1,163,686	8,834,436
12	-	-	-	-	-	1,292,879	436,813	-	-	5,659,918	270,855	7,660,465
13	-	-	-	-	-	-	-	-	-	-	-	-
14	12,450	14,388	73,610	76,619	101,326	2,176,724	592,295	-	-	-	3,121,842	5,890,861
15	37,212	90,450	296,449	341,127	33,995	3,234,733	770,903	-	-	-	324,862	4,330,499
16	10,269	549,253	81,652	94,662	7,860	1,170,696	902,267	-	-	-	272,063	2,345,027
17	67,253	6,418	16,984	18,494	12,858	540,711	423,560	-	-	-	113,210	1,077,481
18	19,041	50,449	716,560	403,271	44,521	2,960,334	3,216,453	-	-	30,122	312,903	6,519,811
19	118	1,152	14,228	29,008	1,452	290,336	2,086	1,373,073	145,098	-	-	1,810,593
20	-	-	112	150,336	390	150,838	186,372	796,935	32,656	-	-	1,166,801
21	-	-	-	482,218	-	482,218	569,275	932,453	640,472	-	-	2,624,418
22	1,721	5,678	11,574	7,523	247,806	382,711	1,649,846	31,772	248,972	-	269,547	2,582,849
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	163,507	1,029,922	2,008,033	1,929,386	739,057	41,042,791	42,046,651	3,134,232	1,097,320	9,266,694	28,159,143	124,746,831
26	796,935	1,257,025	2,233,956	3,365,181	1,662,348	49,050,312	-	-	-	-	-	-
27	274,496	432,968	464,787	1,608,224	428,128	18,897,076	-	-	-	-	-	-
28	2,793	119	396	182	4,721	44,519	-	-	-	-	-	-
29	519,646	823,938	1,768,773	1,756,775	1,229,500	30,108,718	-	-	-	-	-	-
30	44,756	70,595	125,460	198,676	83,672	2,972,043	-	-	-	-	-	-
31	474,890	753,343	1,643,313	1,558,100	1,145,827	27,136,675	-	-	-	-	-	-
32	960,442	2,286,947	4,241,989	5,294,567	2,401,405	90,093,103	-	-	-	-	-	-

Table 60: Supply and Use Tables, People's Republic of China, 2012
(million yuan)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		8,942	-	-	-	-	-	-	-
2 Ores and Minerals		-	4,765	236	30	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	45	200	5,455	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	3	8,448	1	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	1	6,564	1	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	2	3,102	1	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	117	12,985	21	-	-	-	-
8 Rubber and Plastic Products		-	4	2,826	2	-	-	-	-
9 Nonmetallic Products		-	42	4,587	9	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	10	1,628	12	58	-	-	-
11 Metal Products, Machinery, and Equipment		-	188	39,316	73	-	-	-	-
12 Constructions and Construction Services		-	-	58	-	13,742	-	-	-
13 Wholesale and Retail Trade		-	-	-	-	-	6,049	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	2,333
15 Transport, Postal, and Courier Services		-	-	-	-	-	-	6,182	-
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services		-	-	-	-	-	108	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	18	-	72	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		8,942	5,178	79,949	5,622	13,800	6,229	6,182	2,333

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		1,310	5	5,039	2	117	2	90	283
2 Ores and Minerals		1	812	6,023	1,135	85	0	6	0
3 Electricity, Town Gas, Steam, and Hot Water		101	344	2,794	1,683	190	99	152	31
4 Food Products, Beverages, and Tobacco		989	36	3,069	32	47	42	101	807
5 Textiles, Apparel, and Leather Products		5	23	3,942	12	82	15	37	30
6 Products of Wood, Paper, and Printed Matter		3	51	2,017	9	332	104	18	8
7 Coke Oven, Petroleum, and Chemicals Products		863	345	8,787	245	622	43	1,039	51
8 Rubber and Plastic Products		75	41	2,449	17	216	23	66	8
9 Nonmetallic Products		3	48	1,753	12	2,848	2	10	1
10 Furniture and Other Transportable Goods, n.e.c.		5	17	315	18	60	15	28	5
11 Metal Products, Machinery, and Equipment		85	707	23,288	465	3,613	253	690	9
12 Constructions and Construction Services		1	13	111	24	375	21	51	9
13 Wholesale and Retail Trade		9	12	207	10	35	17	53	10
14 Accommodation, Food, and Beverage Services		8	22	301	16	67	47	89	4
15 Transport, Postal, and Courier Services		69	80	1,284	49	245	199	661	25
16 Information and Communication Technology		9	13	188	27	165	28	69	12
17 Financial Services		108	186	1,536	264	386	315	543	31
18 Real Estate, Leasing, and Other Business Services		56	155	1,680	56	611	1,106	158	50
19 Public Administration		3	2	35	2	4	4	3	0
20 Education Services		1	2	15	2	6	5	4	1
21 Human Health and Social Care Services		1	1	14	1	2	2	2	0
22 Other Services		3	10	96	7	26	53	33	5
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		3,706	2,926	64,944	4,088	10,134	2,395	3,903	1,380
26 Total Gross Value Added		5,236	2,251	15,005	1,534	3,665	3,834	2,279	954
27 Compensation		5,300	1,025	6,511	475	2,238	1,562	1,103	638
28 Other Taxes Less Subsidies on Production		-290	260	1,773	20	510	359	59	86
29 Operating Surplus, Gross		226	966	6,722	1,039	918	1,913	1,116	230
30 Consumption of Fixed Capital		226	279	2,231	488	164	288	502	106
31 Operating Surplus, Net		-	687	4,490	551	754	1,624	614	123
32 Total Output^a		8,942	5,178	79,949	5,622	13,800	6,229	6,182	2,333

- = magnitude equals zero, n.e.c. = not elsewhere classified.

Note: Discrepancy between supply and use table is due to different data resources.

a Supply of products is valued at producers' prices including value added tax.

(continued on next page)

Table 60: Supply and Use Tables, People's Republic of China, 2012 (continued)
(million yuan)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	8,942	525	-	9,467	571	133	10,171
2	-	-	-	-	-	5,031	2,566	-	7,598	233	408	8,238
3	-	-	-	-	18	5,718	246	-	5,964	45	242	6,251
4	-	-	-	-	-	8,452	346	-	8,798	1,384	393	10,575
5	-	-	-	-	-	6,566	212	-	6,778	1,144	193	8,114
6	-	-	-	-	-	3,104	144	-	3,249	294	54	3,597
7	-	-	-	-	-	13,122	1,418	-	14,540	752	349	15,640
8	-	-	-	-	-	2,832	165	-	2,997	367	60	3,424
9	-	-	-	-	-	4,638	74	-	4,711	291	90	5,092
10	-	-	-	-	-	1,709	54	-	1,763	308	64	2,135
11	-	-	-	-	-	39,577	5,760	-	45,336	2,696	938	48,970
12	-	-	-	-	-	13,800	23	-	13,822	-	-	13,822
13	-	-	108	-	72	6,229	2	-	6,231	-5,732	-	500
14	-	-	-	-	-	2,333	115	-	2,449	-	-	2,449
15	-	-	-	-	-	6,182	327	-	6,509	-2,353	15	4,170
16	-	2,782	32	-	16	2,830	135	-	2,964	-	10	2,974
17	5,901	-	-	-	-	5,901	44	-	5,946	-	-	5,946
18	-	32	10,527	-	124	10,791	324	-	11,114	-	57	11,171
19	-	-	-	3,364	-	3,364	7	-	3,370	-	-	3,370
20	-	-	-	2,203	-	2,203	13	-	2,216	-	-	2,216
21	-	-	-	2,077	-	2,077	9	-	2,086	-	-	2,086
22	-	16	124	-	1,156	1,385	69	-	1,454	-	-	1,454
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	5,901	2,830	10,791	7,644	1,385	156,785	12,577	-	-	-	3,003	172,365

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	0	6	92	20	14	6,979	2,275	63	-	740	85	10,142
2	-	0	3	10	3	8,078	17	-	-	65	49	8,210
3	38	35	78	70	34	5,648	528	48	-	8	16	6,249
4	22	36	129	201	77	5,587	4,330	-	-	200	339	10,457
5	55	22	101	205	30	4,560	1,436	-	-	49	2,029	8,074
6	148	151	353	119	10	3,323	58	-	-	20	204	3,605
7	33	36	581	924	104	13,672	1,067	-	-	72	824	15,636
8	6	1	33	7	13	2,956	56	-	-	13	403	3,427
9	3	4	19	23	3	4,729	65	-	-	6	319	5,120
10	80	12	147	55	27	784	272	-	-	303	780	2,139
11	41	444	1,275	229	73	31,171	1,716	-	-	8,622	7,475	48,983
12	51	15	131	60	12	874	-	-	-	12,815	78	13,767
13	17	9	36	39	6	460	37	-	-	-	3	500
14	207	30	235	185	18	1,229	1,159	-	-	-	56	2,445
15	104	42	218	226	25	3,225	349	114	-	107	374	4,168
16	172	325	67	188	13	1,277	736	83	-	757	122	2,976
17	365	103	806	201	31	4,876	941	95	-	-	41	5,953
18	953	217	977	188	95	6,301	2,257	1,137	-	1,061	419	11,176
19	6	5	33	22	2	122	31	3,220	-	-	6	3,378
20	30	2	8	61	1	139	649	1,430	-	-	4	2,222
21	2	0	0	20	0	45	1,055	987	-	-	4	2,092
22	52	8	50	64	40	447	819	142	-	-	35	1,443
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	2,383	1,502	5,372	3,119	631	106,483	19,854	7,318	-	24,839	13,667	172,160
26	3,519	1,328	5,419	4,525	753	50,302	-	-	-	-	-	-
27	1,102	449	1,614	3,887	509	26,413	-	-	-	-	-	-
28	393	56	685	18	53	3,983	-	-	-	-	-	-
29	2,023	823	3,120	620	191	19,906	-	-	-	-	-	-
30	91	319	1,922	489	62	7,168	-	-	-	-	-	-
31	1,932	504	1,198	131	129	12,738	-	-	-	-	-	-
32	5,901	2,830	10,791	7,644	1,385	156,785	-	-	-	-	-	-

Table 61: Supply and Use Tables, Fiji, 2011
(million Fiji dollars)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		1,022	-	-	-	-	-	-	-
2 Ores and Minerals		-	176	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	-	346	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	1,171	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	244	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	197	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	118	-	-	-	-	-
8 Rubber and Plastic Products		-	-	37	-	-	-	-	-
9 Nonmetallic Products		-	-	73	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	148	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	185	-	-	-	-	-
12 Constructions and Construction Services		-	-	-	-	374	0	-	2
13 Wholesale and Retail Trade		-	-	26	-	2	1,151	-	11
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	805
15 Transport, Postal, and Courier Services		-	-	-	-	-	-	1,273	16
16 Information and Communication Technology		-	-	-	-	-	-	-	1
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services		13	16	151	2	2	27	5	27
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	8	-	-	-	12
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		1,035	192	2,351	356	378	1,177	1,278	873

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		10	-	536	-	1	-	-	64
2 Ores and Minerals		7	11	22	-	28	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		33	9	56	21	1	47	15	37
4 Food Products, Beverages, and Tobacco		32	-	73	-	-	-	4	172
5 Textiles, Apparel, and Leather Products		1	1	126	3	1	-	15	9
6 Products of Wood, Paper, and Printed Matter		-	0	88	1	16	-	8	10
7 Coke Oven, Petroleum, and Chemicals Products		135	72	103	160	9	80	476	45
8 Rubber and Plastic Products		1	-	106	1	0	58	17	1
9 Nonmetallic Products		-	-	65	-	39	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		4	-	16	-	-	-	-	2
11 Metal Products, Machinery, and Equipment		17	-	137	-	56	0	49	-
12 Constructions and Construction Services		-	-	-	-	6	-	-	-
13 Wholesale and Retail Trade		-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	0	1	-
15 Transport, Postal, and Courier Services		35	2	83	2	3	102	33	13
16 Information and Communication Technology		27	0	6	2	1	83	21	22
17 Financial Services		21	4	70	17	22	70	31	50
18 Real Estate, Leasing, and Other Business Services		86	2	58	22	42	57	246	49
19 Public Administration		0	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		0	-	-	-	-	-	-	-
22 Other Services		-	-	-	-	-	1	-	30
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		411	102	1,544	229	224	508	918	503
26 Total Gross Value Added		624	90	807	128	154	669	359	370
27 Compensation		85	43	210	36	68	203	189	172
28 Other Taxes Less Subsidies on Production		-	-	-	-	-	-	-	-
29 Operating Surplus, Gross		539	47	597	91	86	466	171	197
30 Consumption of Fixed Capital		33	12	88	30	10	49	84	59
31 Operating Surplus, Net		505	35	509	61	76	417	86	138
32 Total Output		1,035	192	2,351	356	378	1,177	1,278	873

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 61: Supply and Use Tables, Fiji, 2011 (continued)
(million Fiji dollars)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	1,022	187	-	1,209	324	2	1,535
2	-	-	-	-	-	176	11	-	187	2	0	190
3	-	-	-	-	-	346	-	-	346	-	11	357
4	-	-	-	-	-	1,171	618	-	1,790	182	267	2,238
5	-	-	-	-	-	244	100	-	344	161	53	559
6	-	9	-	-	-	207	125	-	332	86	22	440
7	-	-	-	-	-	118	1,497	-	1,615	275	152	2,042
8	-	-	-	-	-	37	170	-	207	7	14	228
9	-	-	-	-	-	73	40	-	113	3	1	117
10	-	-	-	-	-	148	112	-	260	17	21	298
11	-	-	-	-	-	185	1,097	-	1,282	235	102	1,619
12	-	3	0	-	0	379	-	-	379	-	4	383
13	-	-	4	5	2	1,201	-	-	1,201	-1,201	-	0
14	-	-	-	-	-	805	136	-	940	-	183	1,123
15	-	-	-	-	-	1,288	595	-430	1,453	-91	69	1,431
16	-	392	-	-	2	394	64	-	458	-	37	495
17	770	-	-	-	-	770	79	-78	771	-	5	776
18	15	93	948	6	68	1,373	114	-	1,487	-	78	1,565
19	-	-	-	635	-	635	-	-	635	-	0	635
20	-	-	-	533	-	533	16	-	549	-	0	549
21	-	-	-	191	-	191	6	-	197	-	7	204
22	-	10	-	-	172	202	1	-	204	-	0	204
23	-	-	-	-	-	-	-509	509	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	786	508	952	1,370	245	11,501	4,457	-	15,958	-	1,030	16,988

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	-	17	5	633	778	-	-	11	113	1,535
2	-	-	-	-	-	68	-	-	-	-32	153	190
3	13	10	12	28	4	285	67	5	-	0	-	357
4	-	-	-	18	3	303	1,145	-	-	133	656	2,238
5	-	5	10	30	3	204	241	-	-	15	98	559
6	49	10	8	81	2	284	78	-	-	-5	83	440
7	48	6	62	66	13	1,277	124	19	-	17	606	2,042
8	-	1	6	1	-	192	26	-	-	1	9	228
9	-	-	-	-	-	105	-	-	-	2	10	117
10	-	-	0	2	1	25	138	-	-	85	49	298
11	-	29	32	-	0	321	348	-	-	813	137	1,619
12	-	-	-	-	-	6	2	-	-	375	1	383
13	-	-	-	-	-	-	-	-	-	-	-	-
14	-	2	3	1	4	11	63	-	-	-	1,050	1,123
15	34	5	32	30	28	402	289	9	-	-	731	1,431
16	39	59	34	18	6	319	153	-	1	-	24	495
17	17	16	88	48	5	458	278	20	-	-	20	776
18	57	24	114	45	33	834	376	67	-	6	282	1,565
19	-	-	-	-	-	0	1	634	-	-	-	635
20	-	-	-	-	-	-	171	265	101	-	13	549
21	-	-	-	-	-	0	42	141	8	-	13	204
22	-	-	1	0	2	35	52	13	95	-	9	204
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	257	167	404	385	110	5,762	4,371	1,172	204	1,421	4,057	16,988
26	529	341	548	985	136	5,739	-	-	-	-	-	-
27	124	66	117	717	51	2,081	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-
29	405	275	431	268	84	3,658	-	-	-	-	-	-
30	24	46	32	259	12	740	-	-	-	-	-	-
31	381	229	400	8	73	2,918	-	-	-	-	-	-
32	786	508	952	1,370	245	11,501	-	-	-	-	-	-

Table 62: Supply and Use Tables, Hong Kong, China, 2011
(million Hong Kong dollars)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture; Forestry and Fishing ^k	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water; and Waste Management	Construction	Wholesale and Retail; and Repair of Motor Vehicles and Motor Cycles ^l	Transport, Postal and Courier	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products ^a		3,256	-	23,710	-	-	1,361	-	-
2 Ores and Minerals ^b		200	-	2,831	-	-	21,211	-	-
3 Electricity, Town Gas, Steam, and Hot Water ^c		-	-	-	50,494	-	-	-	-
4 Food Products, Beverages, and tobacco ^d		-	-	9,790	-	-	29,134	-	-
5 Textiles, Apparel, and Leather Products		-	-	-	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter ^e		-	-	27,165	-	-	27,004	-	-
7 Coke Oven, Petroleum, and Chemicals Products		-	-	-	-	-	-	-	-
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		-	-	-	-	-	-	-	-
10 Furniture; Other Transportable Goods, n.e.c. ^f		-	-	8,073	-	-	31,675	-	-
11 Metal Products, Machinery, and Equipment ^g		-	-	113,913	-	-	179,881	-	-
12 Constructions and Construction Services		-	-	-	-	217,970	-	-	-
13 Wholesale and Retail Trade		-	-	4,135	5,342	-	788,210	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	146,025
15 Transport, Postal and Courier Services ^h		-	-	-	-	-	-	380,845	-
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing and Other Business Services ⁱ		2	-	27,062	692	116	38,182	8,807	4,838
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services ^j		-	-	-	2,568	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		3,458	-	216,679	59,096	218,086	1,116,659	389,652	150,863

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
1 Agriculture, Forestry, and Fishery Products ^a		5	-	4,928	-	75	197	3,528	36,124
2 Ores and Minerals ^b		1,382	-	5,289	14,334	2,643	27,597	70,595	10,022
3 Electricity, Town Gas, Steam, and Hot Water ^c		31	-	1,928	4,549	634	5,265	3,667	7,017
4 Food Products, Beverages, and tobacco ^d		1	-	2,916	4	1	224	228	1
5 Textiles, Apparel, and Leather Products		-	-	-	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter ^e		674	-	51,461	222	16,322	19,247	3,468	14
7 Coke Oven, Petroleum, and Chemicals Products		-	-	-	-	-	-	-	-
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		-	-	-	-	-	-	-	-
10 Furniture; Other Transportable Goods, n.e.c. ^f		7	-	568	311	177	4,460	678	1
11 Metal Products, Machinery, and Equipment ^g		96	-	96,706	139	24,625	91,488	492	40
12 Constructions and Construction Services		24	-	83	64	95,274	333	1,354	142
13 Wholesale and Retail Trade		-	-	-	-	-	28,483	-	-
14 Accommodation, Food, and Beverage Services		7	-	180	103	243	3,310	1,350	1,820
15 Transport, Postal and Courier Services ^h		13	-	1,795	116	1,662	38,799	115,716	500
16 Information and Communication Technology		1	-	410	97	266	11,724	2,471	696
17 Financial Services		2	-	5,923	2,263	1,873	76,029	13,632	3,366
18 Real Estate, Leasing and Other Business Services ⁱ		288	-	14,072	2,379	8,716	312,692	46,150	23,779
19 Public Administration		-	-	47	23	361	939	1,278	181
20 Education Services		-	-	34	26	89	320	136	34
21 Human Health and Social Care Services		-	-	49	21	63	761	374	81
22 Other Services ^j		29	-	234	509	695	6,283	1,512	760
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		2	-	867	475	966	9,653	6,648	981
25 Total		2,561	-	187,494	25,638	154,685	637,803	273,276	85,557
26 Total Gross Value Added		897	-	29,185	33,458	63,401	478,856	116,375	65,307
27 Compensation		327	-	19,330	6,236	50,625	196,711	60,217	42,769
28 Other Taxes Less Subsidies on Production		6	-	367	295	671	6,129	3,206	1,162
29 Operating Surplus, Gross		565	-	9,487	26,928	12,104	276,015	52,953	21,376
30 Consumption of Fixed Capital		-	-	-	-	-	-	-	-
31 Operating Surplus, Net		-	-	-	-	-	-	-	-
32 Total Output		3,458	-	216,679	59,096	218,086	1,116,659	389,652	150,863

- = magnitude equals zero, n.e.c. = not elsewhere classified.

Note: Details may not add up to the total due to rounding.

- a Includes products of agriculture, horticulture and market gardening, live animals and animal products (excluding meat), forestry and logging products, fish and other fishing products, meat, fish, fruit, vegetables, oils and fats, dairy products and egg products, grain mill products, starches and starch products; and other food products.
- b Includes ores and minerals, beverages, tobacco products, coke oven products, refined petroleum products, nuclear fuel, and wastes or scraps.
- c Includes electricity, town gas, steam and hot water, natural water, electricity, gas, and water distribution on own account.
- d Includes textile, apparel and leather products.
- e Includes chemicals, rubber, plastic, glass, and other nonmetallic products.
- f Includes furniture, and other transportable goods n.e.c..
- g Includes metal products, machinery, and equipment.

(continued on next page)

Table 62: Supply and Use Tables, Hong Kong, China, 2011 (continued)
(million Hong Kong dollars)

Supply Table

	Domestic Production by Industry Group					Total Industry	Imports of Goods and Services	Cost, Insurance, and Freight/Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13							
	Financial and Insurance Activities	Information and Communication Technology	Real Estate Activities and Business Services ^h	Public Administration; Education; Human Health and Social Work Activities	Other Service Activities ⁱ							
1	-	-	-	-	-	28,328	162,067	-	190,393	43,027	140	233,561
2	-	-	-	-	-	24,242	155,923	-	180,165	32,333	4,907	217,405
3	-	-	-	-	-	50,494	12,462	-	62,956	5,343	-4,114	64,185
4	-	-	-	-	-	38,925	342,007	-	380,932	129,731	484	511,147
5	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	54,169	226,627	-	280,796	63,530	354	344,679
7	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	39,748	337,248	-	376,996	92,665	416	470,077
11	-	-	-	-	-	293,796	2,266,026	-	2,559,822	391,248	3,213	2,954,282
12	-	-	-	-	-	217,970	605	-	218,575	-	-	218,575
13	-	690	146	-	828	799,350	26,848	-	826,197	-757,471	-	68,726
14	-	-	-	-	-	146,025	-	-	146,025	-	-	146,025
15	-	-	320	-	-	381,165	128,619	-34,891	474,892	-407	-	474,485
16	-	78,086	-	-	-	78,086	8,820	-	86,906	-	-	86,906
17	477,167	-	-	-	-	477,167	39,733	-2,501	514,398	-	22,705	537,103
18	35,345	54,910	569,018	11,110	44,443	794,524	214,954	-	1,009,478	-	24,836	1,034,314
19	-	-	-	117,797	-	117,797	1,112	-	118,909	-	-	118,909
20	-	-	-	84,832	-	84,832	-	-	84,832	-	-	84,832
21	-	-	-	105,234	-	105,234	-	-	105,234	-	-	105,234
22	-	6,064	-	-	89,910	98,542	669	-	99,211	-	15,293	114,504
23	-	-	-	-	-	-	-37,392	37,392	-	-	-	-
24	-	-	-	-	-	-	157,900	-	157,900	-	-	157,900
25	512,511	139,749	569,484	318,974	135,181	3,830,392	4,044,227	-	7,874,620	-	68,234	7,942,853

Use Table

	Intermediate Consumption by Industry Group					Total Industry	Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13							
1	35	73	84	272	268	45,589	133,635	-	-	2,229	56,566	233,561
2	493	2,534	2,346	6,263	5,033	148,531	30,728	-	-	11,665	26,480	217,405
3	3,267	1,642	7,978	5,372	3,046	44,395	18,228	-	-	-	1,562	64,185
4	7	5	12	27	207	3,631	95,135	-	-	2,795	415,176	511,147
5	-	-	-	-	-	-	-	-	-	-	-	-
6	4,379	1,183	1,644	10,199	1,499	110,312	66,300	-	-	1,211	169,278	344,679
7	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-
10	1,489	86	270	77	728	8,850	120,594	-	-	200	340,433	470,077
11	161	1,117	215	1,283	1,947	218,306	128,687	-	-	210,021	2,397,270	2,954,282
12	136	151	1,516	3,714	144	102,934	-	-	114,530	-	1,111	218,575
13	-	-	-	-	-	28,482	-	-	-	-	40,244	68,726
14	1,445	633	1,086	906	550	11,631	134,394	-	-	-	-	146,025
15	6,806	1,549	3,790	1,219	818	172,783	51,626	-	-	-	250,075	474,485
16	8,923	22,414	2,177	911	1,012	51,100	21,450	-	-	-	14,355	86,906
17	112,649	4,507	45,618	4,155	5,387	275,405	140,403	2,775	-	-	118,520	537,103
18	65,702	37,930	82,987	27,985	24,699	647,379	189,468	-	-	136,852	60,615	1,034,314
19	414	109	231	1,316	172	5,075	12,143	101,692	-	-	-	118,909
20	276	58	208	1,696	66	2,945	11,489	10,719	59,680	-	-	84,832
21	377	115	289	1,055	150	3,333	35,059	53,331	13,510	-	-	105,234
22	2,112	1,941	7,785	1,441	17,709	41,012	67,427	-	5,092	-	974	114,504
23	-	-	-	-	-	-	224,761	-	-	-	224,761	-
24	6,888	2,316	3,237	3,794	7,954	43,784	114,116	-	-	-	-	157,900
25	215,554	78,362	161,474	71,689	71,389	1,965,481	1,146,121	168,517	78,282	467,033	4,117,420	7,942,853
26	296,956	61,388	408,010	247,285	63,793	1,864,911	-	-	-	-	-	-
27	187,228	31,198	115,204	198,457	52,423	960,726	-	-	-	-	-	-
28	2,328	940	11,568	424	878	27,976	-	-	-	-	-	-
29	107,400	29,249	281,239	48,403	10,492	876,209	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	512,511	139,749	569,484	318,974	135,181	3,830,392	-	-	-	-	-	-

h Includes land, water and air transport services; supporting transport services; postal and courier services.

i Includes real estate, leasing or rental services without operator, research and development services, legal, accounting services, other professional, technical and business services, support services, support services to agriculture, hunting, forestry, fishing, mining and utilities, maintenance, repair and installation except construction services, manufacturing services on physical inputs owned by others, other manufacturing services; publishing, printing and reproduction services, and materials recovery services

j Includes sewage and waste collection, treatment and disposal and other environmental protection services, services of membership organizations, recreational, cultural and sporting services, other services, domestic services, and services provided by extraterritorial organizations and bodies.

k Refers to agriculture, forestry and fishing, mining and quarrying.

l Refers to import and export, wholesale excluding maintenance and repair of motor vehicles, and retail trade excluding maintenance and repair of motor vehicles.

m Refers to the real estate activities and ownership of premises; all professional, scientific and technical activities and administrative and support service activities except renting and leasing of motor vehicles, and combined facilities support activities.

n Refers to arts, entertainment and recreation, and other services activities including maintenance and repair of motor vehicles.

Table 63: Supply and Use Tables, India, FY2011
(billion Indian rupees)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		19,095	-	-	-	-	-	-	-
2 Ores and Minerals		-	4,382	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		370	-	262	5,413	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	8,053	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	5,048	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	1,690	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	18,968	-	-	-	-	-
8 Rubber and Plastic Products		-	-	2,180	-	-	-	-	-
9 Nonmetallic Products		-	-	2,482	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	2,523	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	20,545	-	-	-	-	-
12 Constructions and Construction Services		-	-	19	-	21,410	-	-	-
13 Wholesale and Retail Trade		-	-	4,041	-	-	10,656	-	-
14 Accommodation, Food, and Beverage Services		-	-	2	-	-	-	-	2,648
15 Transport, Postal, and Courier Services		-	-	0	-	-	-	9,057	-
16 Information and Communication Technology		-	-	0	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services		-	-	-	-	-	-	-	-
19 Public Administration		-	-	0	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	1	-	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		19,465	4,382	65,814	5,413	21,410	10,656	9,057	2,648

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		2,292	-	9,624	9	865	-	81	822
2 Ores and Minerals		4	97	13,071	204	461	-	14	-
3 Electricity, Town Gas, Steam, and Hot Water		125	121	1,288	236	388	218	534	169
4 Food Products, Beverages, and Tobacco		550	-	361	-	-	1	-	541
5 Textiles, Apparel, and Leather Products		35	34	1,629	2	8	29	50	1
6 Products of Wood, Paper, and Printed Matter		57	57	715	156	67	78	286	0
7 Coke Oven, Petroleum, and Chemicals Products		769	664	10,374	1,085	1,666	740	2,029	66
8 Rubber and Plastic Products		3	14	1,538	30	404	21	144	9
9 Nonmetallic Products		-	-	615	-	2,841	-	-	1
10 Furniture and Other Transportable Goods, n.e.c.		15	10	838	27	271	26	49	1
11 Metal Products, Machinery, and Equipment		48	439	9,790	745	4,427	113	220	3
12 Constructions and Construction Services		89	26	729	225	-	320	123	4
13 Wholesale and Retail Trade		0	0	13	-	-	31	17	5
14 Accommodation, Food, and Beverage Services		8	53	-	72	267	222	117	2
15 Transport, Postal, and Courier Services		85	94	122	29	236	285	42	3
16 Information and Communication Technology		24	36	175	434	299	69	793	19
17 Financial Services		322	29	768	178	462	503	288	92
18 Real Estate, Leasing, and Other Business Services		5	92	64	24	972	51	216	1
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		1	0	-	1	1	7	7	0
21 Human Health and Social Care Services		0	0	-	-	0	-	-	-
22 Other Services		3	5	0	3	3	5	12	8
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		4,435	1,771	51,714	3,459	13,636	2,719	5,021	1,749
26 Total Gross Value Added		15,029	2,610	14,100	1,954	7,774	4,036	899	
27 Compensation		2,316	650	3,229	744	5,094	1,265	1,394	143
28 Other Taxes Less Subsidies on Production		-427	35	130	-53	43	92	-133	10
29 Operating Surplus, Gross		13,140	1,926	10,741	1,263	2,637	6,580	2,775	745
30 Consumption of Fixed Capital		957	318	2,631	629	392	408	654	46
31 Operating Surplus, Net		12,183	1,607	8,110	634	2,245	6,171	2,121	699
32 Total Output		19,465	4,382	65,814	5,413	21,410	10,656	9,057	2,648

-- = magnitude equals zero, FY = fiscal year, n.e.c. = not elsewhere classified.

(continued on next page)

Table 63: Supply and Use Tables, India, FY2011 (continued)
(billion Indian rupees)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	19,095	240	-	19,335	5,133	-468	24,000
2	-	-	-	-	-	4,382	7,734	-	12,115	1,891	279	14,285
3	-	-	-	-	-	6,046	-	-	6,046	-	-6	6,040
4	-	-	-	-	-	8,053	638	-	8,691	1,600	575	10,866
5	-	-	-	-	-	5,048	259	-	5,306	2,002	279	7,588
6	-	-	-	-	-	1,690	280	-	1,970	348	151	2,469
7	-	-	-	-	-	18,968	2,826	-	21,794	3,416	1,847	27,057
8	-	-	-	-	-	2,180	591	-	2,771	471	234	3,477
9	-	-	-	-	-	2,482	120	-	2,602	752	275	3,629
10	-	-	-	-	-	2,523	4,678	-	7,201	494	187	7,882
11	-	-	-	-	-	20,545	6,336	-	26,881	3,695	2,112	32,688
12	-	-	-	-	-	21,429	51	-	21,480	-	26	21,506
13	-	-	-	-	-	14,697	-	-	14,697	-14,586	8	118
14	-	-	-	-	-	2,649	-	-	2,649	-	8	2,657
15	-	-	-	-	-	9,057	814	-407	9,464	-5,216	58	4,307
16	-	9,223	-	-	-	9,223	2,330	-	11,553	-	271	11,824
17	6,498	-	-	-	-	6,498	481	-38	6,941	-	105	7,045
18	-	6,160	1,938	-	-	8,098	11	-	8,109	-	42	8,151
19	-	-	-	6,664	-	6,664	-	-	6,664	-	-	6,664
20	-	-	-	3,377	-	3,377	-	-	3,377	-	33	3,410
21	-	-	-	2,555	-	2,555	-	-	2,555	-	1	2,556
22	-	-	1,950	-	1,013	2,964	14	-	2,978	-	276	3,254
23	-	-	-	-	-	-	-445	445	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	6,498	15,383	3,888	12,597	1,013	178,223	26,958	-	205,181	-	6,294	211,475

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	-	235	-	13,928	9,381	-	146	546	24,000	
2	-	-	-	-	-	13,851	23	-	68	342	14,285	
3	344	390	222	291	38	4,363	1,673	-	-	4	6,040	
4	-	-	2	559	-	2,014	7,707	-	116	1,028	10,866	
5	16	3	21	24	1	1,853	3,722	-	118	1,894	7,588	
6	58	133	157	121	7	1,892	479	-	27	71	2,469	
7	322	823	557	794	20	19,910	2,642	-	403	4,102	27,057	
8	-	2	54	4	2	2,224	569	-	303	381	3,477	
9	-	-	-	-	-	3,457	31	-	37	104	3,629	
10	47	48	75	15	4	1,425	563	-	2,801	3,093	7,882	
11	27	173	67	95	7	16,151	2,163	-	11,111	3,264	32,688	
12	70	554	228	311	4	2,683	-	-	18,783	40	21,506	
13	1	6	6	10	1	89	29	-	-	-	118	
14	238	81	59	23	3	1,144	1,513	-	-	-	2,657	
15	86	47	65	257	16	1,368	2,462	-	-	477	4,307	
16	202	1,363	105	259	194	3,973	1,787	-	294	5,770	11,824	
17	244	838	167	300	114	4,305	2,310	-	-	430	7,045	
18	22	129	116	68	6	1,767	5,976	-	368	40	8,151	
19	-	-	-	-	-	-	-	6,664	-	-	6,664	
20	11	9	3	14	1	54	1,588	1,768	-	-	3,410	
21	3	-	-	9	0	13	1,816	727	-	-	2,556	
22	5	8	9	4	16	83	2,627	524	-	20	3,254	
23	-	-	-	-	-	-	-	-	-	-	-	
24	-	-	-	-	-	-	-	-	-	-	-	
25	1,695	4,607	1,913	3,393	433	96,547	49,064	9,684	-	34,575	21,605	211,475
26	4,802	10,776	1,974	9,204	580	81,676	-	-	-	-	-	-
27	1,340	2,637	954	6,964	393	27,124	-	-	-	-	-	-
28	4	304	36	20	3	64	-	-	-	-	-	-
29	3,459	7,834	984	2,220	184	54,488	-	-	-	-	-	-
30	68	1,604	216	1,201	47	9,171	-	-	-	-	-	-
31	3,390	6,230	768	1,019	138	45,316	-	-	-	-	-	-
32	6,498	15,383	3,888	12,597	1,013	178,223	-	-	-	-	-	-

Table 64: Supply and Use Tables, Indonesia, 2010
(billion rupiah)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		1,163,825	-	-	-	-	-	-	-
2 Ores and Minerals		-	940,237	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	56	318,736	-	-	175	-
4 Food Products, Beverages, and Tobacco		-	116	1,319,077	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	283,892	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	329,995	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	61	838,255	-	-	-	-	-
8 Rubber and Plastic Products		-	-	245,717	-	-	-	-	-
9 Nonmetallic Products		-	-	138,850	-	85,403	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	58	96,424	-	-	14	369	-
11 Metal Products, Machinery, and Equipment		-	7,617	1,017,956	-	2,862	-	-	-
12 Constructions and Construction Services		85	10,657	-	778	1,710,004	-	-	-
13 Wholesale and Retail Trade		-	3,850	1,367	-	-	1,360,684	1,557	505
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	66	437,237
15 Transport, Postal, and Courier Services		-	6,636	263	-	-	152	543,294	-
16 Information and Communication Technology		-	203	6,312	100	-	-	50	-
17 Financial Services		-	-	-	-	-	1,552	830	-
18 Real Estate, Leasing, and Other Business Services		-	29,068	257	50	1,785	3,173	5,513	2,492
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	10	-
21 Human Health and Social Care Services		-	-	-	-	-	-	129	-
22 Other Services		-	-	-	-	-	465	446	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		1,163,909	998,501	4,278,421	319,664	1,800,054	1,366,040	552,439	440,234

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishery Products	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		62,791	80	696,775	-	38,161	190	666	80,491
2 Ores and Minerals		3	102,761	430,804	38,369	91,619	121	2	6
3 Electricity, Town Gas, Steam, and Hot Water		543	2,055	48,834	145,426	3,858	13,758	3,062	1,741
4 Food Products, Beverages, and Tobacco		60,473	1,728	285,541	302	910	1,883	8,243	141,855
5 Textiles, Apparel, and Leather Products		1,378	758	97,118	193	3,592	5,403	216	336
6 Products of Wood, Paper, and Printed Matter		738	2,303	126,139	45	109,954	34,093	286	266
7 Coke Oven, Petroleum, and Chemicals Products		27,154	33,392	338,960	40,574	127,013	83,102	145,119	2,445
8 Rubber and Plastic Products		1,580	209	57,261	43	60,702	26,014	9,643	529
9 Nonmetallic Products		18	-	14,795	15	242,932	163	893	-
10 Furniture and Other Transportable Goods, n.e.c.		363	1,315	5,817	204	2,787	3,635	2,454	243
11 Metal Products, Machinery, and Equipment		8,107	29,242	501,001	6,021	383,908	47,229	40,539	2,834
12 Constructions and Construction Services		22,661	33,009	8,711	504	4,431	28,582	8,017	794
13 Wholesale and Retail Trade		3,000	3,943	1,983	309	2,963	10,989	13,284	352
14 Accommodation, Food, and Beverage Services		287	3,005	13,347	283	20,624	14,694	5,224	311
15 Transport, Postal, and Courier Services		616	12,580	16,453	1,068	14,066	29,882	30,000	394
16 Information and Communication Technology		356	2,892	48,064	1,790	15,478	31,512	10,171	2,374
17 Financial Services		11,802	16,981	39,991	2,404	14,978	55,852	10,162	2,047
18 Real Estate, Leasing, and Other Business Services		3,336	29,584	23,313	3,246	24,853	50,376	15,766	1,629
19 Public Administration		1,600	3,421	4,933	229	6,700	126	2,156	1,056
20 Education Services		-	122	641	64	974	1,107	271	65
21 Human Health and Social Care Services		8	862	2,939	168	1,469	1,695	528	17
22 Other Services		973	129	2,242	9	1,180	1,711	362	168
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		207,790	280,373	2,765,660	241,267	1,173,148	442,116	307,064	239,952
26 Total Gross Value Added		956,120	718,129	1,512,761	78,398	626,905	923,924	245,375	200,282
27 Compensation		245,483	117,406	457,140	20,825	252,963	266,637	87,670	70,355
28 Other Taxes Less Subsidies on Production		8,154	6,341	12,468	641	5,218	6,892	1,897	1,558
29 Operating Surplus, Gross		702,483	594,381	1,043,153	56,932	368,724	650,395	155,808	128,369
30 Consumption of Fixed Capital		-	-	-	-	-	-	-	-
31 Operating Surplus, Net		-	-	-	-	-	-	-	-
32 Total Output		1,163,909	998,501	4,278,421	319,664	1,800,054	1,366,040	552,439	440,234

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 64: Supply and Use Tables, Indonesia, 2010 (continued)
(billion rupiah)

Supply Table

	Domestic Production by Industry Group					Total Industry	Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13							
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	24,155	1,187,980	56,495	-	1,244,475	238,199	172	1,482,845
2	-	-	-	-	1,080	941,317	87,393	-	1,028,710	48,438	1,911	1,079,059
3	-	1	-	-	14,337	333,306	6,116	-	339,422	-	-51,616	287,806
4	-	-	-	-	264	1,319,457	83,568	-	1,403,026	318,674	115,743	1,837,443
5	-	1	-	-	56	283,948	58,028	-	341,977	60,131	10,165	412,272
6	-	1,261	-	-	-	331,257	27,576	-	358,833	88,674	3,464	450,970
7	-	188	-	-	1	838,505	349,504	-	1,188,009	139,562	-50,135	1,277,436
8	-	1	-	-	-	245,718	31,111	-	276,829	45,261	6,163	328,253
9	-	-	-	-	-	224,253	10,934	-	235,187	65,401	2,741	303,329
10	-	2,380	-	-	-	99,243	9,876	-	109,119	21,520	3,153	133,792
11	-	-	-	-	-	1,028,435	635,359	-	1,663,794	412,255	91,765	2,167,814
12	-	-	-	-	2,779	1,724,303	5,400	-	1,729,703	-	28,857	1,758,560
13	10	414	1,457	-	129	1,369,971	-	-	1,369,971	-1,236,764	2,214	135,421
14	-	-	-	-	2,826	440,130	44,479	-	484,608	-	2,932	487,540
15	-	-	506	-	36	550,888	92,069	-61,500	581,457	-211,526	-1,773	368,158
16	-	402,403	-	-	-	409,068	29,677	-	438,744	10,177	9,398	458,319
17	330,675	-	-	-	-	333,057	15,767	-4,944	343,880	-	-	343,880
18	143	2,147	404,259	-	392	449,280	41,252	-	490,531	-	3,741	494,272
19	-	-	-	418,489	-	418,489	5,746	-	424,236	-	-	424,236
20	-	-	-	311,201	-	311,211	3,070	-	314,281	-	-	314,281
21	-	-	-	149,186	-	149,315	5,553	-	154,868	-	-	154,868
22	-	-	339	-	118,740	119,990	5,191	-	125,181	-	1,559	126,740
23	-	-	-	-	-	-	-66,444	66,444	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	330,828	408,796	406,562	878,877	164,796	13,109,120	1,537,720	-	14,646,840	-	180,453	14,827,294

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	41	-	-	13,227	2,533	894,956	388,834	-	4,489	156,249	38,317	1,482,845
2	-	-	-	-	0	663,685	-	-	-	12,619	402,756	1,079,059
3	1,726	3,178	1,679	5,822	1,200	232,881	51,347	228	2,700	57	592	287,806
4	1,443	325	676	22,327	1,544	527,249	1,076,702	15,154	10,601	7,238	200,499	1,837,443
5	104	121	548	3,779	1,711	115,256	144,862	-	1,639	14,286	136,229	412,272
6	6,506	16,570	3,489	51,182	847	352,417	16,020	-	266	2,093	80,174	450,970
7	1,169	2,271	8,846	46,738	5,952	862,736	175,943	-	2,865	11,749	224,143	1,277,436
8	2,752	324	2,191	4,123	1,010	166,379	55,227	-	1	6,682	99,963	328,253
9	0	2	2,094	4,603	861	266,376	24,756	-	1	1,642	10,555	303,329
10	1,138	1,579	1,724	8,926	2,911	33,097	41,657	-	568	24,149	34,321	133,792
11	6,546	18,935	13,424	18,318	4,836	1,080,940	410,992	-	3	379,924	295,955	2,167,814
12	3,775	6,568	20,524	15,370	378	153,322	-	-	-	1,600,541	4,696	1,758,560
13	1,473	484	3,866	6,383	105	49,134	86,287	-	-	-	-	135,421
14	604	1,970	1,528	46,168	301	108,344	330,867	-	8,005	-	40,324	487,540
15	1,717	1,969	4,952	21,249	497	135,445	200,548	-	2,297	-	29,867	368,158
16	17,754	66,708	15,849	29,481	1,876	244,307	182,067	221	1,397	9,842	20,485	458,319
17	26,316	6,845	14,791	20,692	1,273	224,132	108,192	6,859	3,669	-	1,027	343,880
18	12,995	14,485	9,309	9,464	1,032	199,387	223,044	-	9,154	29,612	33,075	494,272
19	2,386	9,445	2,728	485	12	35,276	9,601	373,755	-	252	5,351	424,236
20	1,745	460	118	10,303	8	15,879	116,594	174,322	6,414	-	1,071	314,281
21	855	86	277	12,303	19	21,226	83,048	45,221	2,776	-	2,597	154,868
22	55	424	649	285	34,829	43,016	59,472	2,418	15,913	-	5,920	126,740
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	91,099	152,748	109,263	351,227	63,735	6,425,441	3,786,063	618,178	72,759	2,256,935	1,667,918	14,827,294
26	239,728	256,048	297,299	527,650	101,061	6,683,680	-	-	-	-	-	-
27	73,267	70,788	42,750	429,038	35,754	2,170,076	-	-	-	-	-	-
28	1,363	2,027	9,575	991	379	57,504	-	-	-	-	-	-
29	165,098	183,233	244,974	97,621	64,928	4,456,099	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	330,828	408,796	406,562	878,877	164,796	13,109,120	-	-	-	-	-	-

Table 65: Supply and Use Tables, Lao People's Democratic Republic, 2012
(million kip)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		17,513,984	-	-	-	-	-	-	-
2 Ores and Minerals		-	13,602,621	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	-	6,794,670	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	10,405,886	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	2,417,968	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	2,266,703	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	1,472,483	-	-	-	-	-
8 Rubber and Plastic Products ^a		-	-	-	-	-	-	-	-
9 Nonmetallic Products		-	-	1,586,691	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	980,170	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	891,268	-	-	-	-	-
12 Constructions and Construction Services		-	-	-	-	16,477,402	-	-	-
13 Wholesale and Retail Trade		-	-	-	-	-	14,449,126	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	5,863,430
15 Transport, Postal, and Courier Services		-	-	-	-	-	-	3,166,332	-
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services		-	-	-	-	-	-	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	-	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		17,513,984	13,602,621	20,021,168	6,794,670	16,477,402	14,449,126	3,166,332	5,863,430

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishery Products	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		943,344	7,655	5,612,049	499	52,219	14,408	-	397,951
2 Ores and Minerals		464	751,485	329,298	222,523	517,136	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		35,341	926,195	275,978	469,653	63,690	326,662	4,766	232,714
4 Food Products, Beverages, and Tobacco		351,275	19,383	1,549,375	-	-	7,437	860	1,770,575
5 Textiles, Apparel, and Leather Products		41,295	4,335	965,360	3,626	20,165	15,123	825	54,173
6 Products of Wood, Paper, and Printed Matter		16,662	930	662,442	5,881	273,769	104,074	3,616	51,537
7 Coke Oven, Petroleum, and Chemical Products		773,858	1,707,270	1,222,500	312,538	1,956,004	792,545	1,242,175	404,102
8 Rubber and Plastic Products ^a		-	-	-	-	-	-	-	-
9 Nonmetallic Products		706	19,879	228,956	2,342	2,910,764	3,383	1,253	3,842
10 Furniture and Other Transportable Goods, n.e.c.		7,717	26,616	30,971	75,595	25,378	32,729	24,062	12,574
11 Metal Products, Machinery, and Equipment		90,629	863,698	1,127,334	327,945	3,524,173	887,208	314,531	44,250
12 Constructions and Construction Services		7,512	59,298	2,243	26,325	577,775	109,809	723	24,537
13 Wholesale and Retail Trade		1,326	139,572	10,765	28,145	174,154	118,537	83,332	9,331
14 Accommodation, Food, and Beverage Services		3,314	758	3,925	9,115	18,819	48,542	2,953	17,388
15 Transport, Postal, and Courier Services		21,888	102,464	207,905	35,534	688,840	582,308	111,029	71,161
16 Information and Communication Technology		8,811	1,807	12,744	9,490	19,250	149,686	6,334	24,830
17 Financial Services		14,256	87,946	83,303	23,538	149,678	515,379	48,620	178,942
18 Real Estate, Leasing, and Other Business Services		17,267	24,626	135,277	9,165	185,219	920,907	47,528	172,692
19 Public Administration		-	274	-	-	-	-	-	-
20 Education Services		28	116	119	-	-	3,926	263	351
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	-	-	7,010	59	13,724
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents ^b		4,519	16,610	77,470	5,337	47,602	128,538	6,871	33,385
25 Total		2,340,211	4,760,918	12,538,013	1,567,251	11,204,635	4,768,212	1,899,799	3,518,059
26 Total Gross Value Added		15,173,772	8,841,703	7,483,155	5,227,419	5,272,767	9,680,913	1,266,532	2,345,371
27 Compensation	
28 Other Taxes Less Subsidies on Production	
29 Operating Surplus, Gross	
30 Consumption of Fixed Capital	
31 Operating Surplus, Net	
32 Total Output		17,513,984	13,602,621	20,021,168	6,794,670	16,477,402	14,449,126	3,166,332	5,863,430

... = not available, - = magnitude equals zero, n.e.c. = not elsewhere classified.

a Included in coke oven, petroleum, and chemical products (row 7).

b Refers to travel debits and credits.

(continued on next page)

Table 65: Supply and Use Tables, Lao People's Democratic Republic, 2012 (continued)
(million kip)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	17,513,984	390,050	-	17,904,034	1,898,194	153,654	19,955,881
2	-	-	-	-	-	13,602,621	180,995	-	13,783,616	16,754	699,839	14,500,208
3	-	-	-	-	-	6,794,670	512,000	-	7,306,670	-	223,499	7,530,169
4	-	-	-	-	-	10,405,886	1,458,156	-	11,864,042	3,863,424	1,568,782	17,296,249
5	-	-	-	-	-	2,417,968	685,949	-	3,103,917	844,529	133,412	4,081,858
6	-	-	-	-	-	2,266,703	534,144	-	2,800,847	483,936	87,924	3,372,707
7	-	-	-	-	-	1,472,483	9,445,015	-	10,917,497	1,497,791	1,207,552	13,622,840
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	1,586,691	1,261,168	-	2,847,858	462,306	26,156	3,336,320
10	-	-	-	-	-	980,170	389,153	-	1,369,323	311,282	71,675	1,752,280
11	-	-	-	-	-	891,268	18,224,755	-	19,116,024	3,833,365	2,242,471	25,191,860
12	-	-	-	-	-	16,477,402	350,057	-	16,827,459	-	116	16,827,576
13	-	-	-	-	-	14,449,126	-	-	14,449,126	-13,282,341	41,272	1,208,057
14	-	-	-	-	-	5,863,430	-	-	5,863,430	-	424,357	6,287,787
15	-	-	-	-	-	3,166,332	176,744	-	3,343,076	-	43,943	3,387,019
16	-	1,884,037	-	-	-	1,884,037	115,661	-	1,999,698	70,760	243,662	2,314,120
17	2,833,625	-	-	-	-	2,833,625	227,196	-	3,060,822	-	-	3,060,822
18	-	-	8,278,363	-	-	8,278,363	7,424	-	8,285,787	-	29,497	8,315,284
19	-	-	-	8,883,026	-	8,883,026	-	-	8,883,026	-	-	8,883,026
20	-	-	-	1,760,533	-	1,760,533	-	-	1,760,533	-	-	1,760,533
21	-	-	-	587,617	-	587,617	-	-	587,617	-	-	587,617
22	-	-	-	-	2,194,601	2,194,601	113,396	-	2,307,997	-	34,901	2,342,898
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	2,319,780	-	2,319,780	-	-	2,319,780
25	2,833,625	1,884,037	8,278,363	11,231,176	2,194,601	124,310,535	36,391,643	-	2,319,780	-	7,232,712	167,934,890

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	51	336	13,475	2,760	7,044,746	11,943,979	-	-	-1,390	968,546	19,955,881
2	-	-	543	-	21,396	1,842,846	44,523	-	-	0	12,612,840	14,500,208
3	34,400	18,832	45,052	259,101	78,484	2,770,868	738,095	-	-	0	4,021,206	7,530,169
4	-	-	1,103	5,986	227	3,706,222	12,266,396	-	-	795	1,322,836	17,296,249
5	-	309	8,316	19,641	20,872	1,154,039	1,326,083	-	-	486	1,601,250	4,081,858
6	22,781	104,209	15,859	193,020	45,108	1,499,888	231,712	-	-	-2	1,641,109	3,372,707
7	72,444	33,306	58,279	772,611	158,078	9,505,711	3,624,918	-	-	0	492,211	13,622,840
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	16,811	47,330	13,133	25,919	3,274,318	40,558	-	-	0	21,445	3,336,320
10	8,167	1,258	6,814	33,913	5,839	291,632	658,102	-	-	710,953	91,593	1,752,280
11	21,829	106,950	76,335	302,437	46,131	7,733,448	6,413,392	-	-	10,756,027	288,993	25,191,860
12	747	4,862	296,059	255,422	11,505	1,376,816	302,994	-	-	15,055,389	92,377	16,827,576
13	-	778	2,974	179,935	5,212	754,063	453,994	-	-	0	-	1,208,057
14	8,780	1,503	56,831	125,916	6,727	304,571	5,983,216	-	-	0	-	6,287,787
15	35,152	14,811	90,887	350,799	24,471	2,337,250	615,397	-	-	0	434,371	3,387,019
16	33,509	207,853	20,995	248,583	37,416	781,308	1,254,802	-	-	-9	278,019	2,314,120
17	808,782	10,143	47,305	200,034	21,158	2,189,083	803,515	29,273	-	0	38,950	3,060,822
18	185,327	28,372	265,034	420,736	63,079	2,475,228	5,840,056	-	-	0	-	8,315,284
19	-	-	1,252	205,974	1,654	209,154	86,036	8,330,351	-	0	257,485	8,883,026
20	1,446	784	603	24,605	521	32,764	525,751	1,202,018	-	0	-	1,760,533
21	-	-	-	-	-	-	271,242	316,375	-	-	-	587,617
22	82	209	1,908	39,460	7,457	69,908	2,272,976	-	-	13	-	2,342,898
23	-	-	-	-	-	-	-	-	-	-	-	-
24	47,278	14,171	62,106	128,880	7,180	579,945	-2,561,969	-	-	0	4,301,804	2,319,780
25	1,280,723	565,211	1,105,919	3,793,660	591,193	49,933,806	53,135,769	9,878,017	-	26,522,263	28,465,036	167,934,890
26	1,552,903	1,318,826	7,172,444	7,437,516	1,603,408	74,376,729	-	-	-	-	-	-
27	...	...	...	...	...	...	...	-	-	-	-	-
28	...	...	...	...	...	...	...	-	-	-	-	-
29	...	...	...	...	...	...	...	-	-	-	-	-
30	...	...	...	...	...	...	...	-	-	-	-	-
31	...	...	...	...	...	...	...	-	-	-	-	-
32	2,833,625	1,884,037	8,278,363	11,231,176	2,194,601	124,310,535	-	-	-	-	-	-

Table 66: Supply and Use Tables, Malaysia, 2010
(million ringgit)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		123,865	-	-	-	-	-	-	-
2 Ores and Minerals		-	107,183	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	7	41,358	-	-	-	-
4 Food Products, Beverages, and Tobacco		218	-	181,909	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		62	-	13,848	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	36,980	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	69	182,073	-	-	-	-	-
8 Rubber and Plastic Products		-	-	54,233	75	-	-	-	-
9 Nonmetallic Products		0	171	24,857	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	0	24,212	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		75	43	380,312	-	-	-	47	16
12 Constructions and Construction Services		4	7	2,367	-	90,400	-	38	0
13 Wholesale and Retail Trade		499	9	1,789	1,493	408	198,289	5	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	47,236
15 Transport, Postal, and Courier Services		3	29	-	-	-	-	77,560	0
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	259	-
18 Real Estate, Leasing, and Other Business Services		1,925	38	2,546	1,941	554	1,683	2,338	428
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	0	2,452	-	-	-	0
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		126,651	107,549	905,133	47,319	91,362	199,972	80,247	47,681

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishery Products	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		10,228	-	97,424	-	-	3,984	-	4,324
2 Ores and Minerals		59	1,576	87,949	4,550	2,564	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		969	109	11,661	6,435	365	696	694	2,610
4 Food Products, Beverages, and Tobacco		5,970	17	70,999	-	-	7,493	-	11,471
5 Textiles, Apparel, and Leather Products		13	11	5,708	-	13	1,077	59	177
6 Products of Wood, Paper, and Printed Matter		285	16	16,509	-	4,739	5,627	147	35
7 Coke Oven, Petroleum, and Chemicals Products		18,181	6,407	77,624	4,467	4,337	17,213	17,161	792
8 Rubber and Plastic Products		426	143	29,449	338	755	3,684	1,355	-
9 Nonmetallic Products		242	62	13,567	-	15,220	442	61	-
10 Furniture and Other Transportable Goods, n.e.c.		67	31	2,986	-	68	5,851	199	234
11 Metal Products, Machinery, and Equipment		2,111	4,110	243,227	3,045	23,562	16,490	6,656	1,432
12 Constructions and Construction Services		856	929	5,651	14	7,120	-	159	278
13 Wholesale and Retail Trade		522	253	2,291	161	239	1,062	349	134
14 Accommodation, Food, and Beverage Services		229	6	382	-	90	1,794	901	3,037
15 Transport, Postal, and Courier Services		1,630	1,818	10,756	265	326	3,974	16,583	263
16 Information and Communication Technology		107	52	1,953	280	213	1,240	813	689
17 Financial Services		5,799	1,061	13,105	259	422	5,144	870	390
18 Real Estate, Leasing, and Other Business Services		1,920	1,739	21,380	5,239	3,335	11,792	7,894	1,497
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	7,631	548	-	-	-	681
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		49,612	18,338	720,252	25,602	63,365	87,563	53,901	28,044
26 Total Gross Value Added		77,038	89,211	184,881	21,716	27,996	112,409	26,346	19,636
27 Compensation		14,139	4,941	52,556	2,032	19,759	30,487	7,500	7,923
28 Other Taxes Less Subsidies on Production		-170	2,582	224	5	216	2,965	139	406
29 Operating Surplus, Gross		63,070	81,688	132,101	19,680	8,021	78,957	18,707	11,308
30 Consumption of Fixed Capital		-	-	-	-	-	-	-	-
31 Operating Surplus, Net		-	-	-	-	-	-	-	-
32 Total Output		126,651	107,549	905,133	47,319	91,362	199,972	80,247	47,681

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 66: Supply and Use Tables, Malaysia, 2010 (continued)
(million ringgit)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	123,865	20,525	-	144,390	17,015	1,061	162,466
2	-	-	-	-	-	107,183	29,130	-	136,313	5,280	1	141,594
3	-	-	-	-	-	41,365	8	-	41,372	-	17	41,389
4	-	-	0	8	0	182,136	26,398	-	208,534	30,497	3,181	242,212
5	-	-	-	-	-	13,911	6,553	-	20,464	2,325	446	23,234
6	-	1,905	-	-	-	38,885	8,639	-	47,524	6,532	158	54,214
7	-	-	-	-	-	182,142	75,525	-	257,667	33,062	-4,153	286,577
8	-	-	-	-	-	54,308	8,181	-	62,489	9,611	314	72,414
9	-	-	-	-	-	25,028	4,607	-	29,635	4,561	240	34,436
10	-	623	251	-	-	25,085	10,511	-	35,596	4,509	149	40,254
11	-	89	1	-	706	381,288	331,589	-	712,877	61,516	13,805	788,197
12	-	0	1	-	-	92,817	1,783	-	94,601	-	-	94,601
13	-	-	-	-	-	202,491	479	-	202,971	-161,380	-	41,591
14	-	0	-	-	-	47,236	-	-	47,236	-	854	48,090
15	-	0	-	-	-	77,592	40,905	-30,961	87,537	-13,529	320	74,328
16	-	59,169	-	-	43	59,212	3,166	-	62,377	-	1,932	64,309
17	121,441	-	-	-	-	121,700	2,871	-	124,571	-	685	125,256
18	24,086	22,238	84,476	200	2,642	145,095	25,270	-	170,366	-	1,155	171,521
19	-	-	-	73,012	-	73,012	5,161	-	78,172	-	-	78,172
20	-	-	-	36,666	-	36,666	-	-	36,666	-	-	36,666
21	-	-	-	20,709	-	20,709	-	-	20,709	-	10	20,720
22	-	780	-	3	19,210	22,444	11,654	-	34,099	-	78	34,176
23	-	-	-	-	-	-	-30,961	30,961	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	145,528	84,803	84,728	130,599	22,600	2,074,171	581,995	-	-	-	20,253	2,676,418

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	8	76	2	116,045	26,768	-	-	4,359	15,294	162,466
2	-	-	0	0	-	96,697	141	-	-386	45,141	141,594	141,594
3	2,983	513	674	2,343	507	30,559	10,754	-	4	73	41,389	41,389
4	-	-	1	965	320	97,236	61,553	-	-	5,860	77,563	242,212
5	17	1	16	309	160	7,561	9,224	-	-	-1,295	7,745	23,234
6	2,408	2,098	1,592	1,316	15	34,786	4,430	-	215	14,784	54,214	54,214
7	316	130	743	8,778	360	156,508	30,389	-	2,460	97,219	286,577	286,577
8	-	-	349	381	0	36,880	5,027	-	-	2,146	28,360	72,414
9	-	-	22	36	0	29,651	1,012	-	153	3,621	34,436	34,436
10	1,942	106	639	863	1,073	14,058	5,449	-	3,913	16,834	40,254	40,254
11	71	4,452	1,320	5,267	848	312,592	37,749	-	112,247	325,609	788,197	788,197
12	509	1,469	1,446	5,138	60	23,630	6,835	-	58,815	5,321	94,601	94,601
13	155	25	90	22	6	5,308	35,577	-	0	705	41,591	41,591
14	3,999	30	95	1,419	140	12,124	35,964	-	2	0	48,090	48,090
15	1,804	154	1,847	3,912	262	43,592	13,635	-	0	17,101	74,328	74,328
16	5,840	18,087	1,529	1,589	875	33,267	28,605	43	0	2,395	64,309	64,309
17	43,490	8,230	2,962	185	540	82,455	36,558	-	0	6,242	125,256	125,256
18	6,956	17,838	16,936	18,247	4,176	118,950	26,001	644	7,888	18,038	171,521	171,521
19	-	-	-	-	-	-	64	77,828	-	281	78,172	78,172
20	-	-	-	1,049	-	1,049	15,779	19,471	366	-	36,666	36,666
21	1,212	-	10	447	-	1,670	10,276	8,117	658	-	20,720	20,720
22	-	4	213	2,210	3,102	14,390	15,409	445	537	39	3,356	34,176
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	71,700	53,139	30,493	54,551	12,447	1,269,008	417,199	106,547	1,563	196,417	685,684	2,676,418
26	73,827	31,665	54,235	76,048	10,153	805,163	-	-	-	-	-	-
27	27,321	6,872	15,292	67,704	3,813	260,337	-	-	-	-	-	-
28	-342	779	1,083	601	1,437	9,926	-	-	-	-	-	-
29	46,848	24,014	37,860	7,744	4,902	534,899	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	145,528	84,803	84,728	130,599	22,600	2,074,171	-	-	-	-	-	-

Table 67: Supply and Use Tables, Maldives, 2014
(million rufiyaa)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		6,031	-	38	-	-	-	-	-
2 Ores and Minerals		-	-	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	14	3,479	-	1	0	-
4 Food Products, Beverages, and Tobacco		0	-	3,077	178	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	371	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	257	-	21	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	-	-	-	2	-	-
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		-	-	162	-	4	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	61	47	-	0	-	-
11 Metal Products, Machinery, and Equipment		-	-	246	-	-	-	-	-
12 Constructions and Construction Services		-	-	-	-	8,642	-	-	-
13 Wholesale and Retail Trade		-	-	4	-	223	10,312	35	2
14 Accommodation, Food, and Beverage Services		-	-	-	4	-	-	72	37,992
15 Transport, Postal, and Courier Services		-	-	25	-	110	186	9,166	37
16 Information and Communication Technology		-	-	59	65	-	9	3	5
17 Financial Services		-	-	15	14	162	370	163	793
18 Real Estate, Leasing, and Other Business Services		-	-	0	-	-	-	3	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	22	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	33	-	-1	0	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		6,031	-	4,330	3,821	9,161	10,901	9,441	38,829

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		216	-	1,975	-	-	-	-	4,401
2 Ores and Minerals		-	-	-	-	747	-	-	25
3 Electricity, Town Gas, Steam, and Hot Water		14	-	109	57	68	567	55	13
4 Food Products, Beverages, and Tobacco		118	-	14	3	4	-	1	5,680
5 Textiles, Apparel, and Leather Products		19	-	181	-	0	-	0	1,131
6 Products of Wood, Paper, and Printed Matter		14	-	128	0	1,283	70	13	881
7 Coke Oven, Petroleum, and Chemicals Products		2,287	-	283	2,389	1,924	132	3,344	2,146
8 Rubber and Plastic Products		-	-	-	-	-	-	-	-
9 Nonmetallic Products		-	-	155	-	656	-	5	109
10 Furniture and Other Transportable Goods, n.e.c.		36	-	-	10	50	-	3	692
11 Metal Products, Machinery, and Equipment		95	-	53	276	457	396	240	691
12 Constructions and Construction Services		-	-	36	1	253	422	3	694
13 Wholesale and Retail Trade		-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services		-	-	3	0	0	31	67	148
15 Transport, Postal, and Courier Services		5	-	42	19	519	304	470	2,475
16 Information and Communication Technology		123	-	39	12	111	504	650	1,124
17 Financial Services		60	-	141	159	161	2,423	643	2,944
18 Real Estate, Leasing, and Other Business Services		49	-	46	17	218	654	123	1,450
19 Public Administration		2	-	10	2	19	170	10	104
20 Education Services		-	-	0	-	13	15	8	8
21 Human Health and Social Care Services		-	-	0	-	-	-	-	0
22 Other Services		-	-	0	-	1	17	41	98
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		3,038	-	3,214	2,944	6,485	5,706	5,676	24,813
26 Total Gross Value Added		2,993	-	1,116	877	2,676	5,195	3,766	14,015
27 Compensation		1,175	-	396	440	1,287	1,004	1,624	4,033
28 Other Taxes Less Subsidies on Production		-	-	-	-	1	13	7	282
29 Operating Surplus, Gross		1,818	-	720	437	1,388	4,177	2,134	9,700
30 Consumption of Fixed Capital		-	-	171	553	54	587	739	2,309
31 Operating Surplus, Net		1,818	-	549	-116	1,334	3,591	1,395	7,391
32 Total Output		6,031	-	4,330	3,821	9,161	10,901	9,441	38,829

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 67: Supply and Use Tables, Maldives, 2014 (continued)
(million rufiyaa)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	35	-	-	6,104	1,829	-	7,934	719	36	8,689
2	-	-	-	-	-	-	623	-	623	257	1	881
3	-	-	-	1	-	3,495	-	-	3,495	-	-854	2,641
4	-	-	-	-	-	3,255	5,228	-	8,483	1,700	692	10,876
5	-	-	-	-	-	371	1,045	-	1,416	848	102	2,366
6	-	13	-	1	0	293	1,425	-	1,718	1,090	49	2,857
7	-	-	-	-	-	2	11,653	-	11,655	4,536	359	16,550
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	166	854	-	1,021	108	30	1,158
10	-	-	-	-	-	108	1,064	-	1,172	354	84	1,610
11	-	10	-	-	-	256	8,678	-	8,934	3,147	1,350	13,430
12	-	-	-	-	-	8,642	125	-	8,767	-	141	8,908
13	-	1	-	0	-	10,577	-	-	10,577	-10,577	-	-
14	-	-	-	1	-	38,069	1,191	-	39,260	-	3,483	42,743
15	-	-	68	5	0	9,595	3,215	-2,156	10,654	-2,181	398	8,870
16	-	3,378	1,877	0	99	5,495	1,057	-	6,553	-	53	6,606
17	-	23	6,647	29	0	8,216	3,633	-	11,850	-	121	11,970
18	2,864	-	202	-	-	3,070	600	-40	3,630	-	-	3,630
19	-	-	-	6,684	-	6,684	82	-	6,766	-	18	6,784
20	-	-	-	2,066	-	2,088	666	-	2,754	-	-66	2,688
21	-	-	-	2,107	-	2,107	1,344	-	3,450	-	3	3,454
22	-	1	18	28	1,912	1,993	354	-	2,347	-	184	2,531
23	-	-	-	-	-	-	-2,196	2,196	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	2,864	3,427	8,848	10,923	2,012	110,587	42,471	-	153,057	-	6,184	159,241

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	21	-	0	6,612	1,503	-	-	4	569	8,689
2	-	-	65	-	-	837	24	-	-	19	-	881
3	81	131	52	584	6	1,738	839	-	-	64	-	2,641
4	-	-	-	-	0	5,820	3,293	-	-	122	1,641	10,876
5	0	0	5	17	0	1,353	985	-	-	28	1	2,366
6	23	2	65	146	8	2,633	218	-	-	6	1	2,857
7	-	0	27	359	489	13,379	968	-	-	92	2,111	16,550
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	62	-	-	987	138	-	-	33	0	1,158
10	-	-	-	0	-	790	558	-	-	209	54	1,610
11	-	20	104	63	0	2,394	1,348	-	-	9,409	280	13,430
12	47	4	790	160	0	2,408	639	3	-	5,858	-	8,908
13	-	-	-	-	-	-	-	-	-	-	-	-
14	4	0	3	340	13	610	1,191	-	-	-	40,942	42,743
15	30	5	25	232	56	4,180	1,323	59	-	-	3,308	8,870
16	42	1,127	196	109	88	4,126	1,124	104	-	-	1,251	6,606
17	134	412	576	438	170	8,262	3,598	111	-	-	-	11,970
18	229	6	139	400	15	3,347	280	2	-	-	-	3,630
19	-	105	11	86	1	519	23	6,134	-	-	107	6,784
20	51	2	1	329	0	427	603	1,658	-	-	-	2,688
21	-	-	-	56	-	56	714	2,682	-	-	2	3,454
22	20	1	5	32	1	217	637	28	-	-	1,649	2,531
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	661	1,814	2,146	3,350	849	60,696	20,004	10,782	-	15,844	51,916	159,241
26	2,203	1,613	6,701	7,573	1,163	49,891	-	-	-	-	-	-
27	421	519	666	6,143	741	18,450	-	-	-	-	-	-
28	-	149	-	-	1	454	-	-	-	-	-	-
29	1,782	944	6,035	1,430	421	30,986	-	-	-	-	-	-
30	70	550	1,305	1,095	1	7,434	-	-	-	-	-	-
31	1,712	394	4,730	335	419	23,553	-	-	-	-	-	-
32	2,864	3,427	8,848	10,923	2,012	110,587	-	-	-	-	-	-

Table 68: Supply and Use Tables, Mongolia, 2014
(million togrog)

Supply Table

Industry	Domestic Production by Industry Group							
	1	2	3	4	5	6	7	8
Products	Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products	4,113,107	19,007	46	-	-	-	-	-
2 Ores and Minerals	-	7,932,108	74,402	-	-	1,274	-	-
3 Electricity, Town Gas, Steam, and Hot Water	-	9,366	5,245	430,035	820	-	-	-
4 Food Products, Beverages, and Tobacco	-	6	2,686,042	-	210	96	-	93
5 Textiles, Apparel, and Leather Products	-	-	633,755	1	-	-	18	-
6 Products of Wood, Paper, and Printed Matter	-	5,218	169,035	-	116	-	162	-
7 Coke Oven, Petroleum, and Chemical Products	-	4,922	793,186	5	-	13,525	0	-
8 Rubber and Plastic Products	-	-	65,083	2,535	517	-	129	-
9 Nonmetallic Products	-	-	317,676	-	39,548	-	381	-
10 Furniture and Other Transportable Goods, n.e.c.	56,708	-	62,485	705	1,388	-	11	-
11 Metal Products, Machinery, and Equipment	-	754,134	367,165	-	37,413	11	243	-
12 Constructions and Construction Services	-	174,121	18,172	3,136	4,209,873	3,998	2,309	244
13 Wholesale and Retail Trade	-	12,901	32,773	995	132,896	3,741,850	2,377	16,894
14 Accommodation, Food, and Beverage Services	-	1,485	1,767	476	3,804	3,643	2,077	470,605
15 Transport, Postal, and Courier Services	-	1,960	378	218	7,395	21,629	2,741,487	15
16 Information and Communication Technology	-	-	33	208	425	1,973	118	-
17 Financial Services	-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services	8,406	348,682	108,486	530,296	37,208	141,511	7,697	9,696
19 Public Administration	-	-	-	-	-	-	-	-
20 Education Services	-	-	-	-	-	-	-	-
21 Human Health and Social Care Services	-	-	-	-	18	-	149	757
22 Other Services	-	7,378	-	120,362	395	-	1	339
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports	-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents	-	-	-	-	-	-	-	-
25 Total	4,178,222	9,271,286	5,335,729	1,088,971	4,472,024	3,929,510	2,757,158	498,642

Use Table

Industry	Intermediate Consumption by Industry Group							
	1	2	3	4	5	6	7	8
Products	Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products	306,354	9,664	1,320,114	1,496	11,388	86	424	32,950
2 Ores and Minerals	286	20,256	267,999	37,109	45,898	166	33	137
3 Electricity, Town Gas, Steam, and Hot Water	41	247,963	6,322	408,757	921	370	27	-
4 Food Products, Beverages, and Tobacco	46,176	12,164	304,521	1,828	1,639	10,924	1,638	139,214
5 Textiles, Apparel, and Leather Products	942	45,339	192,480	5,069	22,115	21,151	4,118	3,345
6 Products of Wood, Paper, and Printed Matter	991	18,120	155,663	1,202	146,384	6,467	4,508	4,731
7 Coke Oven, Petroleum, and Chemicals Products	205,459	982,766	287,406	56,826	320,143	210,515	830,097	21,513
8 Rubber and Plastic Products	13,322	105,333	105,216	1,773	71,032	67,318	14,542	4,161
9 Nonmetallic Products	-	46,591	173,605	5,075	736,881	1,557	2,593	1,333
10 Furniture and Other Transportable Goods, n.e.c.	44,509	11,138	8,067	8,888	28,313	4,337	577	1,734
11 Metal Products, Machinery, and Equipment	17,950	1,201,050	212,347	46,408	974,666	103,955	254,496	9,369
12 Constructions and Construction Services	10,458	562,242	5,047	6,743	444,543	25,332	2,775	3,232
13 Wholesale and Retail Trade	-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services	8,296	75,611	13,894	3,495	24,217	45,087	16,299	2,096
15 Transport, Postal, and Courier Services	88,256	492,591	46,285	14,059	127,197	332,682	236,887	8,433
16 Information and Communication Technology	-	40,362	15,442	1,988	49,655	67,769	37,265	3,139
17 Financial Services	337,808	482,941	77,618	30,244	97,177	135,432	78,739	3,111
18 Real Estate, Leasing, and Other Business Services	130,721	1,183,274	170,306	40,823	314,673	333,938	147,082	58,682
19 Public Administration	899	21,714	6,534	5,741	38,035	6,647	5,846	1,507
20 Education Services	194	20,477	3,081	373	2,139	1,324	395	400
21 Human Health and Social Care Services	7	11,872	5,280	176	15,081	6,562	5,992	201
22 Other Services	194	18,788	7,571	10,829	10,965	3,130	3,671	2,789
23 Direct Purchases in Domestic Market by Nonresidents	-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents	-	-	-	-	-	-	-	-
25 Total	1,212,861	5,610,255	3,384,795	688,903	3,483,063	1,384,749	1,648,004	302,078
26 Total Gross Value Added	2,965,360	3,661,031	1,950,934	400,068	988,961	2,544,761	1,109,155	196,565
27 Compensation	236,641	765,780	336,546	237,501	331,376	682,725	380,380	93,129
28 Other Taxes Less Subsidies on Production	-20,277	87,875	6,453	1,631	2,990	2,155	4,213	4,238
29 Operating Surplus, Gross	2,748,996	2,807,376	1,607,935	160,937	654,594	1,859,882	724,561	99,198
30 Consumption of Fixed Capital	19,966	455,570	167,082	140,585	59,718	125,945	102,386	17,373
31 Operating Surplus, Net	2,729,030	2,351,806	1,440,853	20,352	594,877	1,733,936	622,175	81,825
32 Total Output	4,178,222	9,271,286	5,335,729	1,088,971	4,472,024	3,929,510	2,757,158	498,642

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 68: Supply and Use Tables, Mongolia, 2014 (continued)
(million togrog)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	2	-	4,132,162	113,530	-	4,245,692	543,051	54,711	4,843,454
2	-	-	9,510	-	-	8,017,295	19,468	-	8,036,763	483,948	9,540	8,530,250
3	-	-	-	-	-	445,465	237,607	-	683,072	634	-5,048	678,659
4	-	-	-	-	-	2,686,446	858,200	-	3,544,646	702,928	465,295	4,712,870
5	-	-	-	-	-	633,774	416,210	-	1,049,984	228,558	56,549	1,335,090
6	-	17,354	53	3	-	191,940	248,492	-	440,432	89,848	34,322	564,602
7	-	-	-	-	-	811,638	2,839,048	-	3,650,686	936,207	336,898	4,923,790
8	-	-	-	-	-	68,264	305,330	-	373,594	85,104	37,281	495,978
9	-	-	397	-	-	358,002	450,302	-	808,304	165,679	66,301	1,040,283
10	-	-	314	-	-	121,610	167,233	-	288,843	55,302	19,707	363,852
11	-	-	5,134	-	-	1,164,101	4,143,685	-	5,307,785	1,186,385	540,892	7,035,063
12	-	99	624	-	-	4,412,576	162,466	-	4,575,041	-	128,242	4,703,283
13	-	3,152	22,145	2,644	1,269	3,969,897	-	-	3,969,897	-3,969,897	-	-
14	-	-	12,265	324	900	497,347	142,494	-	639,841	-	21,679	661,520
15	-	633	8,441	2,147	156	2,784,459	267,405	-	3,051,864	-507,746	6,735	2,550,852
16	-	731,698	-	-	-	14,233	748,686	-	158,349	-	25,328	932,363
17	1,321,303	-	4	1,988	-	1,323,294	261,539	-	1,584,834	-	61,617	1,646,451
18	-	152,891	3,419,265	10,840	31,193	4,806,171	1,109,569	-	5,915,740	-	206,795	6,122,535
19	-	-	-	1,515,545	-	1,515,545	-	-	1,515,545	-	-	1,515,545
20	-	-	-	1,297,037	10,172	1,307,209	172,265	-	1,479,474	-	-	1,479,474
21	-	-	228	662,206	2,522	665,880	103,792	-	769,672	-	-	769,672
22	-	3,928	16,074	447	487,055	635,977	-	-	635,977	-	8,482	644,459
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	508,733	-	508,733	-	-	508,733
25	1,321,303	909,755	3,494,453	3,493,183	547,500	41,297,737	12,685,716	-	53,983,453	-	2,075,327	56,058,780

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	79	761	25,096	1,758	1,710,170	1,043,026	-	-	1,618,592	471,665	4,843,454
2	-	159	528	62	233	372,867	33,259	-	-	-14,461	8,138,585	8,530,250
3	-	-	9	12	16	664,438	13,312	-	-	0	909	678,659
4	1,336	172	13,181	63,975	16,105	612,873	3,938,720	-	-	137,302	23,974	4,712,870
5	1,490	3,102	4,385	19,462	3,318	326,314	709,483	-	-	52,289	247,004	1,335,090
6	17,100	5,450	14,288	11,691	4,880	391,474	139,226	-	-	32,533	1,368	564,602
7	41,361	25,171	89,596	276,791	8,908	3,356,552	811,971	-	-	134,499	620,769	4,923,790
8	-	6,380	9,545	9,984	706	409,313	69,533	-	-	16,015	1,117	495,978
9	-	27	7,360	1,805	1,127	977,954	40,502	-	-	21,626	201	1,040,283
10	-	2,283	13,383	10,711	1,775	135,716	125,625	-	-	62,503	40,008	363,852
11	4,683	199,713	138,831	66,860	10,995	3,241,324	748,777	-	-	2,055,838	989,123	7,035,063
12	1,737	3,839	117,170	27,316	5,219	1,215,654	14,945	-	-	3,436,124	36,560	4,703,283
13	-	-	-	-	-	-	-	-	-	-	-	-
14	12,287	9,500	35,083	24,915	12,131	282,912	307,990	1,606	-	-	69,012	661,520
15	23,684	11,337	148,244	63,137	13,375	1,606,166	577,795	3,375	-	0	363,516	2,550,852
16	25,393	33,599	56,270	22,849	9,528	363,258	535,025	11,514	-	0	22,566	932,363
17	23,306	7,151	68,152	19,660	20,248	1,381,587	236,788	-	-	0	28,076	1,646,451
18	126,158	96,565	546,109	512,237	66,640	3,727,206	1,730,934	126,872	2,121	265,571	269,829	6,122,535
19	-	4,314	14,407	7,557	4,051	117,252	50,226	1,348,067	-	-	-	1,515,545
20	925	6,158	2,613	4,262	2,097	44,436	626,458	789,149	7,181	0	12,249	1,479,474
21	-	1,252	268	346	2,837	49,873	260,118	453,827	2,256	0	3,598	769,672
22	60	1,379	4,202	8,911	86,181	158,670	201,974	158,888	93,177	0	31,751	644,459
23	-	-	-	-	-	-	-	-241,532	-	-	-	-
24	-	-	-	-	-	-	508,733	-	-	0	-	508,733
25	279,521	417,630	1,284,384	1,177,638	272,129	21,146,010	12,482,892	2,893,298	104,735	7,818,432	11,613,413	56,058,780
26	1,041,782	492,124	2,210,070	2,315,545	275,371	20,151,728	-	-	-	-	-	-
27	281,605	143,522	340,943	1,880,507	141,829	5,852,486	-	-	-	-	-	-
28	7,139	1,071	12,456	2,620	1,675	114,239	-	-	-	-	-	-
29	753,037	347,531	1,856,671	432,418	131,867	14,185,003	-	-	-	-	-	-
30	57,761	107,191	129,550	298,499	25,926	1,707,550	-	-	-	-	-	-
31	695,276	240,340	1,727,121	133,919	105,942	12,477,453	-	-	-	-	-	-
32	1,321,303	909,755	3,494,453	3,493,183	547,500	41,297,737	-	-	-	-	-	-

Table 69: Supply and Use Tables, Nepal, FY2011
(million Nepalese rupees)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		628,769	-	39	-	-	-	-	-
2 Ores and Minerals		-	8,751	4,061	2,393	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	50	27,358	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	103,032	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	32,243	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	11,233	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	14,235	-	-	-	-	-
8 Rubber and Plastic Products		-	-	8,491	-	-	-	-	-
9 Nonmetallic Products		-	-	30,011	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	8,386	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	50,679	-	-	-	-	-
12 Constructions and Construction Services		-	-	122	-	171,910	-	-	-
13 Wholesale and Retail Trade		-	-	4,571	1,066	-	210,024	1,864	4,273
14 Accommodation, Food, and Beverage Services		-	-	115	-	-	-	2	62,138
15 Transport, Postal, and Courier Services		-	-	-	-	-	-	138,661	-
16 Information and Communication Technology		-	-	-	-	-	-	125	354
17 Financial Services		-	-	20,234	675	2,500	4,883	10,947	20
18 Real Estate, Leasing, and Other Business Services		-	-	-	-	-	-	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	440	-	-	-	500	-
21 Human Health and Social Care Services		-	-	559	-	-	-	-	14
22 Other Services		-	-	500	-	8,204	-	8,156	1,577
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		628,769	8,751	289,002	31,492	182,614	214,907	160,254	68,376

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		43,158	-	57,521	1,391	-	-	-	19,618
2 Ores and Minerals		-	-	9,140	-	9,876	-	-	33
3 Electricity, Town Gas, Steam, and Hot Water		2,384	153	3,018	1,358	967	2,494	429	6,167
4 Food Products, Beverages, and Tobacco		32,096	-	25,502	-	-	-	347	12,189
5 Textiles, Apparel, and Leather Products		-	-	5,447	-	-	-	206	1,261
6 Products of Wood, Paper, and Printed Matter		609	97	7,451	92	4,427	-	363	132
7 Coke Oven, Petroleum, and Chemicals Products		27,496	762	14,806	1,538	5,845	1,520	52,578	352
8 Rubber and Plastic Products		663	58	10,865	-	1,751	-	182	-
9 Nonmetallic Products		200	-	13,275	-	31,623	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		3,011	-	3,732	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		4,644	-	46,936	4,452	34,907	-	3,247	-
12 Constructions and Construction Services		-	-	710	-	-	-	-	-
13 Wholesale and Retail Trade		-	-	0	-	-	-	-	-
14 Accommodation, Food, and Beverage Services		-	-	559	238	-	-	1,583	4,344
15 Transport, Postal, and Courier Services		742	-	2,892	642	-	17,261	5,878	1,188
16 Information and Communication Technology		50	-	301	155	221	4,289	942	516
17 Financial Services		34,763	689	5,977	4,585	3,480	8,316	2,474	431
18 Real Estate, Leasing, and Other Business Services		17	-	341	-	-	1,093	1,861	1,013
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	145	-	-	157	-
21 Human Health and Social Care Services		785	-	-	-	-	-	10	47
22 Other Services		1	36	-	896	161	626	777	29
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		150,619	1,795	208,472	15,491	93,258	35,600	71,035	47,319
26 Total Gross Value Added		478,150	6,956	80,529	16,002	89,356	179,306	89,220	21,057
27 Compensation		104,764	2,603	37,414	7,660	63,827	54,336	33,877	10,913
28 Other Taxes Less Subsidies on Production		10	1	131	-	35	103	231	44
29 Operating Surplus, Gross		373,376	4,352	42,984	8,341	25,494	124,867	55,112	10,100
30 Consumption of Fixed Capital		-	-	-	-	-	-	-	-
31 Operating Surplus, Net		-	-	-	-	-	-	-	-
32 Total Output		628,769	8,751	289,002	31,492	182,614	214,907	160,254	68,376

-- = magnitude equals zero, FY = fiscal year, n.e.c. = not elsewhere classified.

(continued on next page)

Table 69: Supply and Use Tables, Nepal, FY2011 (continued)
(million Nepalese rupees)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	628,808	23,150	-406	651,552	128,516	1,323	781,392
2	-	-	-	-	-	15,206	4,524	-2	19,727	3,608	585	23,921
3	-	-	-	-	-	27,408	3,708	-	31,116	-	378	31,494
4	-	-	-	-	-	103,032	42,556	-2,689	142,899	48,985	17,081	208,964
5	-	-	-	-	-	32,243	38,956	-415	70,785	12,768	3,341	86,894
6	-	-	-	-	-	11,233	7,960	-319	18,875	4,875	1,568	25,319
7	-	-	-	-	-	14,235	124,495	-1,583	137,147	21,003	16,955	175,105
8	-	-	-	-	-	8,491	5,705	-129	14,068	8,199	1,508	23,775
9	-	-	-	-	-	30,011	14,362	-26	44,346	5,004	2,477	51,827
10	-	-	-	-	-	8,386	3,135	-331	11,191	3,280	1,987	16,458
11	-	-	-	-	-	50,679	128,787	-4,675	174,791	45,508	45,112	265,412
12	-	-	-	-	-	172,032	-	-	172,032	-	9,657	181,689
13	-	274	-	1,142	-	223,214	-	-	223,214	-223,214	-	-
14	-	5	-	-	-	62,260	-	-	62,260	-	3,528	65,787
15	-	40	-	-	-	138,701	46,248	-	184,949	-58,533	4,928	131,344
16	-	21,217	3,290	-	598	25,584	6,891	-	32,474	-	3,468	35,943
17	-	839	152,735	578	4,328	197,738	-	-	197,738	-	7,020	204,758
18	71,395	-	-	-	-	71,395	2,300	-	73,695	-	338	74,033
19	-	-	-	30,070	30,797	60,867	1,155	-	62,021	-	-	62,021
20	-	-	1,000	93,178	-	95,118	-	-	95,118	-	-	95,118
21	-	-	-	23,565	5,500	29,638	-	-	29,638	-	483	30,120
22	-	78	178	2,006	25,250	45,948	1,387	-	47,335	-	971	48,306
23	-	-	-	-	-	-	-10,574	10,574	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	71,395	22,452	157,203	150,539	66,472	2,052,227	444,744	-	2,496,971	-	122,707	2,619,678

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	-	11,823	-	133,511	542,530	-	1,575	93,298	10,477	781,392
2	-	-	33	-	-	19,082	4,265	-	100	-	473	23,921
3	847	1,002	883	1,334	855	21,890	9,371	-	-	-	233	31,494
4	-	-	-	4,138	-	74,272	128,121	-	-	2,064	4,506	208,964
5	-	-	1,136	375	-	8,426	50,652	-	-	283	27,534	86,894
6	15	275	26	371	200	14,058	10,171	-	359	-	731	25,319
7	2,476	13	40	5,608	719	113,753	57,302	-	280	-	3,770	175,105
8	-	-	-	-	-	13,520	8,315	-	-	578	1,362	23,775
9	-	-	-	-	-	45,098	5,543	-	-	987	199	51,827
10	-	-	9	-	-	6,751	7,515	-	-	713	1,478	16,458
11	2,007	-	7,405	-	862	104,459	112,446	-	-	36,471	12,036	265,412
12	-	-	20,486	-	-	21,196	-	-	160,493	-	-	181,689
13	0	-	-	-	-	0	-	-	-	-	-	-
14	1,443	100	2,390	1,847	2,730	15,234	44,503	-	6,050	-	-	65,787
15	1,599	3,285	2,771	4,750	3,949	44,958	50,492	-	8,500	-	27,395	131,344
16	1,516	292	1,880	558	411	11,132	21,132	-	-	-	3,679	35,943
17	10,533	542	10,182	6,347	6,315	94,633	67,863	-	21	42,241	-	204,758
18	605	260	1,317	758	898	8,162	65,784	-	-	-	87	74,033
19	-	-	-	-	595	595	9,866	46,026	-	-	5,535	62,021
20	-	0	1,975	813	710	3,800	9,761	78,666	2,890	-	-	95,118
21	243	-	20	107	300	1,512	7,356	19,467	1,786	-	-	30,120
22	-	67	413	2,053	982	6,042	4,431	20,967	782	-	16,084	48,306
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	21,284	5,837	50,968	40,881	19,526	762,085	1,217,418	165,126	21,604	337,867	115,579	2,619,678
26	50,112	16,614	106,236	109,658	46,946	1,290,142	-	-	-	-	-	-
27	13,869	5,188	19,016	126,664	25,808	505,940	-	-	-	-	-	-
28	6	33	48	-	32	673	-	-	-	-	-	-
29	36,236	11,393	87,172	-17,006	21,106	783,529	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-
32	71,395	22,452	157,203	150,539	66,472	2,052,227	-	-	-	-	-	-

Table 70: Supply and Use Tables, Pakistan, FY2011
(million Pakistan rupees)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		6,235,775	-	116,776	-	-	-	-	-
2 Ores and Minerals		-	553,679	-	309,663	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	1,612	2,369,717	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	2,486,119	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	2,460,874	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	395,796	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		134,772	-	1,471,491	-	-	-	-	-
8 Rubber and Plastic Products		-	-	109,582	-	-	-	-	-
9 Nonmetallic Products		-	-	338,237	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	416,386	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	1,027,519	-	-	-	-	-
12 Constructions and Construction Services		39,871	-	-	-	927,862	-	-	-
13 Wholesale and Retail Trade		-	-	-	-	-	4,160,770	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	805,460
15 Transport, Postal, and Courier Services		1,233	-	-	-	-	-	3,439,895	11,624
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Real Estate, Leasing, and Other Business Services ^b		-	40,395	129,176	-	-	-	177	-
18 Financial Services ^c		-	-	-	-	-	-	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services ^d		-	-	78,649	618	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		6,411,651	594,074	9,032,216	2,679,998	927,862	4,160,770	3,440,072	817,084

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		1,416,699	3,801	3,200,999	-	8,810	265	278,310	163,052
2 Ores and Minerals		2,590	1,282	679,698	766,126	36,140	242	31,165	14,455
3 Electricity, Town Gas, Steam, and Hot Water		23,140	5,407	169,408	884,390	8,087	2,173	2,971	77,257
4 Food Products, Beverages, and Tobacco		28,385	589	128,934	1,540	4,384	29,252	10,991	42,007
5 Textiles, Apparel, and Leather Products		3,122	425	261,653	88,806	3,890	2,252	216,556	33,752
6 Products of Wood, Paper, and Printed Matter		-	140	219,259	557	19,753	73,295	18,720	13,288
7 Coke Oven, Petroleum, and Chemical Products		264,359	3,875	411,822	317,870	75,465	108,396	778,867	11,438
8 Rubber and Plastic Products		1,215	196	58,794	3,920	161	1,241	2,940	41,813
9 Nonmetallic Products		11,798	9,942	43,698	1,197	169,807	1,165	11,552	11,127
10 Furniture and Other Transportable Goods, n.e.c.		-	-	161,770	31	2,015	142,946	137	-
11 Metal Products, Machinery, and Equipment		-	-	605,030	3,755	127,597	108,669	7,760	-
12 Constructions and Construction Services		-	-	-	-	21,686	15,423	-	-
13 Wholesale and Retail Trade		-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services		15,760	-	9,698	5,381	-	-	6,612	4,903
15 Transport, Postal, and Courier Services		7,754	5,263	233,230	178,183	75,225	122,591	176,481	15,099
16 Information, Communication, and Technology Services		-	-	-	-	-	-	-	-
17 Real Estate, Leasing, and Other Business Services ^b		23,021	56,944	206,369	8,634	1,902	13,382	161,401	58,864
18 Financial Services ^b		21,082	11,189	94,335	12,782	54,488	215,671	28,676	46,810
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services ^c		-	289	21,210	126	-	37,041	3,183	1,776
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		1,818,925	99,342	6,505,907	2,273,297	609,411	874,004	1,736,321	535,640
26 Total Gross Value Added		4,592,725	494,732	2,526,309	406,701	318,451	3,286,766	1,703,750	281,444
27 Compensation of Employees		1,646,018	11,629	747,146	53,449	153,450	654,944	522,858	65,001
28 Other Taxes Less Subsidies on Production		-	-	-	-	-	-	-	-
29 Operating Surplus, Gross		2,946,707	483,103	1,779,163	353,252	165,001	2,631,822	1,180,892	216,443
30 Consumption of Fixed Capital		211,188	22,510	170,776	41,962	27,896	15,903	172,320	-
31 Operating Surplus, Net		2,735,519	460,593	1,608,387	311,290	137,105	2,615,919	1,008,572	216,443
32 Total Output		6,411,651	594,074	9,032,216	2,679,998	927,862	4,160,770	3,440,072	817,084

-- = magnitude equals zero, FY = fiscal year, n.e.c. = not elsewhere classified.

a Includes business and production services; and information, communication, and technology services only.

b Includes real estate; and rental and leasing services.

c Includes education and health services.

d Included in other service activities.

(continued on next page)

Table 70: Supply and Use Tables, Pakistan, FY2011 (continued)
(million Pakistan rupees)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	6,352,550	258,007	-	6,610,558	998,725	26,380	7,635,663
2	-	-	-	-	-	863,342	465,432	-	1,328,775	123,653	315,061	1,767,488
3	-	-	-	-	-	2,371,329	434	-	2,371,763	-	-323,110	2,048,653
4	-	-	-	-	-	2,486,119	302,236	-	2,788,355	690,886	103,003	3,582,244
5	-	-	-	-	-	2,460,874	84,588	-	2,545,462	921,359	20,373	3,487,194
6	-	-	-	-	1,701	397,497	63,564	-	461,061	219,587	18,960	699,608
7	-	-	-	-	-	1,606,263	1,018,272	-	2,624,535	626,606	44,019	3,295,160
8	-	-	-	-	-	109,582	46,044	-	155,626	32,400	40,980	229,006
9	-	-	-	-	-	338,237	17,334	-	355,571	124,530	28,490	508,591
10	-	-	-	-	-	416,386	138,770	-	555,156	57,395	130,469	743,020
11	-	-	-	-	34,752	1,062,271	845,154	-	1,907,425	310,514	163,374	2,381,312
12	-	-	-	-	-	967,733	15,430	-	983,163	55,116	-	1,038,279
13	-	-	-	-	-	4,160,770	-	-	4,160,770	-4,160,770	-	-
14	-	-	-	-	-	805,460	-	-	805,460	-	-	805,460
15	-	-	-	-	-	3,452,752	54,350	-190,504	3,316,598	-	11,005	3,327,603
16	-	-	-	-	-	-	-	-	-	-	-	-
17	-	392,112	-	-	1,185,383	1,747,243	84,877	-	1,832,120	-	43,022	1,875,141
18	668,758	-	-	-	931,975	1,600,733	24,500	-3,888	1,621,345	-	65	1,621,410
19	-	-	-	1,404,194	-	1,404,194	-	-	1,404,194	-	-	1,404,194
20	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	607,309	236,839	923,415	243,031	-	1,166,446	-	6,795	1,173,241
23	-	-	-	-	-	-	-194,392	194,392	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	668,758	392,112	-	2,011,503	2,390,650	33,526,750	3,467,632	-	36,994,382	-	628,887	37,623,268

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	-	241	1,378	5,073,555	2,326,755	-	-	85,491	149,861	7,635,663
2	150	421	-	11,239	1,977	1,545,486	196,960	-	-	7,054	17,988	1,767,488
3	1,352	3,785	-	66,347	16,926	1,261,243	787,316	-	-	-	94	2,048,653
4	-	-	-	547	340	246,968	3,005,475	-	-	38,268	291,532	3,582,244
5	155	6,626	-	39,459	1,295	657,993	1,466,687	-	-	107,237	1,255,276	3,487,193
6	4,563	4,432	-	34,004	3,353	391,364	292,706	-	-	9,456	6,083	699,608
7	16,241	13,597	-	351,805	11,497	2,365,232	769,311	-	-	39,431	121,186	3,295,160
8	-	3,293	-	1,281	12,626	127,480	89,488	-	-	2,618	9,420	229,006
9	-	627	-	-	3,516	264,429	192,451	-	-	8,175	43,535	508,591
10	-	89	-	-	699	307,687	293,925	-	-	54,708	86,701	743,020
11	-	2,247	-	12,082	8,149	875,289	210,625	-	-	1,217,627	77,771	2,381,312
12	-	-	-	-	-	37,109	-	-	-	996,830	4,341	1,038,279
13	-	-	-	-	-	-	-	-	-	-	-	-
14	1,153	-	-	-	3,049	46,556	758,904	-	-	-	-	805,460
15	345	631	-	88,619	6,434	909,854	2,276,880	-	-	-	140,869	3,327,603
16	-	-	-	-	-	-	-	-	-	-	-	-
17	52,989	83,598	-	78,825	77,424	823,351	960,125	-	-	13,852	77,813	1,875,142
18	48,312	61,544	-	92,770	139,519	827,179	771,790	-	-	-	22,441	1,621,410
19	-	-	-	-	-	-	-	1,404,194	-	-	-	1,404,194
20	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-
22	7,151	61	-	41,909	5,678	118,423	431,890	375,227	-	-	247,700	1,173,241
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	132,412	180,950	-	819,128	293,860	15,879,199	14,831,290	1,779,421	-	2,580,748	2,552,610	37,623,268
26	536,346	211,162	-	1,192,376	2,096,790	17,647,551	-	-	-	-	-	-
27	77,153	37,786	-	619,813	365,096	4,954,343	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-
29	459,193	173,376	-	572,563	1,731,694	12,693,208	-	-	-	-	-	-
30	22,700	21,357	-	22,184	310,486	1,039,282	-	-	-	-	-	-
31	436,493	152,019	-	550,379	1,421,208	11,653,926	-	-	-	-	-	-
32	668,758	392,112	-	2,011,503	2,390,650	33,526,750	-	-	-	-	-	-

Table 71: Supply and Use Tables, Sri Lanka, 2011
(million Sri Lanka rupees)

Supply Table

Products	Domestic Production by Industry Group							
	1	2	3	4	5	6	7	8
	Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products	805,460	-	4,072	-	-	-	-	-
2 Ores and Minerals	-	188,476	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water	1,623	-	-	169,500	-	-	-	-
4 Food Products, Beverages, and Tobacco	6,194	-	1,217,535	-	-	78,538	-	-
5 Textiles, Apparel, and Leather Products	-	-	628,336	-	-	17,356	-	-
6 Products of Wood, Paper, and Printed Matter	-	-	121,875	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products	-	-	339,242	-	-	-	-	-
8 Rubber and Plastic Products	15,711	-	146,741	-	-	-	-	-
9 Nonmetallic Products	-	-	211,945	-	6,587	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.	-	-	181,640	-	-	13,563	-	-
11 Metal Products, Machinery, and Equipment	-	-	172,159	-	-	-	-	-
12 Constructions and Construction Services	860	-	6,038	906	981,826	-	-	-
13 Wholesale and Retail Trade	8,670	32	121,699	-	-	949,248	645	-
14 Accommodation, Food, and Beverage Services	-	-	-	-	-	-	-	217,232
15 Transport, Postal, and Courier Services	7,255	-	-	-	-	10,865	1,415,610	2,544
16 Information and Communication Technology	-	-	-	-	-	5,874	-	-
17 Financial Services	13,952	-	46,529	286	4,442	9,143	-	-
18 Real Estate, Leasing, and Other Business Services	-	-	-	-	-	-	-	-
19 Public Administration	-	-	-	-	-	-	-	-
20 Education Services	-	-	-	-	-	-	-	-
21 Human Health and Social Care Services	-	-	-	-	-	-	-	-
22 Other Services	-	-	-	11,421	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports	-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents	-	-	-	-	-	-	-	-
25 Total	859,726	188,507	3,197,811	182,113	992,854	1,084,587	1,416,255	219,776

Use Table

Products	Intermediate Consumption by Industry Group							
	1	2	3	4	5	6	7	8
	Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products	17,433	2,228	497,362	-	1,987	4,586	-	38,649
2 Ores and Minerals	714	-	244,297	6,809	162,427	1,947	2	123
3 Electricity, Town Gas, Steam, and Hot Water	4,580	10,240	57,665	14,328	1,168	2,750	6,283	10,201
4 Food Products, Beverages, and Tobacco	17,560	402	244,476	133	-	17,034	20,121	39,225
5 Textiles, Apparel, and Leather Products	1,554	128	294,854	5,131	213	31,904	18,024	219
6 Products of Wood, Paper, and Printed Matter	97	802	66,224	586	4,512	5,372	10,325	2,350
7 Coke Oven, Petroleum, and Chemicals Products	136,010	13,949	145,011	29,339	27,987	15,009	278,851	6,852
8 Rubber and Plastic Products	10,990	373	45,729	2,040	1,757	7,261	64,702	75
9 Nonmetallic Products	81	84	45,176	191	205,014	-	228	504
10 Furniture and Other Transportable Goods, n.e.c.	8	0	2,420	550	95	7,454	10,398	320
11 Metal Products, Machinery, and Equipment	1,678	1,438	132,940	3,381	76,803	10,788	44,649	71
12 Constructions and Construction Services	288	83	2,083	59	3,178	198	169	3,206
13 Wholesale and Retail Trade	-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services	-	77	22	28	164	4,618	891	-
15 Transport, Postal, and Courier Services	15	431	2,516	9,684	65	48,174	58,054	54
16 Information and Communication Technology	2,045	1,060	20,340	3,739	18	24,123	22,240	896
17 Financial Services	25,672	3,130	27,416	12,739	11	6,493	32,405	288
18 Real Estate, Leasing, and Other Business Services	3,436	311	35,575	7,872	55,727	45,878	57,527	3,596
19 Public Administration	-	-	-	-	-	72	201	-
20 Education Services	-	-	-	-	-	-	46	-
21 Human Health and Social Care Services	-	-	-	-	-	-	88	-
22 Other Services	-	-	3,638	21	13	4,820	2,716	702
23 Direct Purchases in Domestic Market by Nonresidents	-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents	-	-	-	-	-	-	-	-
25 Total	222,159	34,735	1,867,744	96,629	541,140	238,480	627,919	107,334
26 Total Gross Value Added	637,567	153,772	1,330,067	85,484	451,714	846,106	788,335	112,442
27 Compensation	187,670	35,760	192,128	33,428	80,434	19,783	114,939	44,530
28 Other Taxes Less Subsidies on Production	-	37	236	73	3,295	11,260	558	826
29 Operating Surplus, Gross	449,897	117,974	1,137,702	51,982	367,986	815,063	672,838	67,086
30 Consumption of Fixed Capital	44,302	16,596	47,496	42,185	17,269	144,718	21,768	15,145
31 Operating Surplus, Net	405,595	101,378	1,090,206	9,797	350,716	670,345	651,070	51,942
32 Total Output	859,726	188,507	3,197,811	182,113	992,854	1,084,587	1,416,255	219,776

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 71: Supply and Use Tables, Sri Lanka, 2011 (continued)
(million Sri Lanka rupees)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	4,198	813,731	123,649	-	937,380	220,519	38,726	1,196,624
2	-	-	-	-	-	188,476	249,198	-	437,673	69,180	8,503	515,356
3	-	-	-	-	-	171,123	3	-	171,126	185	7,200	178,511
4	-	-	-	-	-	1,302,267	201,632	-	1,503,900	402,991	106,344	2,013,234
5	-	-	-	-	-	645,691	263,296	-	908,988	201,995	31,686	1,142,668
6	-	-	8,142	-	-	130,017	64,328	-	194,345	40,671	8,789	243,806
7	-	-	-	-	-	339,242	465,925	-	805,167	158,448	-11,044	952,571
8	-	-	-	-	-	162,452	43,771	-	206,223	57,119	17,964	281,307
9	-	-	-	-	-	218,532	58,789	-	277,320	79,329	20,412	377,062
10	-	-	-	-	-	195,203	29,531	-	224,735	90,615	11,173	326,523
11	-	-	875	-	-	173,035	792,936	-	965,970	233,658	109,892	1,309,520
12	-	44	-	-	-	989,673	742	-	990,415	-	41,640	1,032,055
13	-	-	-	-	-	1,080,294	-	-	1,080,294	-1,080,294	-	-
14	-	-	-	-	-	217,232	-	-	217,232	-	9,140	226,372
15	-	-	-	-	-	1,436,274	181,810	-125,411	1,492,673	-474,416	40,470	1,058,727
16	-	134,317	112,582	-	228	253,001	48,922	-	301,923	-	10,645	312,568
17	903	2,376	543,927	-	511,533	1,133,090	-	-	1,133,090	-	47,674	1,180,764
18	355,215	-	-	-	-	355,215	13,104	-6,825	361,493	-	14,945	376,439
19	-	-	-	450,030	-	450,030	-	-	450,030	-	18,935	468,964
20	-	-	-	165,919	-	165,919	-	-	165,919	-	6,981	172,900
21	-	-	-	193,883	-	193,883	-	-	193,883	-	8,158	202,041
22	-	660	-	-	743,034	755,116	-	-	755,116	-	31,771	786,887
23	-	-	-	-	-	-	-132,236	132,236	-	-	-	-
24	-	-	-	-	-	-	55,431	-	55,431	-	-	55,431
25	356,118	137,397	665,527	809,832	1,258,992	11,369,495	2,460,830	-	13,830,325	-	580,002	14,410,328

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	-	11	2,999	6,673	571,927	536,182	-	-	36,943	51,572	1,196,624
2	-	-	4,965	3	1,872	423,159	3,731	-	-	64,801	23,665	515,356
3	4,732	7,866	11,378	4,229	9,092	144,512	33,364	-	-	634	-	178,511
4	2,995	57	729	5,946	40,425	389,103	1,313,191	-	-	62,060	248,880	2,013,234
5	193	217	2,263	1,041	17,221	372,963	217,944	-	-	67,793	483,969	1,142,668
6	9,185	2,466	17,447	1,351	56,771	177,488	16,701	-	-	14,854	34,762	243,806
7	95	348	15,609	15,102	34,450	718,611	178,284	-	-	-11,014	66,690	952,571
8	84	1,235	926	-	1,900	137,072	17,454	-	-	23,481	103,299	281,307
9	-	2,351	13,178	-	2,424	269,231	12,044	-	-	87,236	8,551	377,062
10	2,514	1,276	16,699	351	15,926	58,010	58,690	-	-	131,141	78,681	326,523
11	249	43,912	12,722	2,424	48,814	379,868	69,714	-	-	790,310	69,629	1,309,520
12	-	20	14,461	50	32,315	56,111	42,649	-	-	928,554	4,741	1,032,055
13	-	-	-	-	-	-	-	-	-	-	-	-
14	187	137	2,808	644	10,532	20,108	206,263	-	-	-	-	226,372
15	2,543	1,850	2,466	8,122	39,573	173,549	731,074	-	-	-	154,104	1,058,727
16	22,227	17,533	20,022	1,905	54,490	190,637	43,719	-	-	-	78,211	312,568
17	21,904	17,050	36,106	2,179	154,605	339,999	628,985	-	-	211,780	-	1,180,764
18	5,652	3,024	6,302	3,682	7,231	235,814	122,463	8,152	-	-	10,010	376,439
19	-	-	448	8,520	-	9,241	31,408	428,316	-	-	-	468,964
20	-	1	299	14	12	372	68,215	104,313	-	-	-	172,900
21	-	-	-	8,481	6,378	14,946	109,957	77,138	-	-	-	202,041
22	13	234	695	2,670	32,148	47,669	739,217	-	-	-	-	786,887
23	-	-	-	-	-	-	-91,802	-	-	-	-	-
24	-	-	-	-	-	-	55,431	-	-	-	-	55,431
25	72,574	99,579	179,533	69,713	572,852	4,730,391	5,144,879	617,918	-	2,408,574	1,508,565	14,410,328
26	283,544	37,819	485,994	740,119	686,140	6,639,104	-	-	-	-	-	-
27	99,936	20,466	121,139	677,408	256,465	1,884,086	-	-	-	-	-	-
28	3,959	1,302	1,602	38	1,541	24,729	-	-	-	-	-	-
29	179,649	16,051	363,253	62,672	428,134	4,730,289	-	-	-	-	-	-
30	12,407	886	21,769	51,889	26,166	462,596	-	-	-	-	-	-
31	167,243	15,165	341,484	10,783	401,968	4,267,693	-	-	-	-	-	-
32	356,118	137,397	665,527	809,832	1,258,992	11,369,495	-	-	-	-	-	-

Table 72: Supply and Use Tables, Taipei, China, 2011
(million NT dollars)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		517,568	-	-	-	-	-	-	-
2 Ores and Minerals		-	28,944	20,909	178	161	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	124,016	669,285	-	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	781,502	-	-	24,286	-	191
5 Textiles, Apparel, and Leather Products		-	-	559,058	71	-	393	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	369,678	-	-	424	1	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	4,278,942	140	-	216	-	-
8 Rubber and Plastic Products		-	-	545,194	-	-	-	-	-
9 Nonmetallic Products		-	-	436,060	308	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	256,081	66	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	10,048,523	11	703	1,532	-	-
12 Constructions and Construction Services		-	-	9,003	11,428	1,355,244	1,594	33	-
13 Wholesale and Retail Trade		-	187	712,140	1,964	8,739	3,309,477	4,734	3,015
14 Accommodation, Food, and Beverage Services		-	-	1,115	-	-	6,854	-	648,230
15 Transport, Postal, and Courier Services		773	346	17,393	1,832	643	18,931	1,047,775	-
16 Information and Communication Technology		-	2	1,879	199	82	2,072	1,874	26
17 Financial Services		-	-	-	16	-	174	-	-
18 Real Estate, Leasing, and Other Business Services		42,345	10	557,595	4,014	16,062	110,013	35,759	3,041
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	1	-	-	-	-
22 Other Services		499	-	4,420	163,746	7	4,982	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		561,185	29,489	18,723,508	853,259	1,381,641	3,480,948	1,090,176	654,503

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishery Products	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		49,054	-	342,342	21	4,331	3,703	-	31,484
2 Ores and Minerals		18	771	1,239,228	348,735	47,077	53	49	-
3 Electricity, Town Gas, Steam, and Hot Water		4,503	133	405,754	78,200	5,043	62,079	9,757	26,127
4 Food Products, Beverages, and Tobacco		125,957	-	201,914	4	-	12,109	101	155,227
5 Textiles, Apparel, and Leather Products		3,792	46	270,497	84	1,577	3,253	312	5,771
6 Products of Wood, Paper, and Printed Matter		2,160	181	272,810	631	44,145	68,289	3,314	14,810
7 Coke Oven, Petroleum, and Chemicals Products		58,277	6,238	3,687,644	71,851	55,334	73,617	262,397	13,118
8 Rubber and Plastic Products		3,360	409	358,373	3,912	28,935	55,993	6,675	13,583
9 Nonmetallic Products		94	48	335,527	2,262	204,901	238	4	2,208
10 Furniture and Other Transportable Goods, n.e.c.		2,278	11	38,427	2,838	4,264	5,268	1,321	2,417
11 Metal Products, Machinery, and Equipment		6,800	2,346	6,302,935	32,774	496,708	31,200	13,311	4,651
12 Constructions and Construction Services		1,394	315	57,467	4,245	1,947	30,199	11,943	2,776
13 Wholesale and Retail Trade		624	19	54,112	373	1,216	64,519	9,010	1,070
14 Accommodation, Food, and Beverage Services		344	46	86,699	3,279	2,899	61,312	12,804	1,244
15 Transport, Postal, and Courier Services		1,699	472	95,330	3,449	7,447	68,353	186,514	1,941
16 Information and Communication Technology		266	63	33,226	720	4,026	48,927	5,014	3,190
17 Financial Services		3,690	203	194,181	7,867	9,107	56,882	15,429	6,945
18 Real Estate, Leasing, and Other Business Services		48,723	907	508,278	31,311	69,631	359,377	144,619	36,576
19 Public Administration		1,678	54	35,808	4,964	6,253	20,963	6,661	1,119
20 Education Services		253	-	3,904	662	749	370	262	60
21 Human Health and Social Care Services		23	-	152	5	4	10	10	8
22 Other Services		415	53	96,675	32,116	2,994	10,621	2,228	1,130
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		315,402	12,315	14,621,283	630,303	998,588	1,037,335	691,735	325,455
26 Total Gross Value Added		245,783	17,174	4,102,225	222,956	383,053	2,443,613	398,441	329,048
27 Compensation		61,376	5,727	1,664,002	69,276	277,993	966,933	202,523	190,329
28 Other Taxes Less Subsidies on Production		-24,542	699	219,825	3,159	4,694	49,577	6,134	4,619
29 Operating Surplus, Gross		208,949	10,748	2,218,398	150,521	100,366	1,427,103	189,784	134,100
30 Consumption of Fixed Capital		16,054	3,707	1,101,020	144,889	22,156	133,602	98,203	24,353
31 Operating Surplus, Net		192,895	7,041	1,117,378	5,632	78,210	1,293,501	91,581	109,747
32 Total Output		561,185	29,489	18,723,508	853,259	1,381,641	3,480,948	1,090,176	654,503

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 72: Supply and Use Tables, Taipei,China, 2011 (continued)
(million NT dollars)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	517,568	174,025	-	691,593	276,224	8,643	976,460
2	-	-	-	-	-	50,192	1,541,077	-	1,591,269	35,213	952	1,627,434
3	-	-	-	-	-	793,301	5,501	-	798,802	18,988	7,327	825,117
4	-	-	-	-	-	805,979	236,847	-	1,042,826	521,586	76,435	1,640,847
5	-	-	-	-	-	559,522	131,516	-	691,038	200,763	16,998	908,799
6	-	100,885	224	-	27	471,239	154,082	-	625,321	196,010	9,834	831,165
7	-	-	-	-	-	4,279,298	1,747,024	-	6,026,322	553,131	32,789	6,612,242
8	-	-	-	-	-	545,194	154,364	-	699,558	109,043	7,954	816,555
9	-	-	-	-	-	436,368	116,355	-	552,723	76,243	3,593	632,559
10	-	-	31	-	-	256,178	84,755	-	340,933	168,911	9,346	519,190
11	-	1,772	-	-	-	10,052,541	4,145,065	-	14,197,606	1,470,082	144,841	15,812,529
12	-	-	-	-	-	1,377,302	209	-	1,377,511	-	31,994	1,409,505
13	2,033	5,427	3,917	77,582	8,800	4,138,015	55,160	-	4,193,175	-3,479,933	1,265	714,507
14	-	1,227	2,169	-	11,000	670,595	226,197	-	896,792	-	14,192	910,984
15	-	7	447	-	27	1,088,174	198,654	-	1,286,828	-177,655	18,135	1,127,308
16	922	458,716	2,367	218	20	468,377	35,800	-	504,177	-	8,390	512,567
17	1,301,969	-	119	-	-	1,302,278	50,328	-	1,352,606	-	-	1,352,606
18	18,490	235,593	2,327,524	78,426	120,901	3,549,773	325,319	-	3,875,092	-	23,014	3,898,106
19	-	-	32,652	1,346,901	-	1,379,553	3,553	-	1,383,106	-	-2,143	1,380,963
20	-	-	23	800,622	-	800,645	20,645	-	821,290	-	-	821,290
21	-	-	-	583,274	-	583,275	3,010	-	586,285	-	-	586,285
22	-	55,491	1,148	-	621,023	851,316	47,451	-	898,767	31,394	13,346	943,507
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	1,323,414	859,118	2,370,621	2,887,023	761,798	34,976,683	9,456,937	-	44,433,620	-	426,905	44,860,525

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	-	51	569	2,872	1,290	435,717	476,410	-	-	11,455	52,878	976,460
2	-	-	69	15	-	1,636,015	-	-	-	-10,695	2,114	1,627,434
3	5,538	7,137	13,136	41,254	15,109	673,770	151,006	-	-	3	338	825,117
4	-	282	851	6,839	9,839	513,123	1,046,183	-	-	9,607	71,934	1,640,847
5	1	411	2,745	2,672	2,697	293,858	273,061	-	-	1,467	340,413	908,799
6	20,378	67,928	47,383	43,775	15,462	601,266	117,919	-	-	24,188	87,792	831,165
7	2,360	7,144	42,936	140,697	33,775	4,455,388	368,562	92,674	-	-1,372	1,696,990	6,612,242
8	33	1,109	4,760	7,583	9,185	493,910	53,776	-	-	-5,655	274,524	816,555
9	-	42	692	4,589	565	551,170	15,197	-	-	-3,440	69,632	632,559
10	3,301	1,574	3,810	41,024	9,791	116,324	174,954	7,474	-	21,619	198,819	519,190
11	3,068	41,547	45,589	117,830	43,616	7,142,375	930,405	454	-	1,398,969	6,340,326	15,812,529
12	3,074	12,848	100,714	20,762	3,306	250,990	4,766	56	-	1,153,661	32	1,409,505
13	170	26,800	9,653	2,399	3,778	173,743	-	-	-	-	540,764	714,507
14	11,922	5,166	11,095	31,597	18,836	247,243	546,190	4,204	-	-	113,347	910,984
15	12,131	7,275	11,519	25,670	5,367	427,167	316,571	6,125	-	-	377,445	1,127,308
16	10,876	84,514	24,233	38,219	7,799	261,073	203,920	2,707	-	26,482	18,385	512,567
17	212,657	6,374	126,528	38,753	8,418	687,034	610,089	9,164	-	-	46,319	1,352,606
18	102,672	75,407	133,108	104,274	43,894	1,658,777	1,336,928	2,622	-	756,585	143,194	3,898,106
19	14,027	4,622	11,771	3,951	3,199	115,070	43,863	1,218,110	-	-	3,920	1,380,963
20	551	1,182	3,811	12,064	106	23,974	379,814	415,240	-	-	2,262	821,290
21	11	6	43	1,044	7	1,323	187,955	396,348	-	-	659	586,285
22	5,605	45,918	44,287	66,814	23,222	332,078	561,407	12,417	-	-8	37,613	943,507
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	408,375	397,337	639,302	754,697	259,261	21,091,388	7,798,976	2,167,595	-	3,382,866	10,419,700	44,860,525
26	915,039	461,781	1,731,319	2,132,326	502,537	13,885,295	-	-	-	-	-	-
27	460,376	190,661	412,177	1,590,594	371,812	6,463,779	-	-	-	-	-	-
28	32,288	9,856	52,228	-20,565	10,236	348,208	-	-	-	-	-	-
29	422,375	261,264	1,266,914	562,297	120,489	7,073,308	-	-	-	-	-	-
30	84,255	97,781	223,363	436,858	23,660	2,409,901	-	-	-	-	-	-
31	338,120	163,483	1,043,551	125,439	96,829	4,663,407	-	-	-	-	-	-
32	1,323,414	859,118	2,370,621	2,887,023	761,798	34,976,683	-	-	-	-	-	-

Table 73: Supply and Use Tables, Thailand, 2012
(million baht)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		1,845,549	-	-	-	-	-	-	-
2 Ores and Minerals		-	464,356	-	-	-	-	-	-
3 Electricity, Town Gas, Steam, and Hot Water		-	-	83	1,007,059	11,498	-	-	-
4 Food Products, Beverages, and Tobacco		-	-	2,363,804	-	-	-	-	-
5 Textiles, Apparel, and Leather Products		-	-	596,474	-	-	-	-	-
6 Products of Wood, Paper, and Printed Matter		-	-	389,810	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		-	-	972,390	-	-	-	-	-
8 Rubber and Plastic Products		-	-	829,873	-	-	-	-	-
9 Nonmetallic Products		-	-	344,062	-	-	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	2,305,780	-	-	-	-	-
11 Metal Products, Machinery, and Equipment		-	-	5,918,259	-	-	-	-	-
12 Constructions and Construction Services		-	-	-	-	960,205	-	-	-
13 Wholesale and Retail Trade		-	-	-	-	-	2,911,283	-	-
14 Accommodation, Food, and Beverage Services		-	-	-	-	-	-	-	1,235,917
15 Transport, Postal, and Courier Services		-	-	-	-	-	-	1,366,851	-
16 Information and Communication Technology		-	-	-	-	-	-	-	-
17 Financial Services		-	-	-	-	-	-	-	-
18 Real Estate, Leasing, and Other Business Services		37,379	-	121,091	-	7,702	455,095	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	-	-	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		1,882,928	464,356	13,841,625	1,007,059	979,405	3,366,378	1,366,851	1,235,917

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishery Products	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		123,158	12	1,045,596	509	1,308	32	1,658	111,492
2 Ores and Minerals		180	21,889	1,391,667	252,775	72,591	-	8,366	4,472
3 Electricity, Town Gas, Steam, and Hot Water		5,006	5,029	277,340	106,292	10,042	132,822	9,657	83,788
4 Food Products, Beverages, and Tobacco		160,537	-	610,726	2,958	3	7,238	8,480	358,482
5 Textiles, Apparel, and Leather Products		1,254	328	279,762	232	1,930	55,831	4,845	25,190
6 Products of Wood, Paper, and Printed Matter		2,783	325	143,766	503	12,075	22,100	2,390	2,609
7 Coke Oven, Petroleum, and Chemicals Products		159,271	1,982	620,945	2,280	7,581	10,825	932	4,605
8 Rubber and Plastic Products		13,899	2,255	450,156	1,348	12,877	193,460	6,754	8,042
9 Nonmetallic Products		572	12	89,090	495	267,842	3,836	10	2,545
10 Furniture and Other Transportable Goods, n.e.c.		40,027	62,474	987,645	88,476	58,241	72,010	300,280	23,685
11 Metal Products, Machinery, and Equipment		15,063	19,386	3,658,727	24,692	151,845	163,568	30,286	8,479
12 Constructions and Construction Services		145	71	998	131	61	277	85	361
13 Wholesale and Retail Trade		-	-	-	-	-	-	-	-
14 Accommodation, Food, and Beverage Services		3,155	1,777	30,330	3,035	2,359	105,596	12,204	2,945
15 Transport, Postal, and Courier Services		29,159	22,042	562,590	30,680	40,058	224,530	231,438	6,428
16 Information and Communication Technology		663	7,285	25,465	1,227	2,255	28,192	5,324	7,941
17 Financial Services		27,302	5,325	144,155	37,216	13,202	247,091	28,547	23,307
18 Real Estate, Leasing, and Other Business Services		36,751	248,579	667,744	26,519	70,185	208,425	263,432	84,734
19 Public Administration		226	148	10,509	763	438	1,946	1,216	717
20 Education Services		329	2	2,415	1	2	285	185	49
21 Human Health and Social Care Services		38	153	3,040	319	555	867	441	180
22 Other Services		942	360	27,474	1,580	1,259	40,574	8,637	13,088
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		620,461	399,436	11,030,139	582,033	726,712	1,519,505	925,168	773,138
26 Total Gross Value Added		1,262,467	64,920	2,811,486	425,026	252,693	1,846,873	441,684	462,778
27 Compensation		377,003	24,567	965,936	149,126	105,802	927,077	176,748	240,829
28 Other Taxes Less Subsidies on Production		-	-	-	-	-	-	-	-
29 Operating Surplus, Gross		885,464	40,353	1,845,550	275,900	146,891	919,795	264,935	221,950
30 Consumption of Fixed Capital		60,330	13,156	517,966	147,919	63,734	229,639	114,264	97,253
31 Operating Surplus, Net		825,134	27,197	1,327,583	127,981	83,157	690,156	150,672	124,697
32 Total Output		1,882,928	464,356	13,841,625	1,007,059	979,405	3,366,378	1,366,851	1,235,917

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 73: Supply and Use Tables, Thailand, 2012 (continued)
(million baht)

Supply Table

	Domestic Production by Industry Group						Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices
	9	10	11	12	13	Total Industry						
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities							
1	-	-	-	-	-	1,845,549	142,470	-16,045	1,971,973	496,331	-15,567	2,452,738
2	-	-	-	-	-	464,356	1,309,265	-147,423	1,626,198	91,713	90,511	1,808,423
3	-	-	-	-	-	1,018,639	15,441	-1,739	1,032,342	509	21,576	1,054,426
4	-	-	-	-	-	2,363,804	302,304	-34,106	2,632,002	558,553	317,938	3,508,493
5	-	-	-	-	-	596,474	138,269	-15,577	719,166	310,039	10,147	1,039,352
6	-	-	-	-	-	389,810	91,010	-10,250	470,570	100,992	5,181	576,742
7	-	-	-	-	-	972,390	776,493	-87,476	1,661,407	275,588	14,642	1,951,637
8	-	-	-	-	-	829,873	167,599	-18,888	978,584	125,140	5,524	1,109,248
9	-	-	-	-	-	344,062	58,322	-6,570	395,814	83,124	1,452	480,390
10	-	-	-	-	-	2,305,780	290,370	-32,713	2,563,437	281,821	269,532	3,114,790
11	-	-	-	-	-	5,918,259	4,380,472	-493,554	9,805,177	1,006,076	209,849	11,021,102
12	-	-	-	-	-	960,205	-	-	960,205	-	18,806	979,011
13	-	-	-	-	-	2,911,283	-	-	2,911,283	-2,901,496	-	9,787
14	-	-	-	-	-	1,235,917	67,483	-	1,303,400	-	46,672	1,350,071
15	-	31,342	-	-	-	1,398,194	948,626	-	2,346,819	-428,389	12,311	1,930,742
16	-	357,396	1,801	-	1,560	360,757	56,331	-	417,088	-	21,766	438,854
17	926,630	-	-	-	-	926,630	77,861	-	1,004,492	-	79,792	1,084,283
18	-	-	2,065,383	-	-	2,686,649	198,688	-	2,885,337	-	108,476	2,993,813
19	-	-	-	1,091,600	-	1,091,600	-	-	1,091,600	-	-	1,091,600
20	-	-	-	760,668	-	760,668	114	-	760,782	-	-50,158	710,624
21	-	-	-	573,742	-	573,742	35,817	-	609,559	-	5,973	615,532
22	-	-	-	-	467,905	467,905	75,477	-	543,382	-	50,358	593,739
23	-	-	-	-	-	-	-864,341	864,341	-	-	-	-
24	-	-	-	-	-	-	186,322	-	186,322	-	-	186,322
25	926,630	388,738	2,067,183	2,426,010	469,465	30,422,545	8,454,395	-	38,876,940	-	1,224,780	40,101,720

Use Table

	Intermediate Consumption by Industry Group						Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices
	9	10	11	12	13	Total Industry						
1	358	118	7,592	44,822	3,101	1,339,757	738,288	-	9,941	364,752	2,452,738	
2	-	-	-	35	302	1,752,276	813	-	-11,623	66,957	1,808,423	
3	11,539	15,450	54,664	85,828	14,423	811,880	220,395	-	17,171	4,981	1,054,426	
4	2,258	24	1,159	40,139	4,230	1,196,235	1,332,330	-	30,879	949,049	3,508,493	
5	5,606	217	11,249	9,429	4,473	400,346	397,379	-	-1,978	243,605	1,039,352	
6	12,853	2,358	89,772	106,770	2,996	401,299	63,851	-	-9,130	120,722	576,742	
7	1,252	372	16,422	172,740	21,643	1,020,849	261,033	-	-30,153	699,909	1,951,637	
8	1,776	613	17,021	6,286	1,715	716,203	19,752	-	6,460	366,833	1,109,248	
9	181	2	1,055	1,776	164	367,581	25,734	-	9,159	77,916	480,390	
10	10,297	6,035	116,972	104,185	15,758	1,886,085	469,120	-	13,555	746,030	3,114,790	
11	8,635	16,140	95,003	91,361	11,839	4,295,024	733,602	-	2,458,538	3,533,938	11,021,102	
12	366	63	1,543	21,694	824	26,619	-	-	952,393	-	979,011	
13	-	-	-	-	-	-	9,787	-	-	0	9,787	
14	11,408	6,003	59,569	89,111	5,216	332,708	993,619	-	-	23,745	1,350,071	
15	19,950	33,346	40,069	73,263	7,979	1,321,533	434,591	-	-	174,618	1,930,742	
16	11,019	34,604	56,321	20,603	5,829	206,727	145,356	-	-	86,772	438,854	
17	49,797	23,584	92,443	18,173	5,226	715,368	345,467	-	-	23,448	1,084,283	
18	137,514	82,467	376,533	143,931	52,833	2,399,648	487,457	-	17,227	89,481	2,993,813	
19	5,709	1,265	4,830	520	2,821	31,107	16,122	1,044,371	-	-	1,091,600	
20	1,614	27	1,497	20	266	6,694	87,515	616,401	1	13	710,624	
21	28,024	29	786	741	2,177	37,350	260,888	313,892	67	-	615,532	
22	3,638	4,261	86,346	57,280	22,411	267,852	236,738	38,199	54	-	593,739	
23	-	-	-	-	-	-	-931,116	-	-	-	931,116	
24	-	-	-	-	-	-	186,322	-	-	-	186,322	
25	323,793	226,976	1,130,846	1,088,707	186,224	19,533,139	6,535,044	2,012,863	122	3,462,436	8,558,116	
26	602,837	161,761	936,338	1,337,303	283,241	10,889,406	-	-	-	-	40,101,720	
27	246,617	46,815	319,213	1,006,472	150,603	4,736,808	-	-	-	-	-	
28	-	-	-	-	-	-	-	-	-	-	-	
29	356,220	114,946	617,125	330,831	132,638	6,152,598	-	-	-	-	-	
30	70,303	57,559	259,833	281,465	44,737	1,958,158	-	-	-	-	-	
31	285,917	57,388	357,291	49,366	87,901	4,194,440	-	-	-	-	-	
32	926,630	388,738	2,067,183	2,426,010	469,465	30,422,545	-	-	-	-	-	

Table 74: Supply and Use Tables, Viet Nam, 2012
(million dong)

Supply Table

Products	Industry	Domestic Production by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		1,213,134,921	-	186,915	-	-	-	6,096	3,303
2 Ores and Minerals		7	478,137,706	113,674	-	-	-	36,780	-
3 Electricity, Town Gas, Steam, and Hot Water		24,852	-	60,875	136,698,306	277,436	-	-	-
4 Food Products, Beverages, and Tobacco		6,546,767	-	1,163,230,069	-	-	-	37,557	72,020
5 Textiles, Apparel, and Leather Products		-	-	713,069,400	-	-	-	-	729
6 Products of Wood, Paper, and Printed Matter		-	-	219,937,401	-	-	-	-	-
7 Coke Oven, Petroleum, and Chemical Products		528,078	12,805	463,663,598	-	-	-	-	-
8 Rubber and Plastic Products		-	-	181,166,615	17,713	-	-	-	-
9 Nonmetallic Products		-	1,326	154,778,528	-	60,340	-	-	-
10 Furniture and Other Transportable Goods, n.e.c.		-	-	275,856,522	-	21,771	-	-	-
11 Metal Products, Machinery, and Equipment		3,902	-	1,121,855,226	-	33,376	-	-	-
12 Constructions and Construction Services		-	1,440	298,955	-	610,072,445	-	395,394	-
13 Wholesale and Retail Trade		-	-	-	-	-	496,619,385	-	2
14 Accommodation, Food, and Beverage Services		-	-	313	-	-	-	-	232,161,345
15 Transport, Postal, and Courier Services		-	-	48,781	-	367,751	-	329,759,017	447
16 Information and Communication Technology		519	-	197,446	-	59,795	-	385	11,765
17 Financial Services		56	-	3,375,484	-	132,157	-	-	9,773
18 Real Estate, Leasing, and Other Business Services		-	-	1,153	-	1,235,032	-	-	-
19 Public Administration		-	-	-	-	-	-	-	-
20 Education Services		-	-	-	-	-	-	-	-
21 Human Health and Social Care Services		-	-	-	-	-	-	-	-
22 Other Services		-	-	2,283	-	-	-	-	-
23 Cost, Insurance, and Freight/Free on Board Adjustment on Imports		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		1,220,239,100	478,153,277	4,297,843,239	136,716,019	612,260,104	496,619,385	330,235,229	232,259,384

Use Table

Products	Industry	Intermediate Consumption by Industry Group							
		1	2	3	4	5	6	7	8
		Agriculture, Forestry, and Fishing	Mining and Quarrying	Manufacturing	Electricity, Gas, and Water, and Waste Management	Construction	Wholesale and Retail Trade, and Repair of Motor Vehicles and Motorcycles	Transportation and Storage	Accommodation and Food Service Activities
1 Agriculture, Forestry, and Fishery Products		269,051,148	124,239	743,953,457	11,443	1,461,553	1,201,888	46,248	21,274,257
2 Ores and Minerals		1,309,887	63,565,441	202,937,842	10,831,346	14,691,954	714,897	58,921	1,961,092
3 Electricity, Town Gas, Steam, and Hot Water		13,372,140	6,186,651	57,840,085	8,233,871	2,737,289	12,130,505	1,472,478	5,489,621
4 Food Products, Beverages, and Tobacco		205,804,503	22,429	290,151,133	17,666	23,302	1,761,831	101,571	42,763,205
5 Textiles, Apparel, and Leather Products		7,923,274	700,161	377,995,456	223,329	874,264	1,540,719	447,979	2,690,389
6 Products of Wood, Paper, and Printed Matter		6,089,907	236,341	186,112,511	203,673	7,505,832	10,238,400	889,921	3,255,786
7 Coke Oven, Petroleum, and Chemicals Products		188,959,591	67,615,567	441,058,306	4,922,469	47,893,832	20,842,803	110,940,895	37,013,371
8 Rubber and Plastic Products		6,333,311	7,541,728	128,795,256	421,028	7,121,832	4,618,547	9,200,042	472,348
9 Nonmetallic Products		1,098,099	102,706	31,748,397	58,094	107,799,558	477,877	295,693	277,498
10 Furniture and Other Transportable Goods, n.e.c.		9,650,261	7,259,371	50,012,260	5,483,499	12,551,133	8,769,120	16,972,684	3,263,456
11 Metal Products, Machinery, and Equipment		19,131,602	85,718,522	840,248,126	5,992,815	163,487,105	17,720,268	10,156,472	1,714,913
12 Constructions and Construction Services		2,269,695	1,172,869	2,954,185	342,036	35,200,851	3,965,496	1,276,769	559,608
13 Wholesale and Retail Trade		436,629	595,490	1,443,869	179,428	1,257,750	1,399,958	4,648,433	183,121
14 Accommodation, Food, and Beverage Services		3,516,755	1,226,279	6,685,012	313,563	2,736,015	5,588,437	1,266,207	1,087,110
15 Transport, Postal, and Courier Services		2,829,599	5,125,261	17,878,550	217,469	2,317,929	12,612,305	34,130,668	962,536
16 Information and Communication Technology		2,143,054	828,062	4,987,324	190,342	939,719	6,257,769	1,164,772	687,804
17 Financial Services		7,144,009	5,674,864	31,351,229	469,995	11,642,806	40,753,128	8,863,272	9,956,725
18 Real Estate, Leasing, and Other Business Services		7,240,107	8,914,361	42,614,979	573,485	11,147,193	28,517,965	7,188,670	9,611,269
19 Public Administration		19,699	6,415	169,053	7,082	20,038	226,637	18,167	12,595
20 Education Services		91,162	1,559,238	645,187	78,523	137,917	774,623	192,360	33,665
21 Human Health and Social Care Services		61,806	4,895	230,124	37,152	78,317	95,824	39,833	11,459
22 Other Services		186,728	10,416	508,374	11,885	150,826	532,937	77,182	518,416
23 Direct Purchases in Domestic Market by Nonresidents		-	-	-	-	-	-	-	-
24 Direct Purchases Abroad by Residents		-	-	-	-	-	-	-	-
25 Total		754,662,965	264,191,306	3,460,320,517	38,820,194	431,777,015	180,741,932	209,449,239	143,800,242
26 Total Gross Value Added		465,576,135	213,961,971	837,522,722	97,895,826	180,483,089	315,877,453	120,785,990	88,459,142
27 Compensation		320,960,403	107,237,706	544,787,955	29,666,345	151,357,444	213,925,109	74,397,949	59,976,576
28 Other Taxes Less Subsidies on Production		2,650,949	4,304,227	13,789,286	968,337	244,344	2,224,768	2,494,468	3,265,297
29 Operating Surplus, Gross		141,964,783	102,420,038	278,945,482	67,261,144	28,881,301	99,727,576	43,893,572	25,217,269
30 Consumption of Fixed Capital		40,181,085	98,792,607	114,778,524	30,492,849	15,816,241	31,921,217	25,771,225	13,969,099
31 Operating Surplus, Net		101,783,698	3,627,431	164,166,958	36,768,294	13,065,060	67,806,359	18,122,347	11,248,170
32 Total Output		1,220,239,100	478,153,277	4,297,843,239	136,716,019	612,260,104	496,619,385	330,235,229	232,259,384

-- = magnitude equals zero, n.e.c. = not elsewhere classified.

(continued on next page)

Table 74: Supply and Use Tables, Viet Nam, 2012 (continued)
(million dong)

Supply Table

	Domestic Production by Industry Group					Imports of Goods and Services	Cost, Insurance, and Freight/ Free on Board Adjustment on Imports	Total Supply at Basic Prices	Trade and Transport Margins	Taxes Less Subsidies on Products	Total Supply at Purchasers' Prices	
	9	10	11	12	13							
	Financial and Insurance Activities	Information and Communication	Real Estate Activities and Business Services	Public Administration, Education, Human Health, and Social Work Activities	Other Service Activities	Total Industry						
1	-	-	-	-	-	1,213,331,234	201,642,032	-	1,414,973,266	141,487,444	23,552,415	1,580,013,125
2	-	38,756	-	-	-	478,326,922	75,641,279	-	553,968,201	32,257,138	24,057,115	610,282,454
3	-	-	-	-	65	137,061,534	2,945,765	-	140,007,298	14,811,566	6,759,747	161,578,612
4	-	-	-	-	1,017	1,169,887,430	135,989,185	-	1,305,876,615	89,734,238	15,111,247	1,410,722,099
5	-	-	83,320	-	-	713,153,449	203,216,883	-	916,370,332	58,682,251	23,585,723	998,638,307
6	-	-	5,874	-	-	219,943,275	31,669,030	-	251,612,305	23,931,966	3,705,876	279,250,147
7	-	-	-	-	-	464,204,481	550,019,005	-	1,014,223,486	28,869,493	19,606,252	1,062,699,231
8	-	-	-	-	-	181,184,328	33,935,880	-	215,120,209	34,199,385	7,622,790	256,942,384
9	-	-	-	-	-	154,840,194	16,175,737	-	171,015,931	27,490,483	4,382,865	202,889,279
10	-	32,268	5,940	-	12,519	275,929,020	88,078,325	-	364,007,345	24,510,429	12,111,537	400,629,310
11	-	-	-	-	-	1,121,892,504	924,452,528	-	2,046,345,032	133,696,279	74,934,288	2,254,975,599
12	-	-	1,222,993	-	-	611,991,228	-	-	611,991,228	-	5,422,246	617,413,474
13	-	-	-	-	4,505	496,623,892	1,146,472	-	497,770,364	-462,175,072	702,351	36,297,643
14	-	-	-	-	-	232,161,658	17,228,010	-	249,389,668	-	1,402,753	250,792,421
15	-	-	790,295	-	-	330,966,292	115,288,318	-99,274,376	346,980,233	-147,495,601	3,237,770	202,722,403
16	-	133,798,513	503,894	2,587	-	134,574,905	7,106,407	-	141,681,312	-	14,114,786	155,796,098
17	-	78,859	265,279,520	309	-	268,876,158	20,521,447	-	289,397,605	-	57,443,522	346,841,127
18	217,716,618	8,541	109,419	-	-	219,070,763	65,466,060	-8,997,547	275,539,277	-	9,209,591	284,748,868
19	-	-	-	110,228,780	-	110,228,780	-	-	110,228,780	-	1,117,043	111,345,823
20	-	-	-	139,717,252	3,198	139,720,450	22,097,085	-	161,817,535	-	1,326,567	163,144,102
21	-	-	-	83,842,808	-	83,842,808	8,716,345	-	92,559,152	-	1,254,207	93,813,359
22	-	-	57,281	-	75,807,348	75,866,912	4,228,664	-	80,095,576	-	12,905,859	93,001,435
23	-	-	-	-	-	-	-108,271,923	108,271,923	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	217,716,618	133,956,935	268,058,536	333,791,736	75,828,652	8,833,678,217	2,417,292,532	-	11,250,970,748	-	323,566,551	11,574,537,299

Use Table

	Intermediate Consumption by Industry Group					Household Final Consumption Expenditure	General Government Final Consumption Expenditure	Nonprofit Institutions Serving Households Final Consumption Expenditure	Gross Capital Formation	Exports of Goods and Services	Total Use at Purchasers' Prices	
	9	10	11	12	13							
1	48,995	23,327	1,567,673	578,525	97,487	1,039,440,239	321,692,938	-	51,398,721	167,481,227	1,580,013,125	
2	9	2,479	346,216	68,779	514,738	297,003,601	36,446,509	-	14,282,446	262,549,898	610,282,454	
3	1,697,694	2,398,240	3,108,512	3,364,116	1,495,782	119,526,985	41,544,276	-	-92,199	599,550	161,578,612	
4	16,849	15,844	302,684	619,089	100,748	541,700,854	388,171,307	-	17,515,048	463,334,890	1,410,722,099	
5	152,734	154,936	572,921	857,392	1,369,001	395,502,557	68,476,037	-	13,396,509	521,263,205	998,638,307	
6	1,504,034	6,118,525	4,038,990	4,063,170	6,930,796	237,187,886	10,797,033	-	1,109,561	30,155,666	279,250,147	
7	2,777,023	3,108,179	5,822,676	40,566,446	3,910,003	975,431,162	60,158,371	-	-27,746,645	54,856,343	1,062,699,231	
8	218,485	186,858	771,739	872,233	374,490	166,927,896	6,310,357	-	2,820,834	80,883,297	256,942,384	
9	127,564	1,704,349	3,712,079	240,928	630,346	148,273,189	8,761,574	-	-10,413,587	56,268,103	202,889,279	
10	2,423,085	1,010,890	7,208,919	11,380,603	1,724,048	137,709,329	94,588,234	-	36,430,014	131,901,733	400,629,310	
11	1,466,031	29,363,666	9,669,630	5,998,964	3,755,262	1,194,423,378	169,425,595	-	265,066,638	626,059,989	2,254,975,599	
12	106,075	535,614	10,851,019	2,981,430	376,269	62,591,916	36,734,596	-	518,086,961	-	617,413,474	
13	53,874	54,281	356,535	649,782	83,607	11,342,757	24,450,702	-	-	504,184	36,297,643	
14	2,185,624	876,014	3,896,786	4,649,972	759,504	34,787,277	116,686,523	-	-	99,318,621	250,792,421	
15	1,239,708	1,000,993	3,348,668	2,922,452	437,930	85,024,066	63,339,149	-	-	54,359,187	202,722,403	
16	2,356,138	37,486,727	7,412,379	3,450,807	1,721,746	69,626,641	68,901,838	15,153,350	-	2,114,269	155,796,098	
17	10,888,951	3,941,258	24,439,136	8,862,690	2,243,560	166,231,422	161,232,268	8,266,613	-	11,110,824	346,841,127	
18	62,671,998	807,625	4,517,354	1,753,534	930,729	186,489,268	81,936,325	-	-	16,323,274	284,748,868	
19	9,439	11,552	51,060	439,784	21,562	1,013,084	3,070,240	107,262,499	-	-	111,345,823	
20	296,317	506,086	495,115	2,484,834	81,058	7,376,087	113,065,833	35,060,118	-	7,642,065	163,144,102	
21	84,928	13,276	53,268	687,574	42,507	1,440,965	69,171,296	17,350,996	-	5,850,103	93,813,359	
22	98,293	201,863	2,067,290	748,671	5,545,249	10,658,130	69,013,286	9,244,384	-	4,085,636	93,001,435	
23	-	-	-	-	-	-	-	-	-	-	-	
24	-	-	-	-	-	-	-	-	-	-	-	
25	90,423,849	89,522,584	94,610,649	98,241,774	33,146,423	5,889,708,689	2,013,974,287	192,337,959	-	881,854,302	2,596,662,063	11,574,537,299
26	127,292,769	44,434,351	173,447,887	235,549,963	42,682,230	2,943,969,528	-	-	-	-	-	-
27	78,801,272	24,870,533	91,775,282	173,425,878	26,837,560	1,898,020,012	-	-	-	-	-	-
28	9,395,047	634,677	12,577,241	665,287	1,322,468	54,536,396	-	-	-	-	-	-
29	39,096,450	18,929,141	69,095,364	61,458,798	14,522,203	991,413,120	-	-	-	-	-	-
30	7,871,752	17,149,838	12,608,515	21,270,607	3,108,754	433,732,314	-	-	-	-	-	-
31	31,224,697	1,779,303	56,486,849	40,188,191	11,413,449	557,680,806	-	-	-	-	-	-
32	217,716,618	133,956,935	268,058,536	333,791,736	75,828,652	8,833,678,217	-	-	-	-	-	-

Glossary

Term	Definition
Balance of payments	A statistical statement that systematically summarizes for a specific period the economic transactions of an economy with the rest of the world.
Basic price	The amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, on that unit as a consequence of its production or sale. It excludes any transport charges the producer invoices separately.
Central Product Classification	A classification based on the physical characteristics of goods or on the nature of the services rendered.
Changes in inventories (including work-in-progress)	Value of the entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories.
Classification of the Functions of Government	A classification used to identify the socioeconomic objectives of current transactions, capital outlays, and acquisition of financial assets by general government and its subsectors.
Classification of Individual Consumption According to Purpose	A classification used to identify the objectives of both individual consumption expenditure and actual individual consumption.
Classification of the Purposes of Nonprofit Institutions Serving Households	A classification used to identify the socioeconomic objectives of current transactions, capital outlays, and acquisition of financial assets by nonprofit institutions serving households.
Collective consumption service	A service general government provides simultaneously to all members of the community or to all members of a particular section of the community, such as all households living in a particular region.
Compensation of employees	The total remuneration, in cash or in kind, payable by enterprises to employees in return for work done by the latter during the accounting period.
Computer software	Computer programs, program descriptions, and supporting materials for both systems and applications software.
Constant prices	Prices obtained by directly factoring changes over time in the values of flows of goods and services into two components reflecting changes in the prices of the goods and services concerned and changes in their volumes (i.e., changes in “constant price terms”).
Consumption of fixed capital	Represents the reduction in the value of the fixed assets used in production during the accounting period resulting from physical deterioration, normal obsolescence, or normal accidental damage.

Term	Definition
Cost, insurance, and freight (CIF) price	The price of a good delivered at the frontier of the importing country, including any insurance and freight charges incurred to that point, or the price of a service delivered to a resident, before the payment of any import duties or other taxes on imports or trade and transport margins within the country.
Current prices	A fundamental principle underlying the measurement of gross value added, and hence gross domestic product, is that output and intermediate consumption must be valued at the prices current at the time the production takes place. This implies that goods withdrawn from inventories by producers must be valued at the prices prevailing at the times the goods are withdrawn, and consumption of fixed capital in the system is calculated on the basis of the estimated opportunity costs of using the assets at the time they are used, as distinct from the prices at which the assets were acquired.
Current transfers	Consist of all transfers that are not transfers of capital. They directly affect the level of disposable income and should influence the consumption of goods or services.
Depreciation	A method of allocating the costs of past expenditures on fixed assets over subsequent accounting periods. Note that the depreciation methods favored in business accounting and those prescribed by tax authorities almost invariably deviate from the concept of consumption of fixed capital employed in the SNA and so the term “consumption of fixed capital” is used in the SNA to distinguish it from “depreciation” as typically measured in business accounts.
Dwellings	Buildings that are used entirely or primarily as residences, including any associated structures, such as garages, and all permanent fixtures customarily installed in residences; movable structures, such as caravans, used as principal residences of households are included.
Employee	A person who enters an agreement, which may be formal or informal, with an enterprise to work for the enterprise in return for remuneration in cash or in kind.
Employers	Self-employed persons with paid employees.
Employers' actual social contributions	Amounts payable by employers for the benefit of their employees to social security funds, insurance enterprises, autonomous pension funds, or other institutional units responsible for the administration and management of social insurance schemes.
Employers' imputed social contributions	Amount of social contributions that would be needed to secure the de facto entitlements to the social benefits they accumulate. These arise only in cases where social benefits are provided by employers directly to their employees, former employees, or dependents out of their own resources without involving an insurance enterprise or autonomous pension fund, and without creating a special fund or segregated reserve for the purpose.
Employers' social contributions	Payments by employers which are intended to secure for their employees the entitlement to social benefits should certain events occur, or certain circumstances exist, that may adversely affect their employees' income or welfare—sickness, accidents, redundancy, retirement, etc.

Term	Definition
Entertainment, literary, or artistic originals	The original films, sound recordings, manuscripts, tapes, models, etc., on which drama performances, radio, and television programming, musical performances, sporting events, literary and artistic output, etc., are recorded or embodied.
Entrepreneurial income	The operating surplus or mixed income plus property income receivable on the financial or other assets owned by the enterprise (a corporation, quasi-corporation, or institutional unit owning an unincorporated enterprise engaged in market production), minus interest payable on the liabilities of the enterprise and rents payable on land or other tangible nonproduced assets rented by the enterprise.
Establishment	An enterprise, or part of an enterprise, that is situated in a single location and in which only a single (non- ancillary) productive activity is carried out or in which the principal productive activity accounts for most of the value added.
Excise duties	Special taxes levied on specific kinds of goods, typically alcoholic beverages, tobacco, and fuels. These may be imposed at any stage of production or distribution and are usually assessed by reference to the weight, or strength, or quantity of the product.
Expenditures	The values of the amounts that buyers pay, or agree to pay, to sellers in exchange for goods or services that sellers provide to them or to other institutional units designated by the buyers.
Exports of goods and services	Consist of sales, barter, or gifts or grants, of goods and services from residents to nonresidents. The treatment of exports in the System of National Accounts (SNA) is generally identical with that in the balance of payments accounts as described in the Balance of Payments Manual.
Factor cost	Gross value added at factor cost is not a concept used explicitly in the SNA System of National Accounts but it can easily be derived by subtracting the value of any taxes, less subsidies, on production payable out of gross value added.
Farmgate price	Price of the product available at the farm, excluding any separately billed transport or delivery charge.
Final consumption	Goods and services used up by individual households or the community to satisfy their individual or collective needs or wants.
Final consumption expenditure of nonprofit institutions serving households (NPISHs)	Expenditure, including imputed expenditure, incurred by resident NPISHs on individual consumption goods and services.
Financial intermediation services indirectly measured (FISIM)	An indirect measure of the value of financial intermediation services provided, but for which financial institutions do not charge explicitly.
Free on board (FOB) price	The CIF price less the costs of transportation and insurance charges, between the customs frontier of the exporting (importing) country and that of the importing (exporting) country.
Functional classifications	Means of classifying, by purpose or socioeconomic objective, certain transactions of producers and of three institutional sectors—households, general government, and nonprofit institutions serving households.

Term	Definition
General government	The totality of institutional units which, in addition to fulfilling their political responsibilities and their role of economic regulation, produce principally nonmarket services (possibly goods) for individual or collective consumption and to redistribute income and wealth.
Government final consumption expenditure	Expenditure, including imputed expenditure, incurred by general government on both individual consumption goods and services and collective consumption services.
Gross	A common means of referring to values before deducting consumption of fixed capital (generally used as in “gross capital stock” or “gross domestic product”).
Gross capital formation	The total value of the gross fixed capital formation, changes in inventories, and acquisitions less disposals of valuables for a unit or sector.
Gross domestic product (GDP)	<p>Unduplicated market value of the total production activity of all resident producer units within the economic territory of a country during a given period. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Transfer payments are excluded from the calculation of GDP. GDP can be computed using the production, expenditure, and income approaches.</p> <p>Expenditure-based GDP is the sum of private (or household) consumption expenditure, general government consumption expenditure, gross fixed capital formation (private and public investments), changes in inventories, and exports minus imports of goods and services.</p> <p>Income-based GDP is the sum of the compensation of employees, mixed income, operating surplus, consumption of fixed capital, and taxes less subsidies on production and imports.</p> <p>Production-based GDP is the sum of the gross value added by all resident producers in the economy, plus any taxes and minus any subsidies not included in the value of the products. Gross value added is the net output of an industry after adding up all outputs and subtracting intermediate inputs.</p>
GDP at market prices	The sum of the gross values added of all resident producers at producers’ prices, plus taxes less subsidies on imports, plus all nondeductible value added tax/VAT (or similar taxes).
Gross fixed capital formation	The total value of a producer’s acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of nonproduced assets (such as subsoil assets or major improvements in the quantity, quality, or productivity of land) realized by the productive activity of institutional units.
Gross value added	The value of output less the value of intermediate consumption. It is a measure of the contribution to GDP made by an individual producer, industry, or sector.
Gross value added at basic prices	The output valued at basic prices less intermediate consumption valued at purchasers’ prices.
Gross value added at producers’ prices	Output valued at producers’ prices less intermediate consumption valued at purchasers’ prices.

Term	Definition
Harmonized Commodity Description and Coding System	An international nomenclature developed by the World Customs Organization, which is arranged in six-digit codes allowing all participating countries to classify traded goods on a common basis. Beyond the six-digit level, countries are free to introduce national distinctions for tariffs and many other purposes.
Household	A small group of persons who share the same living accommodation, who pool some or all their income and wealth, and who consume certain types of goods and services collectively, mainly housing and food.
Household actual final consumption	Consumption goods or services acquired by individual households by expenditures or through social transfers in kind received from government units or nonprofit institutions serving households.
Household final consumption expenditure	Expenditure, including imputed expenditure, incurred by resident households on individual consumption goods and services, including those sold at prices that are not economically significant prices.
Illegal production	Production of goods or services whose sale, distribution, or possession is forbidden by law; and production activities which are usually legal but which become illegal when carried out by unauthorized producers. The scope of illegal production varies depending on the laws in place in individual countries (e.g., prostitution is legal in some countries but illegal in others).
Import duties	Customs duties or other import charges which are payable on goods of a particular type when they enter the economic territory.
Imports of goods and services	Consist of purchases, barter, or receipts of gifts or grants, of goods and services by residents from nonresidents. The treatment of imports in the System of National Accounts is generally identical with that in the balance of payments accounts as described in the Balance of Payments Manual.
Import subsidies	Subsidies on goods and services that become payable to resident producers when the goods cross the frontier of the economic territory or when the services are delivered to resident institutional units.
Indirect taxes	Taxes that supposedly can be passed on, in whole or in part, to other institutional units by increasing the prices of the goods or services sold; but the term “indirect taxes” is not used in the 1993 System of National Accounts. Rather, taxes are specifically identified by their purpose (e.g., taxes on products).
Individual consumption good or service	A good or service that is acquired by a household and used to satisfy the needs and wants of members of that household.
Industry	A group of establishments engaged in the same or similar kinds of production activity. The classification of productive activities used in the System of National Accounts is the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 3. (Rev.3).
Input–Output table	A means of presenting a detailed analysis of the process of production and the use of goods and services (products) and the income generated in that production. They can be either in the form of (i) supply and use tables or (ii) symmetric Input–Output tables.
Interest	The amount that the debtor becomes liable to pay to the creditor over a given period of time without reducing the amount of principal outstanding, under the terms of the financial instrument agreed between them.

Term	Definition
Intermediate consumption (IC)	The value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods or services may be either transformed or used up by the production process.
International Standard Industrial Classification of All Economic Activities (ISIC)	“International standard for the classification of productive economic activities. The main purpose is to provide a standard set of economic activities so that entities can be classified according to the activity they carry out.”
Inventories	Stocks of outputs that are still held by the units that produced them prior to their being further processed, sold, and delivered to other units or used in other ways; and stocks of products acquired from other units that are intended to be used for intermediate consumption or for resale without further processing.
Inventories of work-in-progress	Goods and services that are partially completed but that are not usually turned over to other units without further processing or that are not mature and whose production process the same producer will be continued in a subsequent period by the same producer.
Local currency unit	Or national currency unit is the monetary unit in which economic values are expressed in a country.
Margin (trade)	The difference between the actual or imputed price realized on a good purchased for resale (either wholesale or retail) and the price that would the distributor have to be paid by the distributor to replace the good at the time it is sold or otherwise disposed of.
Margin (transport)	Transport charges paid separately by the purchaser in taking delivery of the goods at the required time and place.
Market price	The amounts of money willing buyers pay to acquire something from willing sellers.
Merchanting	Process whereby a unit in economy X purchases goods from economy Y for sale in economy Z. The goods legally change ownership but do not physically enter the economy where the owner is resident. The output of merchanting is gross margin.
Mineral exploration	Value of expenditures on exploration for petroleum and natural gas, and for nonpetroleum deposits.
Mixed income	The surplus or deficit accruing from production by unincorporated enterprises owned by households. It implicitly contains an element of remuneration for work done by the owner, or other members of the household, that cannot be separately identified from the return to the owner as entrepreneur, but it excludes the operating surplus coming from owner-occupied dwellings.
National income	The total value of the primary incomes receivable within an economy less the total of the primary incomes payable by resident units.
Net	A common means of referring to values after deducting consumption of fixed capital (generally used as in “net capital stock” or “net domestic product”). However, it should be noted, however, that the term “net” can be used in different contexts in the national accounts, such as “net income from abroad,” which is the difference between two income flows.

Term	Definition
Nondeductible value added tax (VAT)	VAT payable by a purchaser which is not deductible from the purchaser's own VAT liability, if any.
Nonmarket producers	Producers that provide most of their output to others free or at prices which are not economically significant prices.
Nonprofit institutions serving households (NPISHs)	Nonprofit institutions which are not financed and controlled by government and which provide goods or services to households free or at prices that are not economically significant prices.
Operating surplus	The surplus or deficit accruing from production before taking account of any interest, rent, or similar charges payable on financial or tangible nonproduced assets borrowed or rented by the enterprise, or any interest, rent or similar receipts receivable on financial or tangible nonproduced assets owned by the enterprise. (Note: for unincorporated enterprises owned by households, this component is called "mixed income.")
Other subsidies on production	Subsidies, except subsidies on products, which resident enterprises may receive as a consequence of engaging in production (e.g., subsidies on payroll or workforce, or subsidies to reduce pollution).
Output	Goods or services that are produced within an establishment that become available for use outside that establishment, plus any goods and services produced for own final use.
Perpetual inventory method (PIM)	A method of constructing estimates of capital stock and consumption of fixed capital from the time series of gross fixed capital formation. It allows an estimate to be made of the stock of fixed assets in existence and in the hands of producers which is generally based on estimating how many of the fixed assets installed as a result of gross fixed capital formation undertaken in previous years have survived to the current period.
Purchasing power parity (PPP)	Price relative which measures the number of units of country B's currency that are needed in country B to purchase the same quantity and quality of an individual good or service, which that one unit of country A's currency can purchase in country A.
Price	The value of one unit of a particular good or service.
Producers' price	The amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any value added tax (VAT), or similar deductible tax, invoiced to the purchaser. It excludes any transport charges the producer invoiced separately by the producer.
Production	An activity carried out under the responsibility, control, and management of an institutional unit that uses inputs of labor, capital; and goods and services to produce outputs of other goods and services.
Products	Goods and services that are the result of production. These are exchanged and used for various purposes—as inputs in the production of other goods and services, as final consumption, or for investment.
Purchasers' price	The amount the purchaser paid by the purchaser, excluding any deductible VAT or similar deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place.

Term	Definition
Reference rate (of interest)	The pure cost of borrowing funds (i.e., a rate from which the risk premium has been eliminated to the greatest extent possible and which does not include any intermediation services).
Remuneration in kind	Occurs when an employee accepts payment in the form of goods and services, instead of money.
Rent	Earnings of factors of production (land, labor, and capital) which are fixed in supply.
Services	Outputs produced to order and typically consist of changes in the conditions of the consuming units realized by the activities of producers at the demand of the consumers. By the time their production is completed, these must have been provided to the consumers.
Subsidies	Current unrequited payments that government units, including nonresident government units, made to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services which they produce, sell, or import.
Subsidy on a product	A subsidy payable per unit of a good or service produced, either as a specific amount of money per unit of quantity of a good or service, or as a specified percentage of the price per unit. It may also be calculated as the difference between a specified target price and the market price paid by a buyer.
Subsidies on production—other	Subsidies, except subsidies on products, which resident enterprises may receive because of engaging in production.
Supply and use tables (SUTs)	A form of matrices that records how supplies of different kinds of goods and services originate from domestic industries and imports, and how those supplies are allocated between various intermediate or final uses, including exports.
System of National Accounts (SNA)	Consists of a coherent, consistent, and integrated set of macroeconomic accounts, balance sheets, and tables based on a set of internationally agreed concepts, definitions, classifications, and accounting rules.
Tax on a product	A tax payable per unit of some good or service, either as a specified amount of money per unit of quantity or as a specified percentage of the price per unit or value of the good or service transacted.
Taxes	Compulsory, unrequited payments, in cash or in kind, made by institutional units to government units.
Taxes and duties on imports	Taxes on goods and services (excluding value added tax [VAT]) that become payable at the moment when the goods cross the national or customs frontiers of the economic territory or when the services are delivered by nonresident producers to resident institutional units.
Taxes on income	Taxes on incomes, profits, and capital gains. These are assessed on the actual or presumed incomes of individuals, households, nonprofit institutions, or corporations.
Taxes on production	Taxes payable on goods and services when these are produced, delivered, sold, transferred, or otherwise disposed of by their producers, plus other taxes on production, consisting mainly of taxes on the ownership or use of land, buildings, or other assets used in production or on the labor employed, or compensation of employees paid.

Term	Definition
Taxes on products	Taxes (excluding value added tax [VAT], import, and export taxes) on goods and services that become payable as a result of the production, sale, transfer, leasing, or delivery of those goods or services, or as a result of their use for own consumption or own capital formation.
Total economy	All the institutional units which are resident in the economic territory of a country.
Total final consumption	Total value of all expenditures on individual and collective consumption goods and services incurred by resident households, resident nonprofit institutions serving households (NPISHs), and general government units.
Transfer	A transaction in which one institutional unit provides a good, service, or asset to another unit without receiving from the latter any good, service, or asset in return as counterpart.
Valuables	Produced assets that are not used primarily for production or consumption, that are expected to appreciate or at least not to decline in real value, that do not deteriorate over time under normal conditions, and that are acquired and held primarily as stores of value.
Value added tax (VAT)	A tax on products collected in stages by enterprises. It is a wide-ranging tax usually designed to cover most or all goods and services, but producers are obliged to pay to government only the difference between the VAT on their sales and the VAT on their purchases for intermediate consumption or capital formation, while VAT is not usually charged on sales to nonresidents (i.e., exports).
Wages and salaries	The sum of wages and salaries in cash, and wages and salaries in kind.
Wages and salaries in cash	Wages and salaries payable at regular weekly, monthly, or other intervals, including payments by results and piecework payments; plus allowances such as those for working overtime; plus amounts paid to employees away from work for on holiday; plus ad hoc bonuses and similar payments; plus commissions, gratuities, and tips received by employees.
Wages and salaries in kind	Remuneration in the form of goods and/or services that are not necessary for work and can be used by employees in their own time, and at their own discretion, for the satisfaction of their own needs or wants, or those of other members of their households.

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Compendium of Supply and Use Tables for Selected Economies in Asia and the Pacific

This publication provides a standard compilation of supply and use tables (SUTs) for 19 economies in Asia and the Pacific to help them comply with the United Nations 2008 System of National Accounts (SNA) recommendations. SUTs are an integrated statistical estimation and economic analysis model that facilitates the compilation of more reliable, consistent, and internationally comparable estimates of key economic statistics such as gross domestic product. The improved and more detailed statistics are expected to provide a better basis for measuring economic output and growth; facilitating informed policy making; and monitoring progress toward the Sustainable Development Goals (SDGs), relating especially to poverty alleviation, economic growth, technological progress, and industrial and infrastructure development.

The compilation of SUTs is an essential first step to establish an effective statistical system in any economy. In 2014, ADB embarked on a data development and capacity building project to assist 19 members construct benchmark SUTs for the latest possible year. This publication outlines the relevant statistical and economic concepts, data compilation and development practices, project implementation strategies, and the results of the project. It also includes an abridged version of the SUTs of the 19 participating economies. The more detailed tables are available online through the ADB website.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to a large share of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

