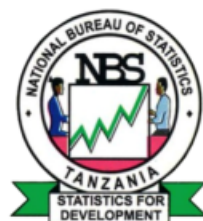




SUPPLY AND USE TABLES 2019

Mainland Tanzania

Sources and Methods



June 2026

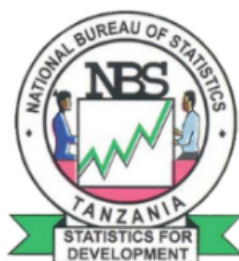


THE UNITED REPUBLIC OF TANZANIA

SUPPLY AND USE TABLES 2019

Mainland Tanzania

Methodology



NATIONAL BUREAU OF STATISTICS

MINISTRY OF FINANCE

June 2026

CONTENTS

LIST OF TABLES	IV
EXECUTIVE SUMMARY	V
LIST OF ABBREVIATION	VI
1.0. Introduction	1
1.1 Background	1
1.2 Rationale for Rebasing National Accounts Statistics	2
1.3 Scope	3
2.0 Data Sources	3
3.0: Supply and Use Tables	4
3.1: Uses of Supply and Use Tables	5
3.2: Basic Structure	6
3.3 Methodology	9
3.4 Balancing	14
4.0 Sources and Methods by Economic Activities	16
4.1 Economic Activities	16
4.1.1 Agriculture, Forestry and Fishing	16
4.1.2 Mining and Quarrying	18
4.1.3 Manufacturing	21
4.1.4 Electricity and Gas Supply	22
4.1.5 Water Supply, Sewerage, and Waste Management	22
4.1.6 Construction	23
4.1.7 Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	24
4.1.8 Transport and Storage	25
4.1.9 Accommodation and Food Services	28
4.1.10 Information and Communication Activities	28
4.1.11 Financial and Insurance Activities	30
4.1.12 Real Estate Activities	32
4.1.13 Professional, Scientific and Technical Activities	32
4.1.14 Administrative and Support Services	33

4.1.15	Public Administration and Defence, Compulsory Social Security	33
4.1.16	Education	34
4.1.17	Human Health and Social Work Activities	35
4.1.18	Arts, Entertainment and Recreation	35
4.1.19	Other Services Activities	36
4.1.20	Activities of Household as Employers	36
5.0	Input Output Tables	36
5.1	Uses Of Input Output Tables	37
5.2	The Symmetric Input Output Table	37
5.3	Methodology	39
6.0	Conclusion	39
7.0	Annexes	41

LIST OF TABLES

Table 1 : Structure of supply table at basic prices	7
Table 2 : Structure of use table at purchasers' prices	8
Table 3 : Structure of symmetric input-output table at basic prices	38
Table 4 : Supply Side of the Supply and Use table	41
Table 5 : Use Side of the Supply and Use Table	43
Table 6 : Input Output Table	45

EXECUTIVE SUMMARY

The National Bureau of Statistics (NBS) has compiled the Supply and Use Tables (SUTs) 2019 and Input-Output Tables (IOTs) for Mainland Tanzania in accordance with the System of National Accounts (SNA 2008) recommendations. The SUT forms the statistical foundation for rebasing national accounts statistics, replacing the 2015 benchmark year to more accurately reflect recent structural, price, and product changes in the economy.

The 2019 SUTs are developed from high-quality data drawn from censuses, surveys, administrative records, and specialized studies, present a comprehensive and internally consistent depiction of the economy's supply and demand flows. The tables provide the benchmark for GDP estimation through the production, expenditure, and income accounts, ensuring complete alignment between total supply and total use for each product category.

The 2019 IOTs have been compiled for the third time following previous tables for 1992 and 2015. The IOTs for the year 2019 were derived from 64×64 SUTs and further aggregated to 20×20 product by product tables using industry technology and fixed product sales structure assumptions. These tables provide a detailed framework for analyzing inter-industry linkages, modelling and explains on how shocks in one sector can be transmitted across the wider economy.

The results underline the need for regular updates of SUTs and IOTs to capture structural changes, broaden coverage to include emerging and informal sectors, and strengthen institutional capacity for both compilation and analytical use. Greater stakeholder collaboration, better sectoral detail, and the adoption of modern statistical tools will enhance the quality, timeliness, and policy relevance of these frameworks.

Overall, SUTs and IOT 2019 offer a robust and internationally comparable basis for economic analysis, evidence based policymaking, and strategic development planning, ensuring Tanzania's GDP estimates remain accurate, timely, and reflective of the evolving economy.

LIST OF ABBREVIATION

BOT	Bank of Tanzania
CI	Changes in Inventories
CIF	Cost Insurance and Freight
CIP	Census of Industrial Production
COFOG	Classification of Functions of the Government
COICOP	Classification of Individual Consumption by Purpose
CPA	Classification of Products by Activity
CPC	Central Product Classification
EWURA	Energy and Water Utilities Regulatory Authority
FOB	Freight on Board
GDP	Gross Domestic Product
GFCE	Government Final Consumption Expenditure
GFCF	Gross Fixed Capital Formation
GFS	Government Finance Statistics
HBS	Household Budget Survey
HFCE	Household Final Consumption Expenditure
HS	Harmonized System
ILFS	Integrated Labour Force Survey
IOT	Input Output Table
ISIC	International Standard of Industrial Classification
NPISHs	Non-Profit Institutions Serving Households
SNA	System of National Accounts
SPP	Small Power Plants
SUT	Supply and Use Tables
TANESCO	Tanzania Electric Supply Company Limited
TPDC	Tanzania Petroleum Development Corporation
TRA	Tanzania Revenue Authority
VAT	Value Added Tax
WIP	Work in Progress

1.0. Introduction

1.1 Background

Supply and Use Tables (SUTs) are integral part of National Accounts Statistics and play an important role as an integration framework. SUTs present in a consistent manner between supply and demand and show the structure of the costs of production and income generated in the production process, the flow of goods and services produced within the economy, and the flows of goods and services with the rest of the world. The compilation of SUT is part of the implementation of the 2008 System of National Accounts. The 2008 Systems of National Accounts (SNA 2008) recommends that National Accounts be benchmarked using the SUT framework.

The history of national accounts compilation in Mainland Tanzania dates back to the year 1954. Since then, improvements in the coverage, data sources, Methodology and use of international guidelines have been continuously implemented. The previous series of national accounts statistics main aggregates were based on the concepts, definitions and classification prescribed in the United Nations System of National Accounts (SNA) of 1953, 1968, 1993 and 2008.

Seven rounds of revisions have been done since the first compilation of national accounts statistics in 1954. The first revision of national accounts statistics in Tanzania was done for the year 1966 based on the SNA 1953 while the second revision was done for the year 1976 based on the SNA 1968. In addition, the third revision was for the year 1992 with estimates based on the SNA 1968 and partly SNA 1993. The fourth revision was for the year 2001 based on the SNA 1993. The fifth revision was for the year 2007 based on the SNA 1993 and partly SNA 2008 while the sixth and seventh revisions for the year 2015 and 2019 are based on the SNA 2008.

The National Bureau of Statistics (NBS) rebased the NAS estimates using SUT 2019 following agreed international recommendations that SUTs be produced after every 5 years. The development of the SUT 2019 started in late 2023, planned to be

disseminated in before the end of 2025. This exercise used high quality detailed data collected from different sectors of the economy. It involved staff from the National Accounts department and other staff from the National Statistical System (NSS).

The SUTs are the foundation for rebasing National Accounts Statistics. It provides a comprehensive and internally consistent picture of the economy in the base year, detailing the supply of goods and services from domestic production and imports, and their use as intermediate consumption, final consumption, capital formation, and exports. During rebasing, the detailed framework serves as the benchmark for aligning and reconciling GDP estimates from the production, expenditure, and income accounts. SUTs guarantee the accuracy and consistency of the new base-year GDP, as total supply equals total use for each product.

1.2 Rationale for Rebasing National Accounts Statistics

The benchmark estimates are for the reference year in which constant prices are referred to, for example, for Gross Domestic Product (GDP) at constant 2019 prices, the year 2019 is referred as the benchmark year. Rebasing of national accounts statistics is the process of replacing an old base year used to compile GDP estimates with a new and more recent base year. The base year provides the reference point to which backward and forward GDP are compiled and compared.

benchmarking of the national account's statistics for Mainland Tanzania has been done for the following reasons:

- i. The 2015 benchmark is out of date and do not reflect the structural changes that have been occurring in the economy in the recent past;
- ii. To integrate the changes that have happened in the patterns of production, consumption and investment in the economy;
- iii. To update relative price changes of various products over the period;

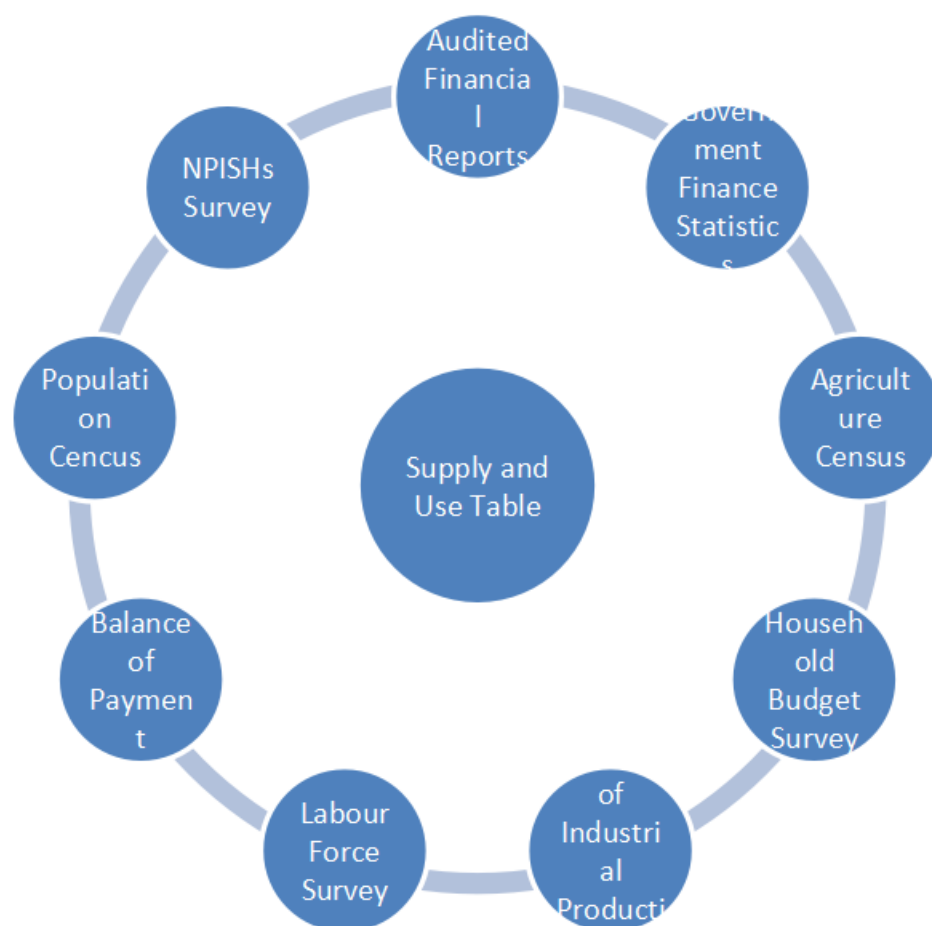
- iv. To update the list of products, as continuous developments and innovations lead to new products to appear in the market while obsolescence causes old products to disappear from the market;
- v. To incorporate current data available from administrative records, censuses and surveys; and
- vi. To further comply with the 2008 System of National Accounts and other United Nations' revised classifications.

1.3 Scope

The SUT, s of Mainland Tanzania covered production values of goods and services produced from all resident industries engaged in production activities; imports of goods and services; values of intermediate goods; final consumption expenditures by households, government and non-profit institutions serving households; capital formation and exports of goods and services for year benchmark year 2019

2.0 Data Sources

During the rebasing exercise using SUT framework, initiatives were undertaken to expand the coverage of economic activities, to include current data sources, administrative records, census and surveys complimented by special studies for selected economic activities. Figure 1 shows a schematic presentation of the data sources for compilation of the SUTs.

Figure 1: Schematic Diagram of Data Sources

3.0: Supply and Use Tables

The Supply and Use Tables (SUTs) provide a comprehensive picture of the economy by industry and product, showing the relationships between inputs, outputs, and components of Gross Value Added (GVA). They integrate institutional sectors of the economy with details on imports and exports, final consumption by government, households, and non-profit institutions, as well as capital formation. The framework consists of two interlinked tables: the supply table, which records the supply of goods and services by product and industry, distinguishing between domestic production and imports; and the use table, which shows how these goods and services are used for intermediate consumption, final consumption, capital formation, or exports.

The Tanzania Mainland SUT comprises of 252 products and 59 industries with the reference year 2007. The compilation adopted is according to the United Nations System of National Accounts (1993 and 2008 SNA).

Compilation procedures involved three main steps

- i. The basic framework (the rows and columns of the supply and use table) was agreed upon. Classification of goods and services suitable for the rows of the SUT was developed based on International Standards of Classifications. The United Nations (UN) classifications adopted include;
- ii. International Standard Industrial Classification of economic activities (ISIC) revision 3.1; Central Product Classification (CPC) revision 2; Classification of Functions of Government (COFOG); Classification of the Purpose of Non-profit Institutions serving households (COPNI); Standard International Trade Classification (SITC); and Classification of Individual Consumption by Purpose (COICOP).
- iii. All necessary available data was collected and reclassified into a standard format and results were entered into the SUT framework.
- iv. Preliminary SUT balancing using additional information collected to fill the data gaps final SUT balancing using a specified balancing programme.

3.1: Uses of Supply and Use Tables

The SUTs are among the core statistical frameworks in the SNA 2008 that provide a detailed and consistent representation of the economy. Additionally, they are used for the following purposes;

- i. To harmonize GDP estimates by production, income, and expenditure approaches, as part of implementing the System of National Accounts (SNA 2008);
- ii. To ensure internal consistency of national accounts statistics by balancing total supply with total use of respective products and services;
- iii. To provide a detailed view of the sectoral composition of the economy and further help to identify key sectors for growth.

- iv. Policy design and economic planning such as Five-Year Development Plans and also to monitor progress of these plans.

3.2: Basic Structure

The SNA 2008 define Supply and Use Tables (SUTs) as matrices that show the production and use of goods and services in an economy. The supply table shows the total supply of goods and services by product and by origin (domestically produced or imported), while the use table shows how those goods and services are used in the economy (as intermediate consumption, final consumption, capital formation, or exports.). The supply and use framework enable detailed analysis of industries and products through a breakdown of the production account, use of goods and services account and the generation of income account.

The Supply Table

A supply table shows values of goods and services supplied to economy by type of product for a given period of time. It distinguishes between the outputs of domestic industries and imports. The valuation matrices for trade and transport margins and taxes on products allow a transformation of supply from basic prices to purchasers' prices (Table 1).

Table 1: Structure of supply table at basic prices

	INDUSTRIES (ISIC) PRODUCTS (CPC)	OUTPUT OF INDUSTRIES (ISIC)						IMPORTS	VALUATION				
		Agriculture	Industry	Construction	Trade, hotel, transport	Other services	Government services				Total domestic output at b.p.	Imports, cif	Total supply at basic prices
No		1	2	3	4	5	6	7	8	9	10	11	12
1	Products of agriculture	Production matrix (V^T)						Domestic output	Imports , cif	Total supply, at b.p.	Valuation items		Total supply, at p.p. (q)
2	Products of industry												
3	Construction work												
4	Trade, hotel, transport services												
5	Other services												
6	Government services												
7	Total	Total output of industries at basic prices							Imports , cif		Total		
8	Cif/fob adjustments on imports												
9	Direct purchases abroad by reside												
10	Output at basic prices	Total output of industries at b.p. (g^T)							Imports , fob		Total		
11	- Market output												
12	- Output for own final use												
13	- Other non-market output												

The first and most important element of the supply table is the production matrix. It records data on the production of the economy that are classified according to two parameters: by rows the type of products (Classification of Product by Activity/Central Product Classification) and by columns the industries (International Standard Industrial Classification).

The production matrix is defined at basic prices, which means that the valuation of the production of each type of product does not include taxes but include subsidies on products. Moreover, basic prices do not consider distribution margins for trade and transportation. The production matrix reflects the main and secondary production activities of industries. The main activity of an industry is reported on the diagonal of the matrix while the secondary activities of an industry are listed off the diagonal.

Imports of goods and services are classified by products and valued at c.i.f. prices. Domestic production and imports give the total supply at basic prices.

The Use Table

The table shows the use of goods and services by type of product and by type of use as intermediate consumption by industry, final consumption expenditure, gross capital formation and exports. The use table also shows the components of value added by industry for compensation of employees, other taxes less subsidies on production, consumption of fixed capital, and net operating surplus (Table 2). In addition, the use table shows the input structure of each industry by column and the use of different products and primary inputs by rows. The costs of production are recorded in the columns of the use table for each industry. The total output of an industry at basic prices corresponds to the total output of an industry as reported in the supply table. All transactions of products are reported at purchasers' prices in the use table; the sum of each row is equal to the total use of a product at purchasers' price. For each product the total of use on the use table must be equal to the total supply in the supply table.

Table 2: Structure of use table at purchasers' prices

	HOMOGENEOUS BRANCHES PRODUCTS (CPC)	HOMOGENEOUS BRANCHES						Total	FINAL USES							Total use at basic prices
		Agriculture	Industry	Construction	Trade, hotel, transport	Other services	Government services		Final consumption expenditure by h.h.	Final consumption expenditure by NPISH	Final consumption expenditure by gov.	Changes in inventories	Changes in inventories	Exports, fob	Total final use	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Products of agriculture	Intermediate consumption at basic prices (S)							Final demand at basic prices (Y)							(q)
2	Products of industry															
3	Construction work															
4	Trade, hotel, transport services															
5	Other services															
6	Government services															
7	Total															
8	Taxes less subsidies on products								Adjustment items							
9	Direct purchases abroad by residents															
10	Domestic purchases by non-residents															
11	Total															
12	Compensation of employees	Components of value added (E)														(w)
13	Other net taxes on production															
14	Consumption of fixed capital															
15	Operating surplus, net															
16	Gross value added at basic prices															
17	Output at basic prices															
18	Imports, CIF	Imports, CIF														
19	Supply at basic prices	(q ^T)							(y)							

3.3 Methodology

The SUTs 2019 provide data at a more disaggregated and detailed level which serves as a useful statistical tool for economic analysis. Construction of the 2019 Supply and Use Tables for Mainland Tanzania applied both manual and automatic balancing procedures. The structure of the tables has 85 industries and 143 products level and aggregated tables by 74, 67, 64 and 20 industries and products level. The main guide for classification of products is the Classification of Product by Activity (CPA 2.1). The selection of products was based on availability of data and their importance to the economy. The compilation of the SUTs for Mainland Tanzania based mainly on the recommendations of the System of National Accounts (UN, SNA 2008) while the International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4 has been used to classify the industries.

3.3.1 Components of the Supply Table

The supply side of SUTs is composed of domestic output valued at basic prices while imports are valued at cost insurance freight (c.i.f). Other components are trade and transport margin, and net taxes on products. *Thus, for each product (row):*

The Benchmark Domestic Supply = Domestic Output + Trade and Transport margins + Net taxes on Products

Domestic Output

Domestic output, also known as the production matrix is the value of goods and services produced within a given economy over a specific period. The matrix records output of goods and services produced by all economic activities in the reference period. It is recorded by two parameters rows classified in accordance with CPA and columns in accordance with ISIC Rev 4. The detailed size of Supply side of Mainland Tanzania SUT 2019 is 143 products X 85 industries, consolidated to 64 X 64 and 20 x 20 for publishing. (Table 4)

Imports

Imports refer to the acquisition of goods and services by residents from producers or suppliers located abroad. In national accounts, total imports are recorded at Free on Board (FOB) value. However, detailed import data by product, as reported in foreign trade statistics, are typically valued at Cost, Insurance, and Freight (CIF) basis. To align these differing valuation methods, a CIF/FOB adjustment is required to reconcile the total import values with their corresponding product-level data.

The 2019 data on goods imports were sourced from the Tanzania Revenue Authority and Bank of Tanzania at 8-digit level of the Harmonized System (HS). Data on services imports were obtained from the Bank of Tanzania. HS to CPC correspondence tables were used to map and populate the import column in the supply table. To avoid double counting, an additional row for the CIF/FOB adjustment was included. This adjustment accounts for transport and insurance services provided by resident units.

Trade Margin

Trade margins represent the actual revenue earned from the resale of goods, calculated as the difference between the selling price and the cost of goods purchased for resale. Trade margins are estimated using wholesale and retail trade margins by product. It is assumed that only agricultural, mining, and manufactured products are subject to trade. The estimation is based on the following approach:

A Trade Margin Study provided margin ratios by product, corresponding to ISIC divisions 45, 46, and 47.

These margin ratios were applied to the total supply at basic prices (domestic supply plus imports) at the product level prior to Supply and Use Table (SUT) balancing. Wholesale trade margins were estimated by subtracting the cost of purchased goods from the gross output of wholesale trade services. The resulting row and column totals were then incorporated into the supply table.

Retail trade margins were calculated using the same method as for wholesale trade. The total trade margin was derived by summing the margins for ISIC divisions 45 (motor vehicle trade), 46 (wholesale trade), and 47 (retail trade).

Transport Margin

Transport margins are estimated separately for domestic and imported goods transported within the country, following a method similar to trade margins. Only goods are assumed to be transported. The process involves identifying relevant transport output, calculating the share of transport-relevant product revenues per industry, and estimating margins by applying these shares to national transport output. Margins for land, rail, and water transport are then allocated to products and recorded in the valuation column of the supply table.

Taxes and Subsidies on Products

Taxes are compulsory, unrequited payments made in cash or in-kind by institutional units to government entities. Taxes on products include, but are not limited to, value-added tax (VAT), and taxes and duties on imports and exports. Subsidies are unrequited payments made by government units including those from abroad to enterprises, based on the level of their production activities or the quantity or value of goods and services they produce, sell, or import.

Taxes on products and subsidies were allocated to specific products using data from government finance statistics (GFS). Import tariffs were assigned to detailed products based on the HS to CPC correspondence. VAT was allocated to products subject to the tax using household final consumption expenditure estimates. Non-deductible VAT was allocated to the intermediate consumption of VAT-exempt products. Additionally, portions of VAT were allocated to exports based on tourist expenditure, and to gross fixed capital formation for VAT-exempt products (*table 1 above and table 4 below*)

3.3.2 Components of the Use Table

The use table shows the use of goods and services by product and by type of use, such as intermediate consumption by industry, final consumption expenditure, gross capital formation and exports of goods and services. The intermediate uses and final uses reflect consumption of domestically produced goods and services as well as imported goods and services. Further, the table shows the use of the components of value added, i.e. compensation of employees, other net taxes, on production, consumption of fixed capital, net and gross operating surplus.

Intermediate Consumption

Intermediate Consumption (IC) is the value of goods and services (at purchasers' prices) used in the production process. It is recorded as a matrix of products (rows) and Industries (Columns) in the Use side of the Supply and Tables

The benchmark Intermediate consumption for all economic activities was estimated using detailed expenditure items obtained from different sources including censuses and surveys, studies and administrative records. The cost structure of IC varied within and across industries. For Agricultural activities the cost differentials were noted among crops, but in most cases covered seeds, Manure, Fertilizer, Pesticides, Fuel and lubricants, rents, minor maintenance and repairs, electricity and water supply, transport, other inputs and miscellaneous costs. (IC by Industry)

Household Final Consumption Expenditure

The Household Final Consumption Expenditure (HFCE) was estimated using the 2017/2018 Household Budget Survey (HBS). The HBS data was classified in accordance with the Classification of Individual Consumption according to Purpose (COICOP 2008). A correspondence table was used to reclassify products to CPA. Add benchmark structure by coicop

Non-Profit Institution Serving Household

Data for the use side on NPISHs was extracted from the 2019 NPISHs Survey. Expenditure on NPISHs was on education, health and other services.

Gross Fixed Capital Formation

The activity of gross fixed capital formation (GFCF) is restricted to institutional units in their capacity as producers, being defined as the value of their acquisitions *less* disposals of fixed assets. Fixed assets are produced assets (such as machinery, equipment, buildings or other structures) that are used repeatedly or continuously in production over several accounting periods (more than one year).

GFCF was estimated across key areas including construction, agriculture, livestock, and manufacturing. Estimates for construction were based on output derived from the Work-in-Progress (WIP) model. The WIP model was also applied to estimate capital formation for livestock. In the manufacturing industry, estimates were based on both domestic production and imports of capital goods, including machinery and equipment. Check facts

Government Final Consumption Expenditure

Government final consumption expenditure (GFCE) refers to the output produced by the general government, as recorded in the government production account, and categorized according to the Classification of the Functions of Government (COFOG). It includes non-market output provided by the government and excludes revenues from sales and fees. Additionally, it encompasses government purchases of goods and services from market producers that are subsequently distributed to households as social transfers. This information is sourced from Government Finance Statistics (GFS). Please indicate briefly how the 2019 estimates were obtained by components

Changes in Inventories

Changes in inventories (CI) refer to the difference between the closing stocks and opening stocks during the accounting period. Data used to estimate CI was extracted

from the 2013 Census of Industrial Production (CIP) for manufacturing products. How did you arrive at 2019 benchmark? Commodity flow approach was used to compute CI for agriculture and mining.

Exports

Exports consist of purchases of goods and services by non-residents from resident producers/suppliers. Exports were valued at FOB. Like the imports data, exports of goods were sourced from the TRA and BoT, while data on export of services was obtained from the Bank of Tanzania.

3.4 Balancing

The balancing of supply and use system starts with compiling preliminary estimates of all required inputs to assemble supply and use table at purchasers' prices and at basic prices. The required information contains:

- a. Production matrix at basic prices
- b. Use table at purchasers' prices
- c. Use table of imports at basic prices
- d. Valuation matrices

At the beginning of balancing, an estimate is available for every entry of the supply table, the use table and the valuation matrices. It is very important to follow a systematic approach to solve the problems during the balancing procedures. The best way is to use manual and automatic balancing tools as sequentially.

The 2019 SUT was initially manually balanced through a systematic process that included thorough data interrogation, application of reasonable and justifiable assumptions, consultations with subject matter experts, and estimation of missing values using the commodity flow approach. The manual balancing continued until the discrepancies were minimized to the lowest possible level. The entire manual balancing process was carried out using the IMF balancing tool.

Once manual balancing was completed, automatic balancing was carried out to eliminate the remaining discrepancies. The RAS method, an iterative mathematical procedure based on the proportional adjustment of imbalances, was applied to automatically generate balanced Supply and Use Tables (SUTs), in combination with the IMF balancing tool

3.4.1 GDP Estimation from The Balanced SUT

From the balanced Supply and Use Tables, GDP was estimated using production and expenditure accounts.

i. Production Account

GDP at market prices = $\sum$ (Gross Output less Intermediate inputs) + Net Taxes on products where:

Gross output equals the value of goods and services produced by industries, derived from the supply table, at basic prices.

Intermediate consumption is the value of goods and services used-up during production process obtained from the use side, at purchaser prices, and Taxes/subsidies on products are used to adjust GDP from basic to market prices.

ii. Expenditure Approach

The estimation of GDP by the expenditure account using SUTs is grounded in the principle that GDP represents the total value of all final uses of goods and services produced within the domestic economy, excluding imports. Under this account, GDP is measured as the sum of household final consumption including expenditure from NPISHs, government final consumption, gross capital formation (including Gross Fixed Capital Formation and changes in inventories), and exports of goods and services. Within the SUT framework, these components of final demand are systematically recorded in the Use Table, where products are classified according to whether they are

consumed as intermediate inputs by industries or allocated to final demand categories such as household consumption, government expenditure, investment, and exports. Thus,

$$\text{GDP at market Prices} = C+G+I+X$$

Where:

C = Final consumption expenditure of Households + NPISH

G = Government final consumption expenditure

I = Gross capital formation (*investment*); and

X = Exports of goods and services.

4.0 Sources and Methods by Economic Activities

This section outlines the coverage, data sources, and methodology used in compiling the Benchmark estimates using Supply and Use Tables (SUTs) according to the economic activities classified under ISIC Revision 4. It provides a detailed explanation of the data sources and methods employed to estimate the output and intermediate consumption values for each industry. The approach ensures consistency and supports the construction of a balanced and comprehensive SUT framework.

4.1 Economic Activities

4.1.1 Agriculture, Forestry and Fishing

Crops

Coverage: The crops covered include maize, paddy, sorghum/millet, other cereals, cassava, Irish potatoes, sweet potatoes, other roots and tubers, beans and other pulses, dried, oil seeds, other vegetables, bananas, other fruit, cashew nuts, coffee, cotton, tea, tobacco and other food and cash crops.

Data Sources: National Bureau of Statistics and Ministry of Agriculture: Agriculture Sample Census 2019/20 where we obtained the volumes of production, farm gate prices and the input/production cost by type of crop.

Methodology

Gross Output: The volume of crops by type was multiplied by the corresponding farm gate prices to derive current gross output.

Intermediate consumption (IC): Intermediate consumption for crops activity was estimated based on the cost of seeds, fertilizers and other costs which were analyzed from the AGSC 2019/20.

Livestock

Coverage: Livestock covers activities of rearing improved and indigenous cattle; goats; sheep; pigs; donkeys and horses; guinea pigs and rabbits; indigenous and commercial chicken; and other poultry.

Data Sources: National Bureau of Statistics: Stock data from the AGSC 2019/20 and CPI for livestock. Ministry of Livestock and Fisheries: The number of livestock, animal products (eggs, hides and skins) and their corresponding prices.

Methodology

Gross Output: Gross output of livestock and their products are estimated based on the increase in livestock, animals slaughtered to abattoirs and livestock products multiplied by their corresponding prices.

Intermediate Consumption: The IC for livestock is estimated as the total cost of inputs such as animal feed; vaccines, dips and sprays; insemination doses and stud fees; veterinary services; rental of buildings and machinery; and transport costs.

Forestry and Logging

Coverage: The activity covers the production of logs, charcoal, and fuel wood, as well as the gathering of non-wood forest products.

Data Sources: National Bureau of Statistics - Household Budget Survey 2017/18

Methodology

Gross Output: Gross output of forestry and logging is estimated based on total consumption expenditure by households in logs, charcoal & fuel wood; and gathering of non-wood forest products.

Intermediate Consumption: Intermediate Consumption of forestry and logging is estimated based on total spending on the production of logs, charcoal & fuel wood; and gathering of non-wood forest products by households.

Fishing

Coverage: This activity covers fishery resources from marine or freshwater environments, with the goal of capturing fish, crustaceans and other marine products.

Data sources; Ministry Livestock and Fisheries: Volumes and value of fish catch: and Costs used in fish production.

Methodology

Gross Output; Benchmark output of fishing activity was based on volume of fish catch from Marine and freshwater multiplied by their respective prices.

Intermediate Consumption: Benchmark Intermediate Consumption was estimated based on the cost of food, fuel, lubricants, charging batteries; and engine and boat repairs and maintenance incurred by freshwater and marine fishers.

4.1.2 Mining and Quarrying

Mining and quarrying include the activities of extraction of minerals occurring naturally such as solids (coal and ores), liquids (petroleum) or gases (natural gas). Extraction can be done underground or on surface mining or well operation. It also includes supplementary activities aimed at preparing the crude materials for marketing, for example, crushing, and grinding, cleaning, drying, sorting, concentrating ores,

liquefaction of natural gas and agglomeration of solid fuels. These operations are often accomplished by the units which extracted the resource and/or others located nearby.

Mining activities are classified into divisions, groups and classes on the basis of the principal mineral produced. Divisions 05, 06 of ISIC Rev.4 are concerned with mining and quarrying of fossil fuels (coal, lignite, petroleum, gas); divisions 07, 08 concern metal ores, various minerals and quarry products.

Coverage:

Mining and Quarrying is divided into four industries which include:

- i. Mining of coal and lignite and extraction of peat,
- ii. Crude petroleum and natural gas,
- iii. Mining of metal ores and
- iv. Other mining and quarrying.

In the SUT products covered include coal and lignite, peat, Petroleum oils and oils obtained from bituminous minerals, Crude natural gas, liquefied or in the gaseous state, Bituminous or oil shale and tar sands, uranium and thorium ores and concentrates, iron ores and concentrates, Copper ores and concentrates, Nickel ores and concentrates, Aluminum ores and concentrates, Precious metal ores and concentrates, other non-ferrous metal ores and concentrates (other than uranium or thorium ores and concentrates), Stone, sand and clay, other minerals and Other technical and business services.

Data Sources; National Bureau of statistics - Annual Survey of Industrial Production (ASIP) and Household Budget Survey 2017/18, Tanzania Revenue Authority - Value Added Tax, Imports and Exports data; Tanzania Petroleum Development Corporation- volume data; Ministry of Energy - volume data and Ministry of Minerals - volume data.

Methodology

Gross Output: Gross output and intermediate consumption of this sector were computed based on the data from the Annual Survey of Industrial production 2018, Value Added Tax, Household budget Survey 2017/18, and Mineral production data from Ministry of Minerals and natural gas production data from Ministry of Energy.

Gross Output for Formal Mining and Quarrying

Gross Output is estimated based on adjusted ASIP 2018 from all mining and quarrying industries engaging 10+ employees. The adjustment was made based on the figures obtained from the Annual Survey of Industrial Production 2018 (ASIP 2018). The output for other formal industries which were not captured in the ASIP 2018 were estimated as product of average income per employee from LFS and the input-output ratio of the formal mining and quarrying.

The gross output was therefore estimated at cost. However, estimating gross output for crude petroleum and natural gas volume data from Ministry of energy was used. The benchmark output for other minerals such as precious metals ore concentrate; copper ores and concentrate are estimated using volume data from the Ministry of Minerals.

Informal Gross Output

The gross output is estimated at cost as the sum of gross value added and their corresponding cost of production. Gross value added is estimated as a product of average income per employee in the informal mining and quarrying (LFS) and the input percent ratio of the industry. Informal mining and quarrying activities include mining of coal and lignite and extraction of peat and other mining and quarrying.

The estimation procedures

- i. Input percent (I/O ratio) = total production cost/Gross Output from ASIP to estimate intermediate consumption.
- ii. Gross Value Added (GVA) estimated by multiplying the average GVA per employee by total persons engaged from ASIP and ILFS respectively.

- iii. Total cost of production is estimated by multiplying the calculated GVA by the input percent.
- iv. Gross Output is estimated as a sum of total production cost and GVA

Intermediate Consumption: The intermediate consumption is derived from adjusted ASIP 2018 which includes cost of electricity, water, gas, fuel, charcoal and other fuels. Other IC are derived from cost of contract, repair and maintenance and waste treatment services in relation to mining and quarrying, cost for other non - industrial services includes postage and communication, rentals, storage and transport, bank charges and others, adjusted purchases of petroleum and natural gas from VAT data. IC for other minerals such as precious metals ores and copper concentrates are estimated using data from the ministry of energy and minerals. However, the IC for informal mining and quarrying is estimated as the product of I/O ratio of formal and gross value added of informal activity.

4.1.3 Manufacturing

Coverage: Manufacturing activity involves physical or chemical transformation of materials, substances, or components into final or semi processed goods. The materials include products of agriculture, forestry, fishing, mining and quarrying as well as products of other manufacturing activities.

Data Sources: National Bureau of Statistics; Annual Survey of Industrial Production 2018 from which estimates for Output and Intermediate Consumption were obtained.

Methodology

Gross Output: Output were estimated from the sales of the surveyed industries

Intermediate Consumption: Intermediate Consumption for Manufacturing activity was estimated based on Compensation of employees, Electricity, gas, steam and air conditioning supply and Water supply, Sewerage, waste management and remediation activities

4.1.4 Electricity and Gas Supply

This section includes the activity of providing electric power, and natural gas through a permanent infrastructure (network) of lines, mains and pipes. The dimension of the network is not decisive; also included is the distribution of electricity and gas in industrial parks or residential buildings. This section therefore includes the operation of electric and gas utilities, which generate, control and distribute electric power or gas.

Data Sources: Data for the compilation of benchmark values for this economic activity have been obtained from the Audited Financial Statements of Tanesco, Small Power Producers (IPPs) and Audited Financial Statements of Tanzania Petroleum Development Corporation (TPDC).

Methodology

Benchmark output for electricity supply is estimated using the revenue of sales and other income from the financial statements of TANESCO and other SPP's. The same is done for Gas supply where revenue from sales and other income is obtained from TPDC audited financial statements.

Benchmark Intermediate Consumption is also obtained from audited financial statements where IC items are extracted from expenditure costs. Included in these costs are repair and maintenance, and operational costs.

4.1.5 Water Supply, Sewerage, and Waste Management

This section includes activities related to the management (including collection, treatment and disposal) of various forms of waste. The output of the waste or sewage treatment process can either be disposed of or become an input into other production processes. Activities of water supply are also grouped in this section, since they are often carried out in connection with, or by units also engaged in, the treatment of sewage.

Data Sources: Data for the compilation of Benchmark values for this economic activity was obtained from the Audited Financial Statements of Water Supply and Sanitation Authorities. These financial statements were obtained from the Energy and Water Utilities Regulatory Authority who is a regulator for these authorities.

Methodology

Benchmark output for this activity is estimated using the revenue from sales and other income from the financial statements of water authorities. Own accounts production is estimated to be 10% of the formal output.

Benchmark Intermediate Consumption is obtained from audited financial statements. The IC items are extracted from the expenditure side. Included in these costs are production costs, sewerage costs, repair and maintenance costs, distribution costs and administrative costs.

4.1.6 Construction

Coverage: The activity covers Construction of buildings; Civil engineering (Construction of road, railways, utility projects); Construction of other civil engineering projects such as (industrial facilities other than buildings, waterways, harbour, dredging of water ways, dams, etc.); and Specialized construction activities, which includes (demolition and site preparation, Electrical, plumbing and other construction, installation activities, Building completion and finishing, other specialized construction activities).

Data sources: Domestic production of construction materials from NBS and exports and imports of construction materials from TRA.

Methodology

Gross Output: The output of construction was obtained by using work in progress model in which output of each construction sub activity is compiled and added together to generate total output for the economic activity. The output based on domestic production and imported material used in the construction activities.

Intermediate Consumption: Intermediate consumption in each sub activity was estimated based on construction work in progress model. The IC of each item was obtained and added together to obtain total intermediate consumption.

4.1.7 Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles

Coverage: This section includes wholesale and retail sales (i.e. sale without transformation) of any type of goods and the rendering of services incidental to the sale of these goods. Wholesaling and retailing are the final steps in the distribution of goods.

Data Sources: Data for this economic activity was obtained from the Trade Margin special study.

Methodology

Trade margins are estimated by using wholesale and retail trade margins by products. It is assumed that only agricultural, mining and manufactured products are traded. Based on the available data, the margin was computed as follows:

- Trade Margin Study conducted by NBS provides the margin ratio by product level for ISIC division 45 - Wholesale and retail trade and repair of motor vehicles and motorcycles, 46 - Wholesale trade, except of motor vehicles and motorcycles and 47 - Retail trade, except of motor vehicles and motorcycles
- The margin ratio applied to the total supply at basic price (domestic supply + import) at product level before SUT balancing.
- The trade margins of wholesale trade services are estimated by deducting the cost of purchased products from the gross output of wholesale trade services. The column and row totals are transferred to the supply table.
- The trade margins of retail trade services are estimated by using the same procedure as wholesale trade.

Total trade margin obtained by adding margin for division 45, 46 and 47

4.1.8 Transport and Storage

Transport and storage activities are classified under Section H of ISIC Rev.4, encompassing Divisions 49 to 53. This section includes the provision of passenger or freight transport, whether scheduled or not, by rail, pipeline, road, water or air and associated activities such as terminal and parking facilities, cargo handling, storage etc. Included in this section is the renting of transport equipment with driver or operator. Also included are postal and courier activities.

Land Transport

Coverage: This activity encompasses the transportation of passengers and freight via road and rail, as well as freight transport via pipelines. Road transport includes operators whose primary business is transportation.

Data Sources: Audited financial statements from 2019 Service Sector Study TAZAMA, SONGAS, TPDC, TAZARA and TRC; and turnover data from Tanzania Revenue Authority.

Methodology

Gross Output: Gross output for land transport was estimated based on the total revenue received from the transportation of goods and passengers (operating revenue) and non-operating revenue. For road transport, gross output was obtained from the 2019 Service Sector Survey. While the rail transport and pipeline revenue items were extracted from the audited reports of the rail operators, TPDC, SONGAS, and TAZAMA Company Limited.

Estimation of Intermediate Consumption: For road transport, intermediate consumption was obtained from the 2019 Service Study Survey. While the rail transport and pipeline intermediate consumption were extracted from the audited reports of the rail operators and SONGAS, TPDC, and TAZAMA Company Limited.

Water Transport Services

Coverage: This activity covers Inland, Sea, and coastal water transport of passengers or freight, including rental of pleasure boats with crew for sea and coastal water transport, operation of ferries, water taxis, etc.

Data sources: Audited financial statement report for Marine Service Company Limited and Census of small watercraft 2018 from TASAC.

Methodology

Gross Output: Gross output for water transport was estimated from the financial reports for Marine Service Company and Census of Small Watercraft 2018 from TASAC.

Estimation of Intermediate Consumption: Intermediate consumptions were obtained from financial reports for Marine Service Company and Census of small watercraft 2018 from TASAC.

Air transport services

Coverage: Air transport services fall under Division 51, covering passenger and freight air transportation. Class 5110 includes scheduled and non-scheduled air transport of passengers, ensuring connectivity across regions. Class 5120 focuses on freight air transport, facilitating global trade and logistics. Class 5223 covers service activities incidental to air transportation, including airport operations, air traffic control, and ground services.

Data Sources: Financial reports from Precision Air, Air Tanzania Company Limited, and others include Airlink and Coastal Aviation.

Methodology

Gross Output: The gross output of air transport was obtained from the financial reports of the air transport company.

Estimation of Intermediate Consumption: Intermediate consumption was obtained from the financial reports of the air transport company

Postal and courier services

Coverage: The sub-industry of postal and courier services includes pick-up, transport, and delivery of letters and parcels under various arrangements. The activity may be carried out with either self-owned (private) transport or via public transport.

Data Source: Audited financial statements from Tanzania Posts Corporation, DHL, Sangare, and TNT.

Gross Output: The gross output of the postal and courier services was obtained from the financial reports of the Tanzania Posts Corporation (TPC) and the courier services-related company.

Estimation of Intermediate Consumption

Intermediate consumption of the postal and courier services was obtained from the financial reports of the Tanzania Posts Corporation (TPC) and the courier services-related company.

Warehousing and support activities for transportation

Coverage: Warehousing and support activities for transportation fall under Division 52, covering storage and logistics services essential for supply chain operations. Class 5210 includes facilities such as warehouses, silos, and refrigerated storage, ensuring goods preservation. Group 522 covers freight forwarding, cargo handling, and transportation infrastructure operations like airports and harbors, facilitating the efficient movement of goods. Class 5229 focuses on customs brokerage and transport documentation, streamlining trade and regulatory processes.

Data Sources: Turnover data from Tanzania Revenue Authority and 2019 Service Sector Survey.

Methodology

Gross Output: The gross output of the warehousing and support activities for transportation was obtained from the turnover value from VAT data

Intermediate consumption: The intermediate consumption of the warehousing and support activities for transportation was obtained from the 2019 Service Study Survey.

4.1.9 Accommodation and Food Services

Coverage: Accommodation and food service are classified under divisions 55-56 ISIC rev4. The activity comprises units providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. It also includes both accommodation and food services. Units belonging to the restaurant group provide complete meals fit for immediate consumption. Those units can be traditional restaurants, self-service or take-away restaurants, as well as permanent or temporary fish and chips stands and the like, with or without seating.

Data Sources: 2019 Service Sector Study from National Bureau of Statistics

Methodology

Gross Output: Gross output for accommodation and food services is obtained from the 2019 Service Sector Study.

Intermediate Consumption: Intermediate consumption for accommodation and food services is estimated using input data from the 2019 Service Sector Study, capturing all production-related expenditures.

4.1.10 Information and Communication Activities

Coverage

Information and telecommunication activity is an economic activity that includes the production and distribution of information and cultural products; the provision of the

means to transmit or distribute these products, as well as data or communications, information technology activities; and the processing of data and other information service activities.

The main components of this activity are publishing activities (58); motion picture, video and television programme production, sound recording and music publishing activities (59); radio and TV broadcasting and programming activities (60); telecommunications activities (61) and information technology activities (62) and other information service activities (63).

Data Source

The data sources of the activity are mainly administrative data from private and public telecommunication companies (i.e. income and expenditure data from audited financial reports); Tanzania Revenue Authority (TRA) (i.e. turnover); Household Budget Survey (HBS) data, and Informal Integrated Labor Force Survey (ILFS).

Methodology

Publishing Activities

The gross output is calculated as the sum of turnover and HBS output for publishing activities. Intermediate consumption (IC) is estimated using 2019 Service Sector Study.

Motion Picture, Video and Television Programme Production Services, Sound Recording and Music Publishing Activities

The gross output is the sum of turnover and informal data from the Integrated Labor Force Survey (ILFS) output for motion picture, video, and telecommunication program activities. Intermediate consumption (IC) is estimated using 2019 Service Sector Study.

Radio and TV Broadcasting and Programming Activities

The gross output is estimated based on turnover of radio and TV broadcasting and programming activity. Intermediate consumption (IC) is estimated based 2019 Service Sector Study.

Telecommunication Activities

The gross output is estimated as the sum of telecommunication companies' income from audited financial reports (i.e., income and expenditure data). Intermediate consumption (IC) is calculated based on financial reports of telecommunication companies.

Information Technology and Other Information Service Activities

The gross output is estimated based on the turnover of computer programming, data processing, and information activity. Intermediate consumption (IC) is derived by using 2019 Service Sector Study.

4.1.11 Financial and Insurance Activities

Coverage

Financial activity includes insurance, reinsurance and pension funding activities and activities to support financial services. In addition, the activity also includes the activities of holding assets, such as services of holding companies and the activities of trusts, funds and similar financial entities.

The main components covered are financial service activities except insurance, reinsurance and pension funding (64); Insurance, reinsurance and pension funding, except compulsory social security activities (65); and auxiliary to financial service and insurance activities (66).

Data Source

The data sources of the activity are mainly administrative data from private and public commercial banks and Central Bank of Tanzania (BOT) (i.e. income and expenditure data from audited financial reports); Tanzania Revenue Authority (TRA) (i.e. turnover); and Insurance companies (i.e. income and expenditure data from audited financial reports).

Methodology

Financial Service Activities except Insurance, Reinsurance and Pension Funding

Central Bank

The gross output is estimated by using a sum-of-cost approach as the sum of intermediation consumption (IC), compensation of employees (COE), and consumption of fixed capital (CFC) using depreciation as a proxy. Intermediate consumption is estimated based on expenses incurred by the Central bank as input in providing financial services obtained from audited financial reports.

Commercial Banks

The gross output is estimated as the sum of income of commercial banks from audited financial reports (i.e. income and expenditure data). Intermediate consumption (IC) is calculated based on expenses incurred by commercial banks from audited financial reports.

Auxiliary to Financial Service and Insurance Activities

The gross output is obtained from VAT turnover data from auxiliary to financial services and insurance activities. Intermediate consumption is derived based on the 2019 Service Sector Study.

Insurance, Reinsurance and Pension Funding, except Compulsory Social Security Activities

The gross output is estimated as the sum of non-life and life insurance output obtained from audited financial reports of insurance companies, in meanwhile, the output is derived as gross premium plus premium supplements/ total investment less incurred claims/benefit due. Intermediate consumption is obtained based on 2019 Service Sector Study.

4.1.12 Real Estate Activities

Coverage: Real estate activity is acting as lessors, agents, and/or brokers in one or more of the selling or buying real estate, renting real estate, providing other real estate services such as appraising real estate or acting as real estate escrow agents. This activity is carried out on its own or leased property and be done on a fee or contract basis.

Data Source: The data sources are HBS and the 2019 Services Sector Survey.

Methodology

The gross output: estimated based on income data of real estate obtained from HBS and the services sector survey.

Intermediate consumption is derived from expenses incurred as input on providing real estate services.

4.1.13 Professional, Scientific and Technical Activities

This section includes specialized professional, scientific and technical activities. These activities require a high degree of training, and make specialized knowledge and skills available to users. These activities include Legal and accounting activities; Activities of head offices; management consultancy activities; Architectural and engineering activities; technical testing and analysis Scientific research and development; Advertising and market research; Other professional, scientific and technical activities; and Veterinary activities.

Data Sources: Turnover data from Tanzania Revenue Authority and 2019 Service Sector Survey.

Methodology

Gross Output: The gross output for this industry was estimated as a sum of turnover of Professional, scientific and technical activities.

Intermediate Consumption: Intermediate Consumption was estimated using 2019 Service Sector Survey.

4.1.14 Administrative and Support Services

Coverage: This section includes a variety of activities that support general business operations. The activity covers Rental and leasing activities; Employment activities; Travel agency, tour operator, reservation service and related activities; Security and investigation activities; Services to buildings and landscape activities; Office administrative, office support and other business support activities.

Data Sources: Turnover data from Tanzania Revenue Authority and 2019 Service Sector Survey.

Methodology

Gross Output: The gross output for this industry was estimated as a sum of turnover of Professional, scientific and technical activities.

Intermediate Consumption: Intermediate Consumption was estimated using 2019 Service Sector Survey

4.1.15 Public Administration and Defence, Compulsory Social Security

Coverage: This section includes activities of a governmental nature, normally carried out by the public administration. This includes the enactment and judicial interpretation of laws and their pursuant regulation, as well as the administration of programmes based on them, legislative activities, taxation, national defense, public order and safety,

immigration services, foreign affairs and the administration of government programmes. This section also includes compulsory social security activities.

Data sources: Revenue and Expenditure data from Ministry of Finance, Office of Treasury Registrar and President's Office Regional Administration Local Government Authority (PO-RALG).

Methodology

Gross Output: The output of this sector was obtained from the government financial statistics. The output includes compensation of employees, consumption of fixed capital and intermediate consumption.

Intermediate Consumption: The intermediate consumption estimated from the government financial statistics in which all intermediate cost incurred by the government are summed up.

4.1.16 Education

Coverage: This activity includes Pre-primary and Primary Education; Secondary Education; Post-Secondary Education; and Tertiary Education.

Data Sources: Revenue and Expenditure data from Ministry of Finance, Office of Treasury Registrar and President's Office Regional Administration Local Government Authority (PO-RALG). Also, Household budget Survey 2017/18 and NPISHs.

Methodology

Gross Output: Non-market Benchmark output for this activity is estimated by government financial statistics by using sum of cost approach. Government financial statistics provide data for compensation of employees and intermediate consumption provided to training institutions. The output of private sector obtained from the Households Budget Survey 2017/18 and NPISHs.

Intermediate Consumption: The intermediate consumption was obtained from government financial statistics for non-market output while for market output computed from Households Budget Survey 2017/18 and NPISHs.

4.1.17 Human Health and Social Work Activities

Coverage: This activity covers human Health activities and Social work activities

Data Sources: Revenue and Expenditure data from Ministry of Finance, Office of Treasury Registrar and President's Office Regional Administration Local Government Authority (PO-RALG). Also, Household budget Survey 2017/18 and NPISHs.

Methodology

Gross Output; Non-Market output obtained from government financial statistics by summing compensation of employees and intermediate consumption for government health facilities. Market output obtained from household budget survey and informal modules from Integrated Labour Force Survey.

Intermediate Consumption: The intermediate consumption was obtained from government financial statistics for non-market output while for market output computed from Households Budget Survey 2017/18 and NPISHs.

4.1.18 Arts, Entertainment and Recreation

Coverage: This section includes a wide range of activities, including creative, arts and entertainment; libraries, archives, museums and other cultural activities; gambling and betting activities; and sports activities and amusement and recreation activities. It is classified under division 90 – 93 of ISIC Rev. 4.

Data Source: Turnover data from TRA and HBS 2017/18 from NBS.

Methodology: Benchmark Gross output at basic prices and intermediate consumption at purchasers' prices are estimated based on VAT total turnover and HBS 2017/18.

4.1.19 Other Services Activities

Coverage: This industry includes the activities of membership organizations; the repair of computers and personal and household goods; and a variety of personal service activities not covered elsewhere in the classification.

Data Sources: Household Budget Survey 2017/18 from the National Bureau of Statistics and turnover data from TRA.

Methodology: Benchmark Gross Output was estimated from turnover data.

Intermediate Consumption: Intermediate Consumption estimates for Other Service activity were obtained from 2017/18 HBS.

4.1.20. Activities of Household as Employers

Coverage: This section covers activities of households as employers of domestic personnel.

Data Sources: The main sources of data for activities of households as employers is from the 2017/18 Household Budget Survey from NBS.

Methodology: Benchmark Gross Output was estimated using HBS 2017/18

5.0 Input Output Tables

The SUTs form the basis for the compilation of the Input Output Tables (IOTs). The current 2019 IOTs is the third to be compiled following those for 1992 and 2015. The 2019 IOTs were derived from 64×64 SUTs and further aggregated to 20×20 product by product tables using industry technology and fixed product sales structure assumptions. These tables provide a detailed framework for analyzing inter-industry linkages and for modelling how shocks in one sector transmit across the wider economy.

An Input Output Tables (IOT) is a matrix organized either by product-by-product or industry-by-industry classifications. It integrates both supply and use information into a

single, symmetric table where the same classification is applied to both rows and columns. This symmetric structure allows for a clear analysis of how products or industries supply inputs to and demand outputs from each other, providing a comprehensive view of economic interdependencies.

5.1 Uses Of Input Output Tables

- i. Predict the effects of changes in demand or supply on different industries and the overall economy.
- ii. Evaluate the potential impacts of government policies, such as tariffs, subsidies, or infrastructure investments.
- iii. Provide insight into interdependencies and linkages between industries helping to identify key sectors and potential bottlenecks.
- iv. Analyze the economic structure and linkages of specific regions or countries.

5.2 The Symmetric Input Output Table

The IOTs constitute the database for macroeconomic models and impact analysis derived from the symmetric input-output tables. The intermediate part of supply and use tables is in principle rectangular: the number of products and industries distinguished do not have to be equal. In practice, often many more products than industries are distinguished.

The intermediate part of a symmetric input-output table (I-O table) is square: the number of rows is equal to the number of columns. The dimension can be either product-by-product or industry-by-industry.

Table 3: Structure of symmetric input-output table at basic prices

HOMOGENEOUS BRANCHES PRODUCTS (CPC)	HOMOGENEOUS BRANCHES						Total	FINAL USES						Total final use	Total use at basic prices
	Agriculture	Industry	Construction	Trade, hotel, transport	Other services	Government services		Final consumption expenditure by h.h	Final consumption expenditure by NPISH	Final consumption expenditure by gov.	Changes in valuables	Changes in inventories	Exports, fob		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Products of agriculture	Intermediate consumption at basic prices (S)							Final demand at basic prices (Y)							(q)
2 Products of industry															
3 Construction work															
4 Trade, hotel, transport services															
5 Other services															
6 Government services															
7 Total															
8 Taxes less subsidies on products								Adjustment items							
9 Direct purchases abroad by residents															
10 Domestic purchases by non-residents															
11 Total															
12 Compensation of employees	Components of value added (E)														(w)
13 Other net taxes on production															
14 Consumption of fixed capital															
15 Operating surplus, net															
16 Gross value added at basic prices															
17 Output at basic prices															
18 Imports, CIF	Imports, CIF														
19 Supply at basic prices	(q ^T)							(y)							

5.3 Methodology

The 64 X 64 Supply and Use Tables for Mainland Tanzania were transformed into symmetric industry by industry and product by product input-output tables by using industry technology assumptions and fixed product sales structure assumptions. The 2019 IOTs for Mainland Tanzania were also aggregated by 20 industry by industry and product by product input-output tables. The compilation of the IOT for Mainland Tanzania was based mainly on the recommendations of the 2008 System of National Accounts (UN, 2008 SNA).

The following tables were constructed as industry by industry and product by product input-output tables:

- i. Symmetric input-output table at basic prices
- ii. Symmetric input-output table for domestic output at basic prices
- iii. Symmetric input-output table for imports

For input-output analysis, it is necessary to value transactions at basic prices. However, all uses are initially recorded at purchasers' prices, which include non-deductible VAT, trade and transport margins, and taxes less subsidies on products. To convert the use table from purchasers' prices to basic prices, valuation matrices were applied. Note that the totals by product in the valuation matrices on the use side should correspond exactly to those on the supply side, ensuring consistency in the transformation from purchasers to basic prices.

6.0 Conclusion

The compilation of the Supply and Use Tables (SUTs) 2019 for Mainland Tanzania represents a significant milestone in advancing the precision, relevance, and international comparability of national accounts statistics. By updating the outdated 2015 benchmark, this harmonized framework captures current structural dynamics, relative price shifts, and emerging production and investment patterns across the economy. Furthermore, the integration of these robust accounting matrices expands the scope of key macroeconomic indicators, thereby equipping policymakers, researchers,

and development planners with higher-quality empirical data to support strategic modeling and evidence based policy formulation.

7.0 Annexes

Table 4: Supply Side of the Supply and Use table

INDUSTRIES (ISIC Rev.4)	OUTPUT OF INDUSTRIES (ISIC REV.4)													
	Agriculture forestry and fishing	Mining and quarrying	Manufacturing	Electricity gas steam and air conditioning supply	Water supply; sewerage waste management and remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Transportation and storage	Accommodation and food service activities	Information and communication	Financial and insurance activities	Real estate activities	Professional scientific and technical activities	Administrative and support service activities
PRODUCTS (CPA Rev.2)	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Products of agriculture, forestry and fishing	41 220 905		1 381											14 307
Mining and quarrying		9 827 788				242 453								
Manufactured products	1 172 254		31 495 637				1 561 102			18 952				
Electricity, gas, steam and air conditioning				2 024 131										
Water supply; sewerage, waste management and remediation services					1 079 350									
Constructions and construction works						43 005 992								
Wholesale and retail trade services; repair services of motor vehicles and motorcycles							17 304 637							
Transportation and storage services								20 034 517						
Accommodation and food services									8 577 933					
Information and communication services			6 395							3 837 939				
Financial and insurance services											6 479 913			
Real estate services								6 480	1 530		51 304	4 494 939		
Professional, scientific and technical services													989 005	200 739
Administrative and support services								293 795	22 995					5 134 826
Public administration and defence services; compulsory social security services														
Education services														
Human health and social work services														
Arts, entertainment and recreation services														
Other services														
Services of households as employers														
Total	42 393 159	9 827 788	31 503 412	2 024 131	1 079 350	43 248 444	18 865 738	20 334 791	8 602 457	3 856 891	6 531 217	4 494 939	989 005	5 349 872
C.i.f./f.o.b. adjustments on imports														
Direct purchases abroad by residents														
Total output	42 393 159	9 827 788	31 503 412	2 024 131	1 079 350	43 248 444	18 865 738	20 334 791	8 602 457	3 856 891	6 531 217	4 494 939	989 005	5 349 872

Table 4b: Supply Side of the Supply and Use Table

INDUSTRIES (ISIC Rev.4)	OUTPUT OF INDUSTRIES (ISIC Rev.4)						Domestic Supply	Imports, cif	Cif/bid Adjustment	Total Imports, cif	Total supply at basic prices	VALUATION			Total supply at purchasers' prices
	Public administration and defence; compulsory social security	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities	Domestic services						Trade margins	Transport margins	Taxes less subsidies on products	
PRODUCTS (CPA Rev.2)	O	P	Q	R	S	T	Domsup	imp	cif/bidadjust	totimp	Totsupbasic	trademarg	transmarg	nettaxes	Totsuppurch
Products of agriculture, forestry and fishing							41 236 593	654 278		654 278	41 890 871	4 909 160	817 771	623 651	48 241 454
Mining and quarrying							10 070 240	50 078		50 078	10 120 319	1 074 552	186 806	20 522	11 402 199
Manufactured products	13 064				71 524		34 332 532	20 082 949		20 082 949	54 415 482	11 329 511	2 212 466	8 393 209	76 350 668
Electricity, gas, steam and air conditioning							2 024 131	44		44	2 024 176			85 889	2 110 065
Water supply; sewerage, waste management and remediation services							1 079 350	15 875		15 875	1 095 225			24 793	1 120 018
Constructions and construction works							43 005 992	76 546		76 546	43 082 538				43 082 538
Wholesale and retail trade services; repair services of motor vehicles and motorcycles							17 304 637				17 304 637	- 17 354 701		50 065	
Transportation and storage services							20 034 517	1 465 893	- 1 338 137	127 756	20 162 273		- 3 220 398	334 575	17 276 450
Accommodation and food services		332 236					8 910 168				8 910 168			381 223	9 291 391
Information and communication services							3 844 334	147 763		147 763	3 992 097	41 477	3 355	411 073	4 448 001
Financial and insurance services							6 479 913	163 829	- 107 358	56 472	6 536 385			141 756	6 678 140
Real estate services			12 623				4 566 876				4 566 876			53 797	4 620 673
Professional, scientific and technical services							1 189 745	13 160		13 160	1 202 905			4 572	1 207 476
Administrative and support services		31 560					5 483 175	435 349		435 349	5 918 523			24 434	5 942 957
Public administration and defence services; compulsory social security services	9 463 677						9 463 677	197 219		197 219	9 660 896				9 660 896
Education services		4 822 842					4 822 842				4 822 842			60 131	4 882 972
Human health and social work services			3 988 303				3 988 303				3 988 303			91 307	4 079 610
Arts, entertainment and recreation services				665 014			665 014	6 890		6 890	671 904			28 682	700 586
Other services					2 601 946		2 601 946	2		2	2 601 949			37 749	2 639 698
Services of households as employers						315 780	315 780				315 780				315 780
Total	9 476 741	5 186 637	4 000 927	665 014	2 673 471	315 780	221 419 764	23 309 877	- 1 445 494	21 864 383	243 284 147			10 767 426	254 051 573
C.i.f./f.o.b. adjustments on imports								- 1 445 494	1 445 494						
Direct purchases abroad by residents								1 392 414		1 392 414	1 392 414				1 392 414
Total output	9 476 741	5 186 637	4 000 927	665 014	2 673 471	315 780	221 419 764	23 256 797		23 256 797	244 676 561			10 767 426	255 443 987

Table 5: Use Side of the Supply and Use Table

INDUSTRIES (ISIC Rev.4)	OUTPUT OF INDUSTRIES (ISIC REV. 4)													
	Agriculture forestry and fishing	Mining and quarrying	Manufacturing	Electricity gas steam and air conditioning supply	Water supply; sewerage waste management and remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Transportation and storage	Accommodation and food service activities	Information and communication	Financial and insurance activities	Real estate activities	Professional scientific and technical activities	Administrative and support service activities
PRODUCTS (CPA Rev.2)	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Products of agriculture, forestry and fishing	3 190 467	104 933	7 588 878			1 085 813	10 587	903	2 053 382	275	150	6 680	117	23 399
Mining and quarrying	65 133	3 327 034	369 163	2 077	1 486 196			208	99					
Manufactured products	3 350 552	1 024 539	7 629 197	278 864	184 265	10 063 374	1 482 591	5 493 906	2 609 579	632 702	186 964	146 610	81 447	529 737
Electricity, gas, steam and air conditioning	23 074	185 228	517 761	38 064	79 575	210 276	151 023	50 489	87 659	62 321	13 828	14 651	8 187	35 240
Water supply; sewerage, waste management and remediation services	61 335	58 994	150 728	1 543	33 571	167 863	75 536	41 177	23 460	5 546	3 748	16 450	1 956	23 963
Constructions and construction works														
Wholesale and retail trade services; repair services of motor vehicles and motorcycles														
Transportation and storage services	395 206	225 337	800 512	379 165	18 581	5 757 384	1 376 813	1 188 478	10 541	103 919	53 660	23 033	23 867	322 055
Accommodation and food services	27 508	174 082	52 865	110 385	10 466	426 623	1 056 884	985 175	325	121 582	79 231	58 801	73 434	247 846
Information and communication services	360 997	224 361	177 368	18 694	23 647	767 547	416 225	210 972	22 632	345 767	185 124	47 700	46 716	262 009
Financial and insurance services	218 791	232 007	357 926	82 926	14 536	2 313 595	494 946	534 392	19 233	95 520	683 347	142 541	26 805	165 589
Real estate services	14 812	21 350	67 175	29 442	6 173	508 345	579 088	156 860	15 608	64 235	129 568		32 048	209 805
Professional, scientific and technical services	32 067	20 016	27 520	9 390	968	112 859	550 498	25 355	771	80 019	48 244	16 878	47 525	66 734
Administrative and support services	120 015	94 804	630 607	119 909	17 133	1 398 635	199 961	959 097	42 816	82 661	55 234	14 589	56 487	57 641
Public administration and defence services; compulsory social security services														
Education services														
Human health and social work services														
Arts, entertainment and recreation services														
Other services	46 586	14 033	52 201	44 854	7 703	37 287	209 759	118 203	107 871	95 879	16 937	44 834	12 242	172 347
Services of households as employers														
Total	7 861 410	2 444 816	21 379 770	1 482 400	398 694	24 355 797	6 603 911	9 765 216	4 993 976	1 690 427	1 456 035	532 764	412 831	2 116 363
C.i.f.f.o.b. adjustments on imports														
Direct purchases abroad by residents														
Direct purchases in domestic														
Total intermediate consumption	7 861 410	2 444 816	21 379 770	1 482 400	398 694	24 355 797	6 603 911	9 765 216	4 993 976	1 690 427	1 456 035	532 764	412 831	2 116 363
Compensation of employees	8 329 597	916 453	3 209 964	227 410	200 085	4 303 803	2 502 433	2 775 226	486 498	280 014	1 628 398	457 152	140 291	366 095
Other taxes on production	9 412	28 936	216 500	11 848	3 517	7 279	6 903	107 065	6 893	8 214	34 179	8 250	4 753	22 294
Other subsidies on production				- 1 020 350				- 49 884		- 16 081	- 16 277			
Consumption of fixed capital	537 179	1 297 886	799 633	11 386	40 336	1 762 360	296 903	1 415 505	52 312	258 863	551 517	21 172	67 079	117 191
Operating surplus, net	25 655 562	5 139 697	5 897 545	1 311 438	436 718	12 819 207	9 455 589	6 321 663	3 062 778	1 635 454	2 877 366	3 475 601	364 052	2 727 929
Value added at basic prices	34 531 749	7 382 971	10 123 642	541 731	680 656	18 892 648	12 261 827	10 569 576	3 608 481	2 166 463	5 075 182	3 962 175	576 175	3 233 509
Output at basic prices	42 393 159	9 827 788	31 503 412	2 024 131	1 079 350	43 248 444	18 865 738	20 334 791	8 602 457	3 856 891	6 531 217	4 494 939	989 005	5 349 872

Table 5b: Use Side of the Supply and Use Table

INDUSTRIES (ISIC Rev.4)	OUTPUT OF INDUSTRIES (ISIC REV.4)						Total intermediate consumption	FINAL USES							Total use at purchasers' prices		
	Public administration and defence; compulsory social security	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities	Domestic services		Final consumption expenditure by households	Final consumption expenditure by non-profit organisations serving households (NPISH)	Final consumption expenditure by government	Final consumption expenditure	Gross Fixed Capital Formation	Changes in inventories	Changes in inventories		Exports	Final uses
PRODUCTS (CPA Rev.2)	O	P	Q	R	S	T		Hhcons	NPISH	Gov cons		GFCF	Chinv	Chinv	Exp		
Products of agriculture, forestry and fishing	9 888	26 647	11 757	714	124 270		14 236 859	30 487 838			30 487 838	679 137		102 000	2 733 620	34 002 595	48 241 454
Mining and quarrying							5 249 908	549			549		228 991	95 728	5 827 022	6 152 291	11 402 199
Manufactured products	1 031 622	507 985	1 270 748	24 076	342 291		36 891 048	30 078 120		1 647	30 079 767	5 397 598		42 674	3 939 581	39 459 620	76 350 668
Electricity, gas, steam and air conditioning	52 860	46 563	17 700	11 792	26 491		1 632 781	476 982			476 982				302	477 284	2 110 065
Water supply; sewerage, waste management and remediation services	20 779	20 240	12 658	12 328	16 343		748 217	340 758			340 758			3 991	27 051	371 801	1 120 018
Constructions and construction works												43 082 538				43 082 538	43 082 538
Wholesale and retail trade services; repair services of motor vehicles and motorcycles																	
Transportation and storage services	191 998	158 461	31 413	20 421	92 657		11 173 501	3 000 554			3 000 554				3 102 395	6 102 949	17 276 450
Accommodation and food services	239 231	216 177	53 381	27 262	35 415		3 996 693	5 294 699			5 294 699					5 294 699	9 291 391
Information and communication services	217 098	133 833	79 288	15 709	37 387		3 615 054	764 749			764 749				68 199	832 948	4 448 001
Financial and insurance services	118 552	108 231	32 819	5 864	35 613		5 683 235	846 273		6 939	853 212				141 693	994 905	6 678 140
Real estate services	33 567	66 149	13 511	4 396	66 043		2 018 175	2 602 498			2 602 498					2 602 498	4 620 673
Professional, scientific and technical services	101 574	4 743	7 029	1 866	5 257		1 159 312	33 501		109	33 610	14 505			49	48 164	1 207 476
Administrative and support services	504 610	229 391	43 869	38 375	65 724		4 731 558	700 093			700 093				511 307	1 211 399	5 942 957
Public administration and defence services; compulsory social security services	707 052						707 052	563 381		8 379 923	8 943 304				10 540	8 953 844	9 660 896
Education services		34 572					34 572	1 669 747	79 455	3 099 199	4 848 400					4 848 400	4 882 972
Human health and social work services								2 274 028	123 196	1 682 386	4 079 610					4 079 610	4 079 610
Arts, entertainment and recreation services								632 561	3 488	59 672	695 721				4 885	700 586	700 586
Other services	61 006	34 370	16 789	4 154	74 958		1 172 014	1 441 779	20 419		1 482 198				5 486	1 467 684	2 639 698
Services of households as employers								315 780			315 780					315 780	315 780
Total	3 289 837	1 587 362	1 590 941	166 978	922 449		93 051 978	81 523 891	226 558	13 229 874	94 980 322	49 173 777	228 991	244 394	16 372 110	160 999 595	254 051 573
C.I.T./I.o.b. adjustments on imports								1 392 414			1 392 414					1 392 414	1 392 414
Direct purchases abroad by residents								- 5 660 573			- 5 660 573				5 660 573		
Direct purchases in domestic																	
Total intermediate consumption	3 289 837	1 587 362	1 590 941	166 978	922 449		93 051 978	77 255 732	226 558	13 229 874	90 712 163	49 173 777	228 991	244 394	22 032 684	162 392 009	255 443 987
Compensation of employees	4 383 354	2 527 098	1 332 734	82 430	545 844	315 780	35 010 656										
Other taxes on production	53 976	22 629	22 760	1 750	8 733		585 892										
Other subsidies on production			- 42 204				- 1 144 796										
Consumption of fixed capital	1 749 573	39 442	225 491	2 139	69 826		9 315 792										
Operating surplus, net		1 010 105	871 204	411 717	1 126 619		84 600 243										
Value added at basic prices	6 186 903	3 599 275	2 409 985	498 036	1 751 021	315 780	128 367 786										
Output at basic prices	9 476 741	5 186 637	4 000 927	665 014	2 673 471	315 780	221 419 764										

Table 6: Input Output Table

INDUSTRIES (ISIC Rev.4) PRODUCTS (CPA Rev.2)	OUTPUT OF INDUSTRIES (ISIC Rev.4)													
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply; sewerage, waste management and remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Transportation and storage	Accommodation and food service activities	Information and communication	Financial and insurance activities	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities
	A 01	B 02	C 03	D 04	E 05	F 06	G 07	H 08	I 09	J 10	K 11	L 12	M 13	N 14
Products of agriculture, forestry and fishing	2 843 361	97 828	6 773 085			956 327	8 581	791	1 800 709	1 604	133	6 335	878	24 767
Mining and quarrying	129	65 204	2 944 652	329 590	1 601	1 338 508		177	85	598				3
Manufactured products	2 512 473	769 055	6 238 357	200 432	150 406	7 325 497	940 379	3 045 379	2 124 278	487 912	145 432	118 341	74 878	379 029
Electricity, gas, steam and air conditioning	22 552	186 406	531 854	38 064	79 574	209 096	138 526	49 743	90 391	62 119	13 719	14 847	9 509	35 070
Water supply; sewerage, waste management and remediation services	59 710	59 934	159 073	1 543	33 562	166 879	69 259	40 481	24 688	5 547	3 717	16 532	2 855	23 775
Constructions and construction works														
Wholesale and retail trade services; repair services of motor vehicles and motorcycles	621 759	174 749	2 110 390	65 966	25 241	2 030 181	210 954	850 263	555 413	87 836	25 843	24 063	14 841	91 018
Transportation and storage services	504 114	293 785	1 298 858	394 966	22 834	6 143 602	1 307 486	1 397 808	114 991	120 346	57 792	28 420	38 834	348 961
Accommodation and food services	27 413	176 474	142 942	110 385	10 466	424 231	969 429	970 628	14 172	120 996	78 608	59 906	82 734	253 433
Information and communication services	329 512	214 259	207 027	17 823	22 287	700 306	346 839	190 762	28 059	311 064	168 036	45 739	53 615	235 448
Financial and insurance services	213 199	241 349	405 025	81 976	14 452	2 283 552	448 651	520 773	25 950	93 886	664 710	146 421	32 747	167 004
Real estate services	14 957	24 200	117 615	29 442	6 173	505 495	631 170	154 544	19 801	63 933	128 550	1 113	39 920	204 082
Professional, scientific and technical services	31 360	20 649	74 626	9 390	968	112 226	504 945	24 980	1 073	79 632	47 865	17 285	50 029	64 449
Administrative and support services	116 878	102 645	653 176	119 909	17 133	1 390 794	183 414	944 935	57 388	82 383	54 800	15 474	58 650	70 691
PUBLIC administration and defence services; compulsory social security services			975											
Education services									2 215					210
Human health and social work services														
Arts, entertainment and recreation services														
Other services	45 761	14 242	73 394	44 854	7 703	37 078	192 402	116 458	109 766	95 418	16 804	45 077	18 709	167 625
Services of households as employers														
Total	7 343 187	2 440 779	21 731 048	1 444 342	392 401	23 623 772	5 852 035	8 307 722	4 969 018	1 613 273	1 406 010	539 555	478 199	2 065 566
Taxes less subsidies on products	307 436	140 577	444 809	38 058	6 293	595 485	205 416	1 313 296	112 401	73 188	38 587	13 666	14 043	129 821
Total	7 650 623	2 581 356	22 175 857	1 482 400	398 694	24 219 257	6 057 451	9 621 017	5 081 419	1 686 461	1 444 597	553 221	492 241	2 195 387
C.I.F./f.o.b. adjustments on imports														
Direct purchases abroad by residents														
Direct purchases in domestic markets by non-residents														
Total intermediate consumption/final consumption at basic prices	7 650 623	2 581 356	22 175 857	1 482 400	398 694	24 219 257	6 057 451	9 621 017	5 081 419	1 686 461	1 444 597	553 221	492 241	2 195 387
Compensation of employees	8 100 387	940 580	3 668 594	227 410	200 085	4 279 675	2 295 361	2 734 246	646 987	279 289	1 615 606	475 119	154 027	408 153
Other taxes on production	9 221	28 977	217 626	11 848	3 517	7 238	6 332	105 484	8 323	8 218	33 910	8 626	5 590	23 100
Other subsidies on production			- 79	- 1 020 350				- 49 148		- 16 002	- 16 149	- 277		- 721
Consumption of fixed capital	522 673	1 307 765	844 410	11 386	40 336	1 752 480	272 335	1 394 603	54 689	257 753	547 184	26 676	71 477	133 312
Operating surplus, net	24 953 689	5 211 562	7 426 124	1 311 438	436 718	12 747 342	8 673 158	6 228 314	3 118 750	1 628 615	2 854 764	3 503 511	466 410	2 723 943
Value added at basic prices	33 585 969	7 488 884	12 156 675	541 731	680 656	18 786 735	11 247 186	10 413 500	3 828 749	2 157 873	5 035 316	4 013 655	697 503	3 287 788
Output at basic prices	41 236 593	10 070 240	34 332 532	2 024 131	1 079 350	43 005 992	17 304 637	20 034 517	8 910 168	3 844 334	6 479 913	4 566 876	1 189 745	5 483 175
Imports cif	654 278	50 078	20 082 949	44	15 875	76 546		127 756		147 763	56 472		13 160	435 349
Total supply	41 890 871	10 120 319	54 415 482	2 024 176	1 095 225	43 082 538	17 304 637	20 162 273	8 910 168	3 992 097	6 536 385	4 566 876	1 202 905	5 918 523

Table 6b: Input Output Table

INDUSTRIES (ISIC Rev.4)	OUTPUT OF INDUSTRIES (ISIC REV.4)							FINAL USES									
	Public administration and defence; compulsory social security	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities	Domestic services	Total intermediate consumption	Final consumption expenditure by households	Final consumption expenditure by non-profit organisations serving households (NPISH)	Final consumption expenditure by government	Final consumption expenditure	Gross Fixed Capital Formation	Changes in inventories	Exports	Final uses at basic prices	Total use at basic prices	
	O	P	Q	R	S	T		Hhcons	NPISH	Govcons		GFCF	Chinv	Chinv	Exp		
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Products of agriculture, forestry and fishing	8 739	21 833	10 032	629	108 276		12 663 907	26 090 221			26 090 221	602 903		94 691	2 439 150	29 226 964	41 890 871
Mining and quarrying							4 680 547	455			455		228 656	80 663	5 129 578	5 439 772	10 120 319
Manufactured products	797 331	373 364	1 043 396	17 692	256 235		26 999 866	20 174 460		1 396	20 175 857	4 027 401		- 55 796	3 268 154	27 415 616	54 415 482
Electricity, gas, steam and air conditioning	52 787	43 297	17 644	11 792	25 782		1 632 774	39 110			39 110				302	39 140	2 024 176
Water supply; sewerage, waste management and remediation services	20 744	18 617	12 615	12 328	15 901		747 959	316 224			316 224			3 991	27 051	347 266	1 095 225
Construction and construction work												43 082 538				43 082 538	43 082 538
Wholesale and retail trade services; repair services of motor vehicles and motorcycles	154 572	70 181	172 865	3 717	56 981		7 346 832	7 514 802		206	7 515 008	927 290	113	101 469	1 413 925	9 957 804	17 304 637
Transportation and storage services	218 647	159 899	62 832	21 141	100 745		12 636 063	3 977 119		41	3 977 160	177 826	19	19 156	3 352 050	7 526 210	20 162 273
Accommodation and food services	238 902	201 014	53 212	27 282	34 467		3 996 693	4 913 476			4 913 476					4 913 476	8 910 168
Information and communication services	199 627	115 234	71 596	15 386	33 755		3 306 374	617 761			617 761				67 961	685 722	3 992 097
Financial and insurance services	117 632	99 730	32 530	5 864	34 660		5 630 154	757 599		6 939	764 537				141 693	906 231	6 536 385
Real estate services	33 521	61 509	13 468	4 396	64 276		2 018 175	2 548 701			2 548 701					2 548 701	4 566 676
Professional, scientific and technical services	101 434	4 410	7 007	1 866	5 117		1 159 312	28 930		109	29 039	14 505			49	43 593	1 202 905
Administrative and support services	503 914	213 301	43 730	38 375	63 988		4 731 558	675 659			675 659				511 307	1 186 965	5 918 523
Public administration and defence services; compulsory social security services	706 077						707 052	563 381		8 379 923	8 943 304				10 540	8 953 844	9 660 896
Education services		32 147					34 572	1 609 616	79 455	3 099 199	4 788 270					4 788 270	4 822 842
Human health and social work services								2 182 721	123 196	1 682 386	3 988 303					3 988 303	3 988 303
Arts, entertainment and recreation services								603 902	3 486	59 651	667 039				4 665	671 904	671 904
Other services	60 922	31 980	16 736	4 154	72 952		1 172 014	1 404 030	20 419		1 424 449				5 486	1 429 935	2 601 949
Services of households as employers								315 780			315 780					315 780	315 780
Total	3 214 848	1 446 696	1 557 664	164 623	873 113		89 463 851	74 685 936	226 556	13 229 874	88 142 341	48 832 462	228 988	244 394	16 372 110	153 820 295	243 284 147
Taxes less subsidies on products	70 454	29 327	28 258	2 355	24 658		3 588 126	6 837 955	1	25	6 837 981	341 315	4			7 179 300	10 767 426
Total	3 285 302	1 476 023	1 585 922	166 978	897 771		93 051 978	81 523 891	226 558	13 229 874	94 980 322	49 173 777	228 991	244 394	16 372 110	160 999 595	254 051 573
C.i.f./f.o.b. adjustments on imports																	
Direct purchases abroad by residents								1 392 414			1 392 414					1 392 414	1 392 414
Direct purchases in domestic markets by non-residents								- 5 660 573			- 5 660 573					- 5 660 573	
Total intermediate consumption/final consumption at basic prices	3 285 302	1 476 023	1 585 922	166 978	897 771		93 051 978	77 255 732	226 558	13 229 874	90 712 163	49 173 777	228 991	244 394	22 032 684	162 392 009	255 443 987
Compensation of employees	4 377 312	2 349 845	1 328 529	82 430	531 241	315 780	35 010 656										
Other taxes on production	53 902	21 042	22 688	1 750	8 499		585 892										
Other subsidies on production			- 42 070				- 1 144 796										
Consumption of fixed capital	1 747 161	36 676	224 779	2 139	67 958		9 315 792										
Operating surplus, net		939 256	866 456	411 717	1 096 478		84 600 243										
Value added at basic prices	6 178 375	3 346 818	2 402 382	498 036	1 704 176	315 780	126 367 786										
Output at basic prices	9 463 677	4 822 842	3 988 303	665 014	2 601 946	315 780	221 419 764										
Imports cif	197 219				2		21 864 383										
Total supply	9 660 896	4 822 842	3 988 303	671 904	2 601 949	315 780	243 284 147										

