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## Foreword

The CSO brought out the new series of National Accounts Statistics in January 2015 with base 2011-12 using new data sources and incorporating some of the recommendations of the System of National Accounts, 2008. In Indian National Accounts Statistics due to disparate data sources, the GDP derived from the production side and the expenditure side often do not match and the differences are termed as statistical discrepancies. This can be obviated with the compilation of the Supply and Use tables (SUT), which offer a detailed analysis of the process of production and the use of goods and services (also treated as products) and the income generated in that production.

The SUT framework is that part of the national accounts system which focuses on the production in an economy. It reflects the production of industries in which intermediate products and primary inputs are required, showing where goods and services are produced and where they are used as intermediate consumption, final consumption, gross capital formation and exports. The most important macro-economic aggregates such as GDP, components of value added, imports, final consumption, capital formation and exports are obtained within this framework which would be mutually consistent.

The Central Statistics Office (CSO) has for the first time compiled and published the Supply and Use Table (SUT) with 140 products and 66 industries of the Indian Economy for the years 2011-12 and 2012-13. It includes the complete table, the details of the methodology adopted, the database used and a brief analysis of the results.

I would like to place on record my deep appreciation of the dedicated efforts and hard work put in by Shri S V Ramana Murthy, DDG, NAD, Shri Nagesh Singh, Director, NAD, Ms Sudeepta Ghosh, DD, Ms Tulika Sondhi, Ms Renu, Shri Druv, statistical officers and other officers of NAD. I also appreciate the efforts of the two man committee comprising Dr A. C. Kulshreshtha, Ex head of NAD and Dr G. C. Manna, DG, CSO, constituted by the Advisory Committee on National Statistics, in looking into the methodology and cross validating the data. I would also like to acknowledge the contribution of Shri Ashish Kumar, ex DG, CSO under whose guidance the compilation of SUT was initiated.

  
( T C A Anant)

New Delhi  
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# Supply and Use Table

(A Note on Compilation for the Years 2011-12 and 2012-13)

## 1. Introduction

Supply and Use Tables (SUT) play an important role as an integration framework of the national accounts. As a key feature of national accounts, SUT provides the ideal concept for balancing supply and demand and it is the best framework for compiling Gross Domestic Product (GDP) at current prices. SUT constitute a complete description of the economy, since they give detailed information on the production processes, the interdependencies in production, the use of goods and services and generation of income through production. After balancing, SUT provide coherent data linking output of industries as products and intermediate and final uses of various products. These tables show the structure of the costs of production and the income generated in the production process, the flow of goods and services produced within the national economy and the flows of goods and services with the rest of the world.

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The supply use equation for any given product in an economy can be mathematically expressed as:

$$\text{Output} + \text{Imports} = \text{Intermediate consumption} + \text{Final consumption} + \text{Gross Capital formation (including changes in stocks and valuables)} + \text{Exports}.$$

To maintain the mathematical identity, due adjustments for price differentials should be made in respect of different items in both sides of the equation to get them converted to the same (purchasers') price level. Since output is at basic prices, taxes, net on products need to be added on left hand side. Accordingly, the above equation has to be re-written as:

$$\text{Output} - \text{Intermediate consumption} + \text{Taxes on products} - \text{Subsidies on products} = \text{Final consumption (government and private)} + \text{Gross capital formation (fixed, changes in stocks and valuables)} + \text{Exports} - \text{Imports}.$$

The private Final Consumption Expenditure (FCE) includes both the household FCE and FCE of Non-profit Institutions serving Households (NPISH). It may be noted that left hand side and right hand side in the above equation respectively represent GDP at market price and expenditure components of GDP.

## 2. Supply and Use Tables

Supply Table and Use Table are product X industry matrices but their entries are different. In the Supply Table for each product produced by respective industry appearing in the row, entries across columns show the value of the product by kind of supplier, distinguishing the domestic supply from foreign supply (imports). These are at basic prices. Total supply of each product at purchasers' price is obtained by adding taxes less subsidies on products and trade and transport margins.

On the other hand, a Use Table shows for each product, across the columns, the use of the product (good or service) by type of use, i.e. as intermediate consumption by industries, final consumption, gross capital formation and exports. They are all at purchasers' price.

Formats of Supply Table and Use Table are shown below:

### ***Supply Table***

	Industry 1	▪	Industry n	Import	Taxes less subsidies on products	Trade and transport margins	Total supply at purchasers' prices
Product 1 Product 2 ▪ Product m	<b>Domestic Output matrix at basic prices</b>				<b>Valuation Matrix</b>		
Output/ Total at basic prices							

## Use Table

	Industry 1	• •	Industry n	Final consumptio n expenditure	Gross capital formation	Exports	Total uses at Purchasers' prices
Product 1	<b>Intermediate Use Matrix</b>			<b>Final use Matrix</b>			
Product 2							
• •							• •
Product m							
<b>Total Intermediate Inputs</b>							
GVA	<b>Value Added Vector</b>						
Compensation of Employees							
Gross operating surplus							
CFC							
Taxes less subsidies on production							
<b>Total Input /Output</b>							

The total supply at purchasers' prices initially serves as control for total use at purchasers' price in the use matrix.

### 3. Compilation Procedure

As seen from the above, the Supply and Use Table framework contains two matrices: the Supply Table and the Use Table, which includes Intermediate Uses and the Final Uses. The Supply and Use tables for the years 2011-12 and 2012-13 have been compiled at a level of disaggregation of 140 products and 66 industries as given in Annexure 1 and 2 respectively. These 140 product groups have been taken up keeping in view the availability of product details from the data sources and also the products/items included in the compilation of Index of Industrial Production (IIP). Similarly, 66 industries have been considered keeping in view the requirements of National Accounts Statistics.

For the compilation of the SUT, the 140 sector classification of products is based on the National Product Classification for Manufacturing Sector (NPCMS) / Annual Survey of Industries Commodity Classification (ASICC) used in the Annual Survey of Industries (ASI) and Common Product Nomenclature (CPN). For the services category, the National product Classification for Services Sector (NPCSS) has been used. The 66 sector classification of industries is based on the National

Industrial Classification 2008 and 2004 comprising 29 sectors of Agriculture and allied, 11 sectors of Mining, 72 sectors for manufacturing and 28 sectors for Services. Further, in deriving the SUT, present methodology for compilation of National Accounts (Gross Domestic Product and the Final Expenditures) has been adopted. All the source data pertaining to Agriculture and Allied sectors, Mining & Quarrying, Manufacturing and Services have been concorded with the SUT industry and product classifications developed in the process. In addition, the International Trade Classification Harmonised System (ITC HS) codes relating to imports and exports of products have been concorded to SUT product codes.

The first step in compiling supply and use tables is to compile separate tables for Supply, adjustment for valuation and Use. The total supply of goods and services available is the sum of domestic production and imports. The domestic production - Output is at basic prices and the imports are inclusive of Cost of Insurance and Freight (CIF). CIF adjustment is done to bring them to Free on Board (FOB) prices. The domestic output matrix would be at basic prices. This matrix needs to be revalued since the use matrix which consists of intermediate uses and final uses which are at purchasers' prices. Hence, the need to revalue the supply matrix by adding taxes on products less subsidies on products and adding the trade and transport margins.

The Use Table is at purchasers' prices (unbalanced), which in turn consists of three sub-matrices: the intermediate use matrix, the final use matrix (final demand column vectors) and the gross value added (row vector). The intermediate use matrix shows the input requirements of goods and services for the production of output of each industry sector. The final use matrix shows categories of final uses as final consumption expenditure (FCE) by households, NPISH and the government, gross fixed capital formation, changes in stocks, valuables and exports of products. The Gross Value Added (GVA) vector at basic prices shows the components of value added by industry sectors. In the Indian National Accounts FCE by NPISH is not yet separately available. Thus private FCE comprising Household FCE and NPISH FCE is adopted as the category of FCE and product-wise estimates of Private FCE (PFCE) are obtained following commodity flow approach.

#### 4. Supply Table

The methodology outlined in section 3 for compilation of Supply Table is described below in detail.

**Agriculture and Allied Activities:** Ministry of Agriculture provides crop-wise value of output. These values are grouped into agriculture products of the supply table. In addition the value of output of operation of government irrigation system is also included in the output of crops. The output of livestock products (milk, wool, hides & skins and other livestock products), inland fish and marine fish, industrial wood, firewood (estimated on the basis of NSS survey on Consumption expenditure) and other forestry products are included in the respective livestock, fishing and forestry industry sectors.

**Mining and Quarrying:** Industry wise outputs have been obtained by aggregating the output data from the analysis of the private corporate (MCA) data

base and annual reports of Non-Departmental Commercial Undertakings (NDCUs). For apportioning Mining output data mentioned above into output of various SUT mining product industry sectors, output pattern observed in the Indian Bureau of Mines (IBM) data on minerals has been used.

**Manufacturing:** In the case of organised manufacturing, detailed Industry wise and product wise data from the Annual Survey of Industries (ASI) is analyzed from unit level data. Separately supply tables for ASI Quasi-corporate, Private corporate (taking structure of Public Limited Company and Private Limited Company from ASI data), NDCUs and Departmental Commercial Undertakings (DCUs) by analyzing their annual accounts have been compiled.

The unorganized manufacturing sectors estimates of outputs and inputs for the year 2011-12 are derived in the following manner. Since NSS 67th Round survey on unincorporated enterprises (2010-11) based on NIC 2008 industrial classification did not capture the product and by product wise outputs and inputs, for unorganized manufacturing, the structure from NSS 62nd Round survey of unorganized manufacturing (2005-06) based on ASICC 2000 and NIC 2004 has been used. The industry wise estimates so derived are updated for volume and prices to arrive at 2011-12 prices by using industry specific growth rates of combined IIP and WPI between 2005-06 and 2011-12. The aggregate industry wise estimates so derived are prorated using the 2005-06 structure to arrive at the 2011-12 product wise unorganised manufacturing output matrix. In addition to these items net value of goods sold in the same condition as purchased is taken as trade output. A concordance between NIC 2008 and NIC 2004 was established. Using this structure the National Accounts Statistics (NAS) industry wise unincorporated totals were prorated to arrive at product wise output/input matrix for the unincorporated sector which is consistent with the estimates of NAS.

Industry wise total output is obtained by aggregating output matrices from unorganized sector, NDCUs, DCUs and private corporate sector.

**Construction:** Construction activity has three components, Dwellings, Other Buildings & Structures (DOBS), Construction in Plantations, and Mineral explorations. Further the construction in DOBS has two components, namely Pucca and Kutcha. The estimates of Pucca construction in DOBS are compiled through commodity flow approach on the basis of availability of basic materials and factor inputs. Estimates of output of Kutcha construction, Plantation and Mineral explorations are obtained from expenditure information/data.

**Electricity:** Institution wise output of electricity is estimated from the annual accounts of NDEs, private corporate sector and for DE from the budget documents.

**Gas:** The output of gas sector is estimated for NDE, private corporate and HH sector. The biogas plants output estimated from the data obtained from KVIC is allocated to the household sector.

**Water Supply:** Output of water supply is obtained from NDE, general government, private corporate sector and household sector. The estimate of household sector is obtained from the NSS 67th Round enterprise survey.

Services sectors: Initially, institution wise (general government, DCUs, NDCUs, private corporate and unincorporated sectors) estimates of output from NAS 2011-12 were taken as the starting point. Then the product by industry output matrix was mapped using this data. Since most of the services produced are single product, mapping of product outputs to the SUT industry sectors did not cause much problem.

Other Vectors: Taxes on products less subsidies on products were used to bring the supply matrix to purchasers' price. For the purpose of Sales Tax / Value Added Tax, all the States were requested to furnish the product wise information on sales tax collected. Since the receipt of information was scanty, the rates were updated as available on the different States' Sales Tax Act, which have been applied on product wise domestic output. Union budget finance account No. 8 has been analyzed for product wise services tax and other taxes. Product wise details of Export-Import duties have been compiled from the Directorate of Systems and Data management, Customs and Excise Department and concorded with the products of SUT.

CIF and TTM adjustment: The imports include cost of insurance and freight (cif) and need to be adjusted to bring them at fob (free on board) prices. This implies that the data on share of imports by foreign carriers only is to be taken into account for import of the freight service. But this data is seldom available with custom authorities. Based on the experience world wide a rate of 5% of import of services of air transport, water transport and insurance services is taken as cif adjustment. The same is added back to imports so as to keep the totals intact. As regards the Trade and Transport Margins (TTM), the same margins as adopted in the PFCE compilation in the National Accounts Statistics have been used. Necessary adjustments for Trade and Transport Margins were made to bring supply matrix to purchasers' price.

Ideally, the industry wise estimates of output of the supply matrix so obtained should be consistent with the estimates of Output of the National Accounts (press release) for the given year. But they may not be due to various reasons such as disparate data sources and assumptions. These are made consistent by prorate adjustment of the totals by industries as a starting point.

## **5. Use Table**

Compilation of Use Table is little cumbersome as it requires detailed information on products going as intermediate inputs in the production process of industries. Wherever detailed information on products was not readily available, appropriate ratios had to be used for disaggregation. Major data sources and methodology of compilation are elaborated below:

Agriculture and Allied Activities (SUT Code 1-4): This includes Agriculture, Livestock, Forestry and Logging and Fishing industry sectors.

(a) Findings of Cost of Cultivation Studies (CCS), 2011-12 published by Directorate of Economics and Statistics, Ministry of Agriculture (DESAg): The inputs going into the production of agricultural commodities are seed, chemical fertilizers, organic manures, pesticides and irrigation charges, electricity, diesel oil, bullock



labour, current repairs and maintenance of fixed assets, other operational costs, and market charges.

(b) The irrigation charges for agricultural activities were taken from the budget documents of Centre, State Governments and local bodies. Other input items considered from the budget documents are travel expenses, advertisement, postage and stamps, publication, paper, repairs of furniture, maintenance of staff car and fuel charges and repairs and maintenance.

(c) Land Use Statistics published by Department of Agriculture and Cooperation.

(d) Information on repairs and maintenance of implements is obtained from Cost of Cultivation Studies (CCS) and on construction from All India Debt and Investment Survey (AIDIS).

(e) Input structure of livestock consists of livestock feed (roughages and concentrates), expenditure on repairs and maintenance and operational costs. The estimates of livestock feed in respect of roughages and concentrates is compiled based on CCS information. Repairs and maintenance details are compiled from CCS and also AIDIS data.

(f) Data on input of Forestry Sector was obtained from the Chief Conservator of Forests, State forest departments, State Government Forest Corporations and private contractors. The commodity-wise details of items such as material and supplies and office expenditure which appear in the demands for grants of budget documents are obtained through correspondence from state forest departments. Similarly, information on item wise inputs of forest corporations of various state governments is culled out from their annual reports. The inputs are expenditure on water, electricity, fuel, normal repairs and maintenance of fixed asset and services etc.

(g) In the absence of data from other States, input structure of fishing was obtained from the State government of Haryana. This was augmented by data obtained from the States of Karnataka and Andhra Pradesh. Value of salt used for fish curing is estimated directly from the State Fishery Department of Maritime States.

Mining and Quarrying (SUT codes 5-10): Mining and quarrying activity was split separately into eleven sectors namely, (i) coal and lignite, (ii) natural gas, (iii) crude petroleum, (iv) iron ore (v) manganese ore, (vi) bauxite, (vii) copper ore, (viii) other metallic minerals, (ix) lime stone, (x) mica and (xi) other non-metallic minerals (includes minor minerals). The input structure for Metallic minerals, Non-Metallic minerals and Minor Minerals has been compiled on the basis of information provided by the companies listed in Indian Mineral Year Book and also from the Annual Reports of various NDCUs and annual reports of major companies in private corporate sector. The items "other inputs" and "raw materials" appearing in the data have been divided into various products on the basis of ratios emerging from IOTT 2007-08.

Manufacturing (SUT codes 11-40): This activity is considered separately for organised and unorganised manufacturing sectors.

Organised Manufacturing: Input structure from ASI unit level data has been used by taking into account information contained in Blocks on Inputs, Imports and Other inputs including Services, separately for ASI Quasi corporate, private corporate (type of organization codes relating to public limited and private limited



company), NDCUs (type of organization code relating to NDCUs) and DCUs. SUT product codes and Industry codes (compiled specifically for the purpose) are concorded with NPCMS at 7-digit level codes and with NIC 2008 at 5-digit level codes respectively. All the concorded data is presented in the form of a Matrix of Product X Industry. The input flows for organised manufacturing are arrived at by combining the institution wise input structure. The repairs and maintenance of buildings are allocated to construction sector whereas the repairs and maintenance of others, machinery and equipment are allocated to relevant sectors producing respective industrial machinery. The methodology followed for estimating inputs is similar to that of outputs.

**Unorganised Manufacturing:** The input structure for unorganised manufacturing sector obtained from the survey on unorganised manufacturing sector based on NSS 62nd Round (2005-06), arrived at 2011-12 prices, is applied on the industry wise input from unincorporated enterprises based on 67th Round of NSS survey results, 2010-11 (adjusted for 2011-12 prices). The methodology followed is similar to estimation of output flows as explained for the supply table. Input/output flows thus arrived separately for organised and unorganised manufacturing are merged together to arrive at the total flows of the manufacturing sectors.

**Construction (Sector 41):** The values of the basic materials viz., cement, iron and steel, bricks and tiles, timber and round wood, fixtures and fittings, bitumen and bitumen mixtures, glass and glass products and other construction materials used for construction are the input costs of the construction sector. The basic materials are obtained following commodity flow approach and converted to purchasers' prices by adding taxes on products less subsidies on products and trade- transport margins. To split up the aggregate value of other construction materials over their various constituents, norms used were obtained from a study of Central Building Research Institute (CBRI), Roorkee and major private construction companies. The office expenditure of construction companies has been taken from annual reports of public sector companies and this expenditure is further proportionately arrived at on the basis of ratios (used for IOTT 2007-08) in the construction sector. Inputs relating to straw, bamboo and grass for kutcha construction have been obtained using commodity flow approach from Agriculture and forestry sector.

**Electricity (Sector 42):** The economic activities covered in this sector are generation, transmission and distribution of electrical energy. The estimates of inputs are arrived at by aggregating the inputs of (i) State Electricity Boards, (ii) Neyveli Lignite Corporation, (iii) Damodar Valley Corporation, (iv) Departmental Commercial Undertakings of Central and State Governments relating to the electricity sector, Municipal Electricity boards & Local Bodies and (v) Private Electricity companies, respectively.

**Gas (Sector 43):** The economic activities covered in this sector include production, transmission and distribution of Gas. The inputs have been obtained from Annual reports of the Gas companies namely, Gujarat Petronet Ltd., Indraprastha Gas Ltd, Andhra Pradesh Gas Power Corporation Ltd and major private companies

Water Supply (Sector 44): The economic activities covered in this sector are collection, purification and distribution of water for domestic and industrial consumers, excluding the operation of government irrigation system. For preparing the input structure, government sector comprises centre, state governments and local authorities including water supply corporations/ boards. The item-wise inputs in respect of the government sector are estimated on the basis of data culled out from the budget documents of centre, state governments and local authorities. In addition, the accounts of water supply corporations/boards were also examined for the purpose. The input structure from private corporate companies and unincorporated water supply were obtained from the enterprise survey of 2010-11 adjusted for relevant price levels.

Railway Transport (Sector 45): The total material consumption of Government Railways was obtained by analysing the Demands for Grants for Expenditure of the Central Government Railways. Reports of DMRC, Konkan Railways and Kolkata Metro were analysed to compile input structure of Metro Railway sector. The material consumption of government railways appears as expenditure under five heads in the Demands for Grants for Expenditure of the Central Government Railways. These expenditure heads are (i) travel expenses, (ii) contingent expenses; (iii) cost of materials, (iv) contractual payments and (v) other expenses. Item-wise details for contingent expenses, cost of materials, contractual payments and other expenses are culled out, to the extent possible, from the respective heads of the budget document.

Land Transport (Sector 46): These activities are considered separately for the purpose of estimation of input structure. For the public sector undertakings, input structure is estimated by analysing the annual reports of State Road Transport Corporations and Budget Documents of Centre, States and Local bodies. As regards private sector, material consumption is estimated separately for passenger and freight traffic. For passenger and freight traffic, the input cost and item-wise details of the inputs are estimated separately on the basis of norms obtained from the results of the Enterprise Survey of 67th Round of NSS.

Water Transport (Sector 47): For the details of material inputs, the profit and loss accounts of major shipping companies (Both for Public and Private) and the results from 67th Round enterprise survey of NSS for the unorganised sector were analyzed and the proportions are applied to the input for the entire shipping transport available from NAS.

Air Transport (Sector 48): For public sector, report of Air India, statutory authorities such as Airports Authority of India and for private sector, Annual reports/profit & loss accounts of various private airlines companies have been analyzed.

Other Services (Sector 50-66): As regards communication, storage and warehousing, hotels and restaurants, trade, real estate, renting and business services, education and health, for the Public sector and corporate part, information on inputs has been culled out from the budget documents, annual reports of public sector companies and reports of major private companies. For the unincorporated part, input structure of Enterprise Survey of NSS 67th Round has been used.

Banking and Insurance (Sector 54-55): Reports of various financial Institutions were analyzed for the input structure. For the unorganised part, the input structure was obtained from the NSS 67th Round Survey on enterprises.

Ownership of Dwellings (Sector 56): For ownership of dwellings, the only intermediate input is construction in the form of repairs and maintenance of dwellings and is estimated using the results of NSS Survey on Household Consumption Expenditure.

Education & Research and Medical & Health (Sector 57-58): In these sectors, the general government share is very large. The input structure of public sector part is derived from the budget documents and for the unorganised sector; the input structure is obtained using results of the NSS 67th Round Enterprise Survey.

Public Administration and Defence (Sector 66): Input structure of this sector is obtained from budget analysis of all Central government, State government and Local Bodies. The NPISH serving government, the autonomous bodies are included in this sector. The amounts that appear as sales in this sector are considered as negative entries in the input structure.

For some of the "other Services" e.g. Information and Broadcasting, input structure is obtained using information from budget documents. For others, wherever available, annual reports have been used.

## **6 Final Use vectors:**

Government Final Consumption Expenditure (GFCE): The final consumption expenditure of the Government comprises compensation of employees, consumption of fixed capital and intermediate consumption (purchase of goods and services including repair and maintenance less sales). Detailed analysis of budget documents of Centre and State Governments, Local bodies and NPISH serving Government have been done for the final demand vector of GFCE. Classification of Function of Government (COFOG) such as Government expenditure on public administration and defence, education, health, community, social and other services part have been kept under GFCE while purchase of products and services by the administrative departments have been kept under the industry sector 'Public Administration and Defence' in the Use Table as Inter-Industry use.

Private Final Consumption Expenditure (PFCE): Commodity flow approach, as followed in the National Accounts, has been applied for PFCE estimates. The commodity flow approach considers the availability, supply from domestic production and imports of a product, duly converted to purchaser's prices by applying taxes less subsidies on products and TTM and then from it the intermediate consumption, government consumption, exports and change in stocks are knocked out to arrive at the PFCE estimates which conceptually include the Household FCE and NPISH FCE including any errors and omissions. Since all this is already done in the compilation of PFCE for National Accounts Statistics, for the purpose of SUT, the PFCE estimates have been made to concord to the SUT product classification form the Classification of Individual Consumption of Products (COICOP) adopted in the National Accounts.

Gross Fixed Capital Formation (GFCF): Different percentage shares of various kinds of capital goods (such as wholly or partly, capital goods and parts of capital and partly capital goods) on Ex- factory value, Excise, Import less export and trade transport margins (TTM) to constitute GFCF have been applied to calculate

GFCF of plant and machinery. Data sources for GFCF are same as manufacturing, excise and import duty data from Central Board of Excise and Customs (CBEC) and Reserve Bank of India. The data for Intellectual property products (IPP) is separately available from the MCA 21 database as well as analysis of annual reports of government companies and autonomous bodies. For Households Sector, IPP information pertains only to software for which information has been obtained from the NSS 67th Round Survey on Unincorporated Enterprises, 2010-11.

Change in Stocks (CIS): Estimates of change in stocks have been prepared using Food Corporation of India (FCI) reports for wheat, rice and sugar. IBM reports in case of mining and ASI results of 2011-12 for manufacturing. In case of agricultural items PFCE worksheets information is the data source (stock with private traders). For mining, data from IBM reports on change in reserves is taken as a proxy; while for manufacturing, information of the concerned blocks of ASI have been used.

Exports: As explained earlier, DGCIS data on merchandise have been used to concord trade data (ITC HS) and BOP data from RBI to concord services data with SUT codes.

## **7. Balancing Supply and Use**

Since PFCE is estimated following commodity flow approach, it becomes easy to balance the supply and use figures for those products which are consumed by the households. Similarly the estimates of machinery and equipment as fixed capital formation and basic materials that go in the Construction are also estimated following commodity flow approach, and hence it becomes easy to balance the supply and use figures for these products. While undertaking the balancing exercise for the household consumption products the product flow in the Use Table was examined vis a vis, the work sheets for PFCE; and necessary corrections made in the relevant product flow. Similar approach was followed for the products that are machinery and equipment or basic materials that go in the Pucca DOBS construction sector.

The product wise outputs of supply and use tables were confronted to assess the variation in the supply and use of a product. The initial divergence between supply and use for 86 products was within the order of 20%, and for the remaining products, it was more than 20%. The observed differences in the supply and use were resolved by taking a relook at the final uses or the intermediate consumption for instance, PFCE in case of household consumption products, GFCF in case of construction basic materials and machinery and equipment products. In some cases coding mistakes in the export/ import items were detected. Besides, for certain products, auxiliary information such as input output ratios from the latest IO Table or the TTM were found to be inappropriate and necessary adjustments were made for reconciling the supply and use figures. In few cases supply figure was too low: for example, water supply was too small to match the use (discrepancy being more than Rs. 400 crores) as the expenditure for purchase (use) of water by the Hydro-electricity power plants was not included in the output of water supply. Thus it necessitated increasing the output of water purchased to the extent it was missing in the Supply Table. Such balancing exercises were

undertaken till the discrepancy between supply and use reduced to around 3% after which the RAS (automatic row- column prorated adjustments) balancing was adopted.

## **8. Limitations of the Exercise**

In the current methodology of estimation of PFCE, no adjustment is made for privately held stocks as well as wastage due to transportation. Seed feed wastage adjustments are made while estimating the value of output of agriculture sector. Data on cif adjustment is not available. So an adjustment was made based on the experiences of similar countries. Data on product wise sales tax is not available and so a proxy of output of the product was used to allocate the same. The annual reports do not give break up of cost of material consumed and other inputs. As a result, ratios obtained from the latest IO table were used to distribute the same in the case of services. For the manufacturing sectors, while the output figures were better captured using NDCU and MCA data, the item-wise material inputs were estimated using the ASI input-output ratios for the relevant industries. Subsidies across products were distributed on the basis of domestic output. The data relating to trade and transport margins are dated. Hence, the differences between product wise CPI and WPI were used as a proxy to arrive at product wise trade and transport margins.

In the balancing exercises undertaken on supply and use of various products, the following product outputs (supply) namely, (i) Business services, (ii) water supply, and (iii) subsidy on free electricity have been found to be grossly underestimated in the current National Accounts Statistics. Thus appropriate corrective steps were taken in the estimates of products of relevant sectors.

## **9.SUT: 2012-13**

For 2012-13 SUT, the data sources and methodology of compilation remain the same except that the year pertains to 2012-13. Almost similar problems that were faced in 2011-12 SUT were faced while undertaking the balancing exercise of supply and use of various products. Similar approach was thus adopted for balancing the supply and use of various products in the economy.

## **10 GDP estimates**

It is of interest to note that the GDP estimate for the year 2011-12 derived from SUT is Rs 8796971 crore compared to NAS 2011-12 estimate of Rs 8736039 crore (NAS 2016, released in January 2016) signifying an increase of 0.7 %. For the year 2012-13 the estimate is Rs 10012704 crore as against Rs 9951344 crore as per the NAS.

The expenditure and production approaches give consistent set of estimates as may be seen in the following table.

Table : GDP by Expenditure and Production Approach from SUT  
(Rs Crore)

		GDP (Rs Crore)		Share(%)	
		2011-12	2012-13	2011-12	2012-13
Expenditure Approach	PFCE	4906378	5794547	55.8	57.9
	GFCE	968375	1061360	11.0	10.6
	GFCF	2997619	3321413	34.1	33.2
	Valuables	253033	273775	2.9	2.7
	CIS	206854	212363	2.4	2.1
	EXP	2160489	2438963	24.6	24.4
	Import	2695777	3089717	-30.6	-30.9
	GDP	8796971	10012704	100.0	100.0
Production Approach	Output	17822309	19916206		
	IC	9654721	10644823		
	Product taxes less Subsidies	485987	577765		
	Import duty	143396	163556		
	GDP	8796971	10012704		

## SUT 140 Sector Product Classification

SUT code	Product name	Specification
001	<b>Paddy</b>	Paddy
002	<b>Wheat</b>	Wheat
003	<b>Coarse cereals</b>	Jowar, Bajra, Barley, Maize, Ragi and other coarse cereals
004	<b>Gram</b>	Gram whole, gram seed, Black gram, Bengal gram, Horse gram, Red gram, green gram
005	<b>Arhar</b>	Arhar, un-milled
006	<b>Other pulses</b>	other pulses including urd, masoor, moong, dry peas
007	<b>Groundnut</b>	Groundnut
008	<b>Rapeseed and Mustard</b>	Rapeseed and mustard
009	<b>Other Oil Seeds</b>	Includes Sesames, Nigerseed, Sunflower, Soybean, Safflower and other oil seeds n.e.c.
010	<b>Kapas</b>	Raw Kapas
011	<b>Jute, Hemp and Mesta</b>	Raw Jute, hemp and Mesta
012	<b>Sugarcane</b>	Sugarcane
013	<b>Coconut</b>	Coconut, copra
014	<b>Tobacco</b>	Tobacco plantation
015	<b>Tea</b>	Tea plantation
016	<b>Coffee</b>	Coffee plantation
017	<b>Rubber</b>	Rubber Plantation
018	<b>Fruits</b>	Fruits
019	<b>Vegetables</b>	All edible vegetables including onion and potato
020	<b>Other Food Crops</b>	Other cereals, san-hemp, dry, chillies, black pepper, dry ginger, turmeric, indigo, opium, cardamom, other fibres, other dyes and tanning materials, other drugs and narcotics, other condiments and spices, fodder, grass, rice bran, rice husk, straw and stalks, badges, cane trash and miscellaneous food and non food crops.
021	<b>Milk</b>	Raw milk
022	<b>Wool</b>	Shorn wool, pulled wool used in textiles
023	<b>Egg and Poultry</b>	Eggs of hens or other birds in shell, fresh, Swine, poultry, and increment in poultry
024	<b>Other Livestock Products</b>	natural honey, cocoon, raw hides and skins, animal hair, bristles, bones, horns, hoofs, insect waxes, dung fuel, manure, increment in livestock, and other live animals.
025	<b>Industrial Wood</b>	Industrial wood (timber, match and pulp wood)
026	<b>Firewood</b>	Firewood
027	<b>Other Forestry Products</b>	Other forestry products such as bamboo, sandal wood, uncultivated material such as gums, resins, lacs, forest grown fruits, nuts, herbs, barks and cane, gobar gas
028	<b>Inland Fish</b>	Inland Fish



SUT code	Product name	Specification
029	<b>Marine Fish</b>	Marine Fish
030	<b>Coal and Lignite</b>	Coal, coal ash, coal compressed, coal for carbonisation, coal slack, coal washed and other forms of coal n.e.c. and lignite (agglomerated and non agglomerated)
031	<b>Natural Gas</b>	Natural gas liquefied or in gaseous state
032	<b>Crude Petroleum</b>	Petroleum crude
033	<b>Iron Ore</b>	Magnetite, hematite, iron ore, iron pyrites, iron ore and concentrates n.e.c.
034	<b>Manganese Ore</b>	Manganese ore and manganese silica
035	<b>Bauxite</b>	Bauxite calcined, Bauxite raw
036	<b>Copper ore</b>	Ores & concentrates of copper
037	<b>Other Metallic minerals</b>	Chromite, lead and zinc ore, silver ores, gold ores, ilmenite and rutile
038	<b>Limestone</b>	Limestone mining
039	<b>Mica</b>	Mica
040	<b>Other Non- metallic Minerals</b>	Dolomite, apatite, asbestos, barytes, china clay, gypsum, kyanite, magnesite, diamond, calcite, ochre, garnet, graphite, feldspar, fireclay, fluorite, quartz and silica, sillimanite, steatite, minor minerals, salt mining and quarrying, sand and stone quarrying, mining of clay, sandpits, chemical and fertilizer, mineral mining, precious and semi precious stone mining
041	<b>Processed Poultry Meat &amp;Poultry Meat Products</b>	Chicken (fresh/frozen) , Pork (fresh/frozen), HAM, Chicken, cooked (not canned), Mutton, cooked (not canned), Meat, cooked (not canned) n.e.c, Bacon, buffalo meat (fresh/frozen), veal meat ( fresh/frozen), Mutton, fresh/frozen, Beef, fresh/frozen
042	<b>Processed other Meat &amp;Meat Products</b>	Edible offal's of animals, canned meat soups, Sausages, Meat (all types), canned
043	<b>Processed Fish &amp;Fish Products</b>	Fish (all types) canned, prawns, sardine, Cattle fish, Lobsters (processed), molluscs, Fish frozen, crustaceans, sea shell and other aquatic invertebrates. Products n.e.c. of fish, crustaceans, molluscs, or other aquatic invertebrates; dead fish, crustaceans, molluscs or other aquatic invertebrates unfit for human consumption
044	<b>Processed Fruits &amp; Processed Vegetables</b>	Processed, frozen or preserved fruits and vegetables
045	<b>Dairy products</b>	Butter, Ghee, Milk skimmed or pasteurised, Milk condensed, Flavoured milk, milk powder of all kind, ice cream, paneer, khoya, Cream, curd and other dairy products n.e.c.
046	<b>Edible Oils and Fats</b>	Mustard oil, Soybean Oil, Margarine, Groundnut oil and Other Edible oils
047	<b>Grain Mill Products, Starch and Starch Products</b>	Rice, Wheat flour, Pulses milled, Gram flour, Bajra flour, Barley milled and other grain mill products, Dextrose , Glucose, Lactose, caramel, Artificial Honey, sugar syrup, Tapioca and substitutes
048	<b>Sugar</b>	Sugar (raw), Sugar refined (incl. sugar cubes), Sugar candy / Batasa, Khandsari sugar, Beet sugar, Boora, Cane gur (liquid/badha), Gur palm, Molasses, Date gur, gatta sugar, Gur& Sugar n.e.c.

<b>SUT code</b>	<b>Product name</b>	<b>Specification</b>
049	<b>Bread &amp; Bakery Products</b>	Biscuits, cakes, bread, buns, Rusks, wafers, pastries, cookies, and other bakery products n.e.c.
050	<b>Miscellaneous Food Products</b>	Manufacture of cattle, poultry and other animal feeds, starch processed from maize, tapioca, tamarind, potato etc., Manufacture of malted foods, grinding and processing of spices and aromatics processed, soups and broths, papads, appalam, egg powder, semi processed foods and instant food mixes, Chocolate, cocoa powder, sweet meat confectionary products, chewing gums, sago and sago products, vitaminised high protein flour, frying of dals, nuts and foods n.e.c., residuary snacks n.e.c., other food processing activities.
051	<b>Alcoholic Beverages</b>	Alcoholic beverages such as Wine (sparkling/ concentrate/ still), spirits, Vinegar, beer, country liquor, fenny, Alcohol (dehydrated/absolute) and other alcoholic beverages n.e.c.
052	<b>Non- alcoholic Beverages</b>	Non-alcoholic beverages such as Aerated water, soda water, soft drinks, fruit juices and other non-alcoholic beverages
053	<b>Tea Processed</b>	Tea processing
054	<b>Coffee Processed</b>	Coffee processing
055	<b>Tobacco Products</b>	Cigarette, Bidi, Snuff, Cigar, Zarda, Gutka, pan-masala
056	<b>Cotton Yarn and Cotton Textiles</b>	cotton yarn and Cotton Fabrics incl. Cotton hosiery fabrics, Made up articles of cotton, Other cotton textile goods, n.e.c
057	<b>Synthetic Yarn and Synthetic Textiles</b>	Synthetic yarn and Fabrics of man-made fibre, Man-made up articles of man-made fabrics, Man-made fibre articles n.e.c.
058	<b>Wool Yarn and Woollen Textiles</b>	Wool yarn and Fabrics made of wool/Animal hair & waste thereof, Made up articles of wool, Animal hair.
059	<b>Silk Yarn and Silk Textiles</b>	Silk yarn and Silk fabrics incl. silk waste fabrics
060	<b>Carpet Weaving</b>	Weaving carpets, rugs, durries ad others
061	<b>Readymade Garments</b>	Textile goods of silk, cotton, wool and manmade fibre
062	<b>Misc. Textile Products</b>	Textiles articles other than apparel such as table linen, bed linen, kitchen linen, curtains, interior blinds, Quilts, eiderdowns, cushions, life-jackets and life-belts, Parachutes, Sacks and bags and other textile articles n.e.c.
063	<b>Leather Footwear</b>	Manufacture of leather footwear and leather cum rubber/plastic cloth footwear and parts thereof.
064	<b>Leather and Leather Products except Footwear</b>	Tanning, curing, finishing , embossing and japanning of leather, Manufacture of wearing apparel, leather Bags, cases, belts, harness, and other novelty items made of leather, Tanning , bleaching, dyeing of fur and other pelts, manufacture of wearing apparel , rugs and other articles of fur and pelts and miscellaneous leather manufactured items.
065	<b>Wood and Wood Products except Furniture</b>	Manufacture of veneer, plywood and their products, sawing and planning of wood, wood containers, structural wooden goods, wooden industrial goods, cork & cork products and miscellaneous wood products.

<b>SUT code</b>	<b>Product name</b>	<b>Specification</b>
066	<b>Paper, Paper Products and Newsprint</b>	Paper used for writing/printing/ graphic design/computer stationary, Paper(uncoated) used for Newsprint and for other special purpose, Paper coated, Cellulose wading, impregnated, Craft paper and Paper for special use, Boards, Paper boards all kind and other paper products n.e.c.
067	<b>Publishing, Printing and allied activities</b>	Printing and Publishing of newspapers, periodicals, books, journals, atlases, maps, directories, sheet music, bank notes, currency notes, postage stamps, security passes, engraving, etching, playing cards, envelops, post cards, other printed material n.e.c. and printing allied activities.
068	<b>Furniture and Fixtures</b>	Furniture and fixtures
069	<b>Rubber Products</b>	Rubber tyres and tubes for transport equipment, rubber footwear, hose pipes, rubber sheets, flaps, caps, rubber surgical and medical equipment, rubber contraceptives, rubber pipes, balloons, rubber industrial and domestic goods and misc. rubber products.
070	<b>Plastic Products</b>	Bags/Boxes/Panels/Containers of Plastic/PVC, Tubes/Pipes/Basin & Sanitary fittings of plastic/PVC, Footwear Plastic/PVC, Film/Foil/Rolls/Tape/Rope of plastic/ PVC & related materials, Sheet/Liner/Cloth/Laminated sheet of plastic/PVC, Misc. articles of Plastic/PVC.
071	<b>Petroleum Products including L.P.G</b>	Motor spirit, aviation fuel, petrol, naphtha, Diesel, Kerosene, Other light petroleum oils, gas oils, fuel oils, lubricating oils, and other petroleum products n.e.c.
072	<b>Coal Tar Products</b>	Coal tar by product, crude, peat, processed, coal tar products
073	<b>Inorganic Chemicals</b>	Inorganic elements, Inorganic acids, oxygen compounds, carbonates and carbides, Sodium and Potassium compounds, Inorganic alkali and compounds thereof, Inorganic Halogen and Sulphur compounds of metals/ non-metals, Inorganic Nitrogen and Phosphorus compounds, Inorganic gases incl. Rare gases and miscellaneous inorganic compounds.
074	<b>Organic Chemicals</b>	Organic chemicals
075	<b>Fertilizers</b>	Inorganic, organic, mixed and other fertilizers
076	<b>Pesticides</b>	Manufacture of Insecticides, weedicides, pesticides and fungicides
077	<b>Paints, Varnishes and Lacquers</b>	Acid dyes, reactive dyes, naphthol, fast colours, paints, varnishes, polishing material, Dyeing and tanning material and related stuff.
078	<b>Drugs and Medicine</b>	Drugs and medicines - allopathic, ayurvedic, unani, homeopathic and others
079	<b>Soaps, Cosmetics and Glycerine</b>	Soaps, essential oil and essence, cosmetics, perfumes, cleaning powder, whitening agents, Detergent powder, all other toilet aids
080	<b>Synthetic Fibres, Resin</b>	Turpentine, resin, synthetic resin plastic materials and synthetic fibres like celluloid nylon, terylene and miscellaneous products of fermentation industries other than alcohol

<b>SUT code</b>	<b>Product name</b>	<b>Specification</b>
081	<b>Other Chemicals and Chemical Products</b>	Inedible vegetable oils including solvent extracted oils, animal oils and fats, matches, explosives, ammunition, safety fuses, fireworks, photochemical materials, sensitized films and paper, fine chemicals, drug & dye intermediaries, glue, gelatine, shellac, synthetic sweeteners, textile chemical auxiliaries and other chemical products
082	<b>Cement</b>	Asbestos, Cement and articles thereof
083	<b>Non- metallic Mineral Products</b>	Manufacture of glass and glass products, glass ware and articles thereof, earthenware and pottery, Chinaware, porcelain ware, sanitary ware, insulators, lime and plaster, mica products, structural stone goods, stoneware, stone dressing and crushing, Structural clay products, articles of concrete, cement and plaster, abrasives, graphite products, silica products, Monumental or building stone and articles thereof, Other non-metallic mineral products n.e.c.
084	<b>Iron, Steel Ferro Alloys</b>	Includes Iron and steel Ferro alloys in primary form
085	<b>Iron and Steel Casting and Forging</b>	Iron and steel casting and forgings
086	<b>Iron and Steel Foundries</b>	Semi- finished and finished products of iron and steel e.g. iron and steel structural, pipes, wire drawings, tools and others
087	<b>Non-ferrous Basic Metals (including alloys)</b>	Includes Copper & Copper alloy, refined or not, unwrought or worked, Nickel and Nickel alloys, Refined or not, unwrought or worked, Zinc and Zinc alloys, refined or not, unwrought or worked, Aluminium and Aluminium alloys, unwrought or worked, Tin and Tin alloys unwrought and worked, Lead and Lead alloys, worked or unwrought, Other base metals & alloys thereof, unwrought or worked.
088	<b>Hand Tools, Hardware</b>	Hand tools, bolts, nuts, locks, metal chains, agricultural hand tools and implements, general hardware.
089	<b>Miscellaneous Metal Products</b>	Includes ammunition boxes, base plates, metal belts, metal bushes, chains, pins, chimney, chases, cocks, cones, locks, rods, bolts, container, drill caps, fabricated metal products, furnaces, guns, handles, kitchen ware of metal, metal furniture and fixtures, metal utensils, sanitary ware and plumbing fixtures and fittings and other metal products n.e.c.
090	<b>Tractors and other Agricultural Implements</b>	Agricultural and Forestry machineries/parts thereof
091	<b>Industrial Machinery for Food and Textile Industry</b>	Food, Beverages & Tobacco processing machineries & parts, textiles machinery, Rubber machinery, leather machinery.
092	<b>Industrial Machinery (except food and textile)</b>	Mining, Quarrying & Metallurgical machineries/parts, pharmaceutical and chemical machinery, Construction/Cement machineries & parts, paper machinery
093	<b>Machine Tools</b>	Lathes, bearings, blowers, valves, carburettors, water meters, conveyors, cutters, filters, furnaces, gears, gauges, grinding machines, loading machines, lubricators, metal cutting tools, slotting machines and other general purpose machine tools n.e.c.

<b>SUT code</b>	<b>Product name</b>	<b>Specification</b>
094	<b>Other Non-Electrical Machinery</b>	Drills, coal cutting machines, earth moving, lifting and hoisting machinery, cranes, conveyors and road rollers and other heavy machinery and equipment used by construction and mining industries, prime movers, boilers and steam generating plants such as diesel engines, refrigerating, air conditioning plants for industrial use, domestic air conditioners and refrigerators, fire-fighting equipment and appliances including fire engines, conveying equipments such as bucket elevators, derrick and size reduction equipment like crushers, ball mills etc., centrifugal machines, pumps, air and gas compressors and vacuum pumps, ball rollers and tapered bearings, speed reduction units, sewing and knitting machines, washing machines, filtration and distillation equipment, arms and armaments and miscellaneous non electrical machinery
095	<b>Electrical Industrial Machinery</b>	Electrical motors, Generators, Transformer, power pack, Switch, Switch-Gear, Control panel, Circuit breakers etc. and parts thereof
096	<b>Electrical Cables, Wires</b>	insulated cables, wires, conductors, ignition coils, other electric conductors
097	<b>Batteries</b>	Battery, Accumulators, Cells and parts thereof
098	<b>Electrical Appliances</b>	Electric filament or discharge lamps; arc lamps, Lighting equipment, household appliances like iron, heaters etc.
099	<b>Communication Equipment</b>	Telephone/Telecommunication/Transmission equipment
100	<b>Other Electrical Machinery</b>	Manufacture of radiographic X-ray apparatus and tubes and parts, manufacture of light fittings, emergency lighting equipment, flash lights, stage lighting equipment, electric furnaces and oven telescopic aerials and parts and accessories
101	<b>Electronic Equipment including T.V</b>	Manufacture of television sets, electronic computers, electronic control instruments, other parts and accessories
102	<b>Medical precision, Optical Instrument</b>	Medical/Bio-medical, Surgical, Laboratory and Health fitness equipment & parts, Optical & Photographic equipment & parts, Precision equipment and other mathematical instruments.
103	<b>Watches and Clocks</b>	Manufacture of clocks, table time pieces, watches and their parts
104	<b>Ships and Boats</b>	Ships, Boats and other waterways transports
105	<b>Rail Equipment</b>	Railways, Metro-railways, Trams & rolling stock, Railways rolling stock, n.e.c., Metro railways and Tramways & Rolling stock.
106	<b>Motor Vehicles</b>	Motor vehicles - Passengers/Goods transportation and special purpose vehicle, and parts of motor vehicles
107	<b>Motor Cycles, Scooters</b>	Motor cycle, Scooter, Moped & parts, n.e.c.
108	<b>Bicycles, Cycle-Rickshaw</b>	Non-motorized cycles/wheels chair & parts, n.e.c
109	<b>Aircrafts &amp;Space Crafts</b>	Aircraft/Helicopter & other flying machines
110	<b>Other Transport Equipment</b>	Other transport equipment n.e.c. such as hand driven carts, invalid carriages
111	<b>Gems and Jewellery</b>	Semi- precious and precious Gems and jewellery

<b>SUT code</b>	<b>Product name</b>	<b>Specification</b>
112	<b>Miscellaneous Manufacturing</b>	Musical/Fine arts instruments & parts thereof, Decorative items, Hair, Fine fibre, Natural/Artificial & articles thereof, Sports and Athletic accessories, Human safety articles & parts thereof, Toys and amusement articles, currency coins, common purpose stationary items, Advertising materials, boards, miscellaneous articles n.e.c.
113	<b>Construction and Construction Services</b>	General construction services of buildings, General construction services of civil engineering works, Site preparation services and other activities allied to construction.
114	<b>Electricity</b>	Generation and transmission of electric energy and its distribution to households, industrial, commercial, other users
115	<b>Gas</b>	Generation and Transmission of LPG, bio gas, natural gas
116	<b>Water Supply</b>	Irrigation , Collection, purification and distribution of water
117	<b>Trade</b>	Wholesale & retail trade services
118	<b>Repair &amp; Maintenance of Motor Vehicles</b>	Repair & Maintenance of Motor Vehicles
119	<b>Hotels and Restaurant</b>	Services rendered by hotels, boarding houses, eating houses, cafes, restaurants, canteen etc.
120	<b>Railway Transport</b>	Transport services via railways
121	<b>Land Transport</b>	Buses, trucks, taxies, auto rickshaws and other land transport vehicles.
122	<b>Air Transport</b>	Air transport
123	<b>Water Transport</b>	Shipping transport by boats, steamer, ferry etc. by canal or rivers and unorganised water transport by sea.
124	<b>Supportive and Auxiliary Transport Activities</b>	Supportive and auxiliary transport activities and services incidental to transport activities such as cargo handling services, travel agency services etc.
125	<b>Storage and Warehousing</b>	Cold storage and ware housing services
126	<b>Communication Services</b>	Postal, telephones, telegraph services rendered by postal and telegraph department and overseas communication services such as internet telecommunication services, online information provision services
127	<b>Financial Services</b>	Financial services by banks, financial companies, post office saving banks, industrial development and financial corporations, cumulative time deposits, cooperative credit societies
128	<b>Insurance Services</b>	Life insurance corporation, postal life insurance, employees state insurance, non- life insurance, fire, marine, accidents etc.
129	<b>Ownership of Dwellings</b>	Ownership of dwellings
130	<b>Real Estate Services</b>	Real estate, Leasing & Rental services
131	<b>Renting of Machinery and Equipment</b>	Renting of machinery & equipment
132	<b>Research &amp; Development Services</b>	Research & Development Services
133	<b>Legal Services</b>	Legal services

<b>SUT code</b>	<b>Product name</b>	<b>Specification</b>
134	<b>Other Business Services</b>	Professional, technical and other business services such as consultancy and management services, accounting, book keeping, architectural services, engineering services, speciality design services, advertising services etc.
135	<b>Computer Related Services</b>	Computer related services
136	<b>Public Administration and Defence</b>	Administrative services of the government, Public administrative services provided to the community as a whole, Administrative services related to compulsory social security schemes
137	<b>Education Services</b>	Education & coaching
138	<b>Human Health and Social Care Services</b>	Human health services, Residential care services for the elderly and disabled, Social services without accommodation for the elderly and disabled, Other social services without accommodation
139	<b>Community, Social and Personal Services</b>	Religious and community services, cultural services, personal services such as domestic services, laundry, dry-cleaning and dyeing, photographic studios, barber and beauty shops, funeral related activities, custom tailoring, hair dressing and other beauty treatment, washing and cleaning of textiles.
140	<b>Recreation, Entertainment and Radio, TV broadcasting Services and other Services</b>	Recreation and Entertainment services, Radio and T.V broadcasting services, Sanitary services, international and other territorial bodies and other social services n.e.c.



## Annexure 2

### SUT 66 Sector Industry Classification

SUT code	Industry name	Specification
001	<b>Agriculture</b>	Cultivation of Rice, cereals, vegetables, melons, sugarcane, tobacco, fibre crops, fruits and citrus fruits, pome fruits and stone fruits, oleaginous fruits, beverage crops, spices, aromatic, drug and pharmaceutical crops and other perennial and non-perennial crops
002	<b>Livestock</b>	Animal production, mixed farming and other support activities for animal production, Hunting, trapping and related service activities
003	<b>Forestry and Logging</b>	Silvi culture and other forestry activities, logging, gathering of non- wood forest products and other allied activities to forestry
004	<b>Fishing and Aquaculture</b>	Fishing and aquaculture
005	<b>Mining Coal and Lignite</b>	Mining of coal and lignite
006	<b>Crude Petroleum</b>	Extraction of crude petroleum
007	<b>Natural gas</b>	Extraction of Natural gas
008	<b>Iron ores</b>	Mining of iron ores
009	<b>Non-ferrous Metal Ores</b>	Mining of Non-ferrous metal ores
010	<b>Other Mining and Quarrying</b>	Quarrying of stone, sand and clay, mining of chemical and fertilizer minerals, extraction and agglomeration of peat, extraction of salt, other mining and quarrying n.e.c.
011	<b>Production, Processing and Preservation of Meat, Fish, Fruit, Vegetables, Oils and Fats</b>	Processing and preserving of meat, fish, crustaceans and molluscs and products thereof, Processing and preserving of Fruits and vegetables, Manufacture of edible animal oils and fats, hydrogenated oils, vanaspati ghee, and other vegetable and animal oils and fats n.e.c., Manufacture of non- edible animal oil and fats
012	<b>Manufacture of Dairy Products</b>	Manufacture of dairy products such as Butter, Ghee, Milk skimmed or pasteurised, Milk condensed, Flavoured milk, milk powder of all kind, ice cream, paneer, khoya, Cream, curd and other dairy products n.e.c.
013	<b>Manufacture of Grain Mill Products, etc. and Animal Feeds</b>	Flour milling, dal milling, Rice milling, other grain milling and processing n.e.c.; Manufacture of starches and starch products such as glucose, sago and sago products, gluten, tapioca, corn oil and other starch products n.e.c.
014	<b>Manufacture of other Food Products</b>	Manufacture of bakery products, sugar, cocoa, chocolate and sugar confectionary, macaroni, noodles, couscous and similar farinaceous products, prepared meals and dishes, Animal feed and other food products n.e.c.
015	<b>Manufacture of Beverages</b>	Manufacture of alcoholic and non -alcoholic beverages
016	<b>Manufacture of Tobacco Products</b>	Manufacture of tobacco products
017	<b>Manufacture of Textiles,Cotton Ginning</b>	Spinning, weaving and finishing of textiles and manufacture of other textiles such as knitted and crocheted fabrics, made up textile articles, except apparel, carpets and rugs, cordage, rope, twine and netting and other textiles n.e.c.

018	<b>Manufacture of Wearing Apparel, except Custom Tailoring</b>	Manufacture of wearing apparel, articles of fur, knitted and crocheted apparel
019	<b>Manufacture of Leather and related Products</b>	Tanning and dressing of leather; dressing and dyeing of fur, manufacture of luggage, handbags and the like, saddlery and harness and manufacture of footwear
020	<b>Manufacture of Wood and of products of wood and cork, except Furniture; Manufacture of articles of straw and plaiting material</b>	Saw milling and planing of wood, manufacture of veneer sheets, plywood, lamin board, particle board and other panels and board, manufacture of builders carpentry and joinery, manufacture of wooden containers and other products of wood n.e.c.
021	<b>Manufacture of Paper and Paper Products</b>	Manufacture of pulp, paper and paperboard, manufacture of corrugated paper and paperboard and containers of paper and paperboard and manufacture of other articles of paper and paperboard
022	<b>Printing and reproduction of recorded media except Publishing</b>	Printing of newspapers, magazines, books, brochures, maps, atlases, postage stamps, taxation stamps, bank notes, currency notes and other printing activities; reproduction of recorded media
023	<b>Manufacture of Coke and Refined Petroleum Products</b>	Manufacture of coke oven products such as gas, crude coals and lignite tars and refined petroleum products paraffin wax, lubricating oils, illuminating oils, hard coal and lignite fuel briquettes and other refined petroleum products n.e.c.
024	<b>Manufacture of Chemical and Chemical Products except Pharmaceuticals, Medicinal and Botanical Products</b>	Manufacture of Urea, organic fertilizers, complex inorganic fertilizers, associated nitrogen products and other fertilizers n.e.c., Manufacture of insecticides, rodenticides, fungicides, herbicides, disinfectants, plant growth regulators and other agro chemical products, Manufacture of inorganic and organic chemicals, plastics and synthetic rubber in primary forms, paints, varnishes and similar coatings, printing ink and mastics, manufacture of soaps and detergents, cleaning and polishing preparations, perfumes and toilet preparations, manufacture of manmade fibres and manufacture of other chemical products n.e.c.
025	<b>Manufacture of Pharmaceutical; Medicinal Chemicals&amp;Botanical Products</b>	Manufacture of pharmaceuticals, medicinal (allopathic, ayurvedic, unani) and botanical products
026	<b>Manufacture of Rubber &amp;Plastic Products</b>	Manufacture of Rubber tyres and tubes; retreating and rebuilding of rubber tyres and manufacture of other rubber products, manufacture of plastic products such as tableware, kitchenware, sanitary ware of plastics, spectacles frames and other plastic products n.e.c.
027	<b>Manufacture of other Non-metallic Mineral Products</b>	Manufacture of glass and glass products, refractory product, clay building materials, other porcelain and ceramic products, manufacture of cement, lime and plaster, manufacture of articles of concrete, cement and plaster, Cutting, shaping and finishing of stones, manufacture of other non-metallic mineral products n.e.c.
028	<b>Manufacture of Basic Iron and Steel + Casting of Iron and Steel</b>	Manufacture of pig iron, sponge iron, hot rolled and cold rolled products of steel, railway track materials of steel, steel wires, manufacture of other basic iron and steel n.e.c., Manufacture of tubes, pipes, hollow profiles and other iron and steel castings, Castings of on ferrous metals

029	<b>Manufacture of Basic Precious and Non-Ferrous Metals, Casting of Non-ferrous Metals</b>	Manufacture of copper, aluminium, lead, zinc, tin products, alloys, chrome, agnames, nickel products alloys, refining of precious metals and manufacture of other non-ferrous metals
030	<b>Manufacture of Fabricated Metal Products, except Machinery and Equipment</b>	Manufacture of structural metal products, tanks, reservoirs and steam generators, manufacture of weapons and ammunition, manufacture of other fabricated metal products; metalworking service activities, Forging , pressing stamping and roll forming of metal; powder metallurgy, Machining; treatment and coating of metals, manufacture of cutlery, hand tools, and general hardware, manufacture of other fabricated metal products n.e.c.
031	<b>Manufacture of electronic component, consumer electronics, magnetic and optical media</b>	Manufacture of electronic components such as conductors, semiconductors, diodes, transistors, circuits, coils, capacitors and manufacture of consumer electronics such as televisions, radio receivers, audio recording and duplicating equipment, VCRs, CD and DVD players and other electronic consumer goods, Manufacture of domestic electrical appliances such as refrigerators, washing machines, vacuum cleaners, mixers, grinders; manufacture of domestic electro thermic appliances, electric fans, non-electric cooking and heating equipment and other domestic appliances n.e.c.
032	<b>Manufacture of Computer and Peripheral Equipment</b>	Manufacture of computers and peripheral equipments such as desktops, laptops, magnetic and optical storage devices, monitors, keyboards, all types of mice, joysticks, and trackball accessories, printers, scanners, smart card readers, virtual reality helmets, computer projectors, computer terminals, manufacture of other computers and peripheral equipment n.e.c
033	<b>Manufacture of Communication Equipments</b>	Manufacture of Communication equipment such as broadcasting equipment, telephone and facsimile equipment, telephone answering machines, pagers, cellular phones, data communication equipment and other communication equipment n.e.c.
034	<b>Manufacture of Optical and Electronics Products n.e.c</b>	Manufacture of other electronic equipment includes manufacture of watches and clocks, Manufacture of measuring, testing, navigating and control equipment, Manufacture of irradiation, electro medical and electrotherapeutic equipment, Manufacture of optical instruments and equipment, Manufacture of magnetic and optical media
035	<b>Manufacture of Electrical Equipment</b>	Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus, manufacture of batteries and accumulators, manufacture of wiring and wiring devices, manufacture of electric lighting equipment, and manufacture of other electrical equipment n.e.c.
036	<b>Manufacture of Machinery and Equipment, n.e.c</b>	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines, manufacture of fluid power equipment, other pumps, compressors, taps and valves, manufacture of bearings, gars, gearing and driving elements, ovens, furnaces and furnace burners, manufacture of lifting and handling equipment, manufacture of office machinery and equipment, power driven hand tools and manufacture of other general purpose machinery, Manufacture of agricultural and forestry machinery, metal forming machinery and machine tools, manufacture of machinery for metallurgy, machinery for mining, quarrying and construction, machinery for food, beverage and tobacco processing, machinery for textile, apparel and leather production and other special purpose machinery

037	<b>Manufacture of Transport Equipment</b>	Manufacture of vans, trollies, trailers, semi- trailers, tractors, motor vehicles engines and motor vehicles n.e.c., bodies for motor vehicles, parts and accessories for motor vehicles, Manufacture of railway locomotives, self -propelled railway or tramway coaches, goods vans, tanks wagons, and other rail locomotives such as bogies, axles, brakes, wheels, hooks and coupling devices etc., Building of ships, floating structures, pleasure and sporting boats, Manufacture of airplanes, helicopter, gliders, hang-gliders, dirigibles and hot air balloons and other non-powered aircraft, spacecraft and launch vehicles, satellites, planetary probes, orbital stations, shuttles, intercontinental ballistic (ICBM) and similar missiles and other parts and accessories of aircraft and spacecraft', Manufacture of weapons, ammunitions, motor cycles, bicycles, invalid carriages and other transport equipment n.e.c.
038	<b>Manufacture of furniture</b>	Manufacture of furniture made of wood, cane & reed, of metal, of plastic, manufacture of mattresses and pillows and other furniture n.e.c.
039	<b>Other Manufacturing</b>	Manufacture of jewellery of gold, silver and other precious or base metal, clad with precious and semi- precious metals and stones, working of diamonds and other semi-precious stones, production of worked pearls, manufacture of other articles of gold, silver and other precious and semi- precious stones and metals, Manufacture of dental fillings, dental wax and dental laboratory furnaces, dental instruments, artificial teeth, bridges, etc., manufacture of laboratory apparatus, bone plates and screws, syringes, needles, cannulas etc., manufacture of measuring instruments, orthopaedic devices, ophthalmic goods and other medical and dental instruments n.e.c., Includes recovery of materials such as paper, plastics, used beverage cans and metals, into distinct categories, from garbage. Also includes the processing of metal and non-metal waste and scrap and other articles into secondary raw material., Manufacture of musical instruments, sports goods, games and toys, stationery articles, protective safety equipment, umbrellas, walking sticks, articles of personal use and other articles n.e.c.
040	<b>Repair and Installation of Machinery and Equipment</b>	Repair and installation of machinery and equipment
041	<b>Construction</b>	General construction services of buildings, General construction services of civil engineering works, Site preparation services and other activities allied to construction.
042	<b>Electricity</b>	Generation and transmission of electric energy and its distribution to households, industrial, commercial and other users
043	<b>Gas</b>	Generation and transmission of LPG, bio gas, natural gas
044	<b>Water Supply</b>	Irrigation, Collection, purification and distribution of water
045	<b>Railway Transport</b>	Government railways and private railways
046	<b>Land Transport</b>	Buses, tramways and pipelines, trucks, taxies, auto rickshaws, animal services, urban bullock, urban buffalo, horses and other animal drawn carts, cycles, hand pulled rickshaw and pack animals
047	<b>Water transport</b>	Shipping transport by boats, steamer, ferry etc. by canal or rivers and unorganised water transport by sea.
048	<b>Air Transport</b>	Air Transport
049	<b>Supportive and Auxiliary Transport Activities</b>	Supportive and auxiliary transport activities and services incidental to transport activities such as cargo handling services, travel agency services etc.
050	<b>Storage and Warehousing</b>	Cold storage and ware housing services

051	<b>Communication</b>	Postal, telephones, telegraph services rendered by postal and telegraph department and overseas communication services such as internet telecommunication services, online information provision services
052	<b>Trade</b>	Wholesale & retail trade services
053	<b>Hotels and Restaurants</b>	Services rendered by hotels, boarding houses, eating houses, cafes, restaurants, canteen etc.
054	<b>Financial Services</b>	Financial services rendered by banks, financial companies, post office saving banks, industrial development and financial corporations, cumulative time deposits, cooperative credit societies
055	<b>Insurance Services</b>	Life insurance corporation, postal life insurance, employees state insurance and non-life insurance such as fire, marine, accidents etc.
056	<b>Ownership of Dwellings</b>	Residential houses
057	<b>Education and Research</b>	Education, scientific and research services
058	<b>Medical and Health</b>	Medical and health services
059	<b>Legal Services</b>	Legal services
060	<b>Computer related Services</b>	Computer related services
061	<b>Other Business Services incl. R &amp;D</b>	Accounting services and other Business services incl. Research & development
062	<b>Real estate activities</b>	Real estate activities
063	<b>Renting of Machinery and Equipment</b>	Renting of machinery and equipment
064	<b>Community, Social and Personal Services</b>	Religious and community services, cultural services, personal services such as domestic services, laundry, dry cleaning and dyeing, photographic studios, barber and beauty shops, funeral related activities, custom tailoring, hair dressing and other beauty treatment, washing and cleaning of textiles
065	<b>Other Services</b>	Sanitary services, recreation and entertainment, Radio & TV, Broadcasting services, international and other territorial bodies and services n.e.c.
066	<b>Public administration and Defence</b>	Public administration and Defence