



सत्यमेव जयते

Government of India
Ministry of Statistics and Programme Implementation
National Statistics Office
National Accounts Division



Guideline for Compilation of

GSDP

by
Expenditure Approach



Private Final
Consumption
Expenditure



Government Final
Consumption
Expenditure



Gross
Capital
Formation



Net Exports of
Goods and
Services

GUIDELINE FOR COMPILATION OF GROSS STATE DOMESTIC PRODUCT (GSDP)
ESTIMATES BY EXPENDITURE APPROACH



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FOREWORD

The Gross State Domestic Product (GSDP) is an important indicator of the economic performance of a State and provides a comprehensive measure of the value of goods and services produced within its economic territory. The Expenditure Approach provides an alternative perspective for measuring the economic activity of a State by estimating expenditure on final goods and services by different institutional sectors. It also provides valuable insights into the demand-side structure of the State economy and complements the estimates compiled through the Production and Income Approaches.

The National Statistics Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI), has been making continuous efforts to strengthen the State Domestic Product (SDP) Estimates and promote greater uniformity, consistency and comparability in the compilation of State-level aggregates. In this context, these Guideline for Compilation of GSDP from the Expenditure Approach have been prepared to provide a systematic conceptual and methodological framework for the State/UT Directorates of Economics and Statistics (DESS).

The Guideline, prepared keeping in view the recommendations of the relevant Sub-Committees of the Advisory Committee on National Accounts Statistics (ACNAS), provide a standardized framework for the compilation of the major components of expenditure, including Private Final Consumption Expenditure (PFCE), Government Final Consumption Expenditure (GFCE), Gross Fixed Capital Formation (GFCF), Changes in Inventories, Valuables, and Exports and Imports. They also outline the appropriate concepts, classifications, data sources, estimation procedures and allocation methods to be adopted for compiling these estimates.

The Guideline emphasize the use of reliable and comprehensive administrative and survey-based data sources and the adoption of the most appropriate estimation approaches, while providing suitable alternatives wherever State-level data are not directly available. The framework is intended to facilitate greater harmonisation of concepts, definitions and methodologies across States/UTs, while allowing necessary flexibility to address State-specific data availability and institutional arrangements.

The Ministry remains committed to providing continuous technical guidance and support to the States and Union Territories in strengthening the State Domestic Product and Other related Aggregates. I am confident that these Guideline will serve as a useful reference for the State/UT DESS and contribute towards strengthening the compilation of GSDP through the Expenditure Approach.

I would also like to place on record my deep appreciation for the dedicated efforts of all officers and staff of the State Coordination Unit of the National Accounts Division (NAD), MoSPI, under the guidance of Shri Siddhartha Kundu, Additional Director General, National Accounts Division (NAD), for their valuable contribution towards the preparation and timely finalisation of these Guideline.

(Dr. Dalip Singh)

PREFACE

The preparation of these Guideline for Compilation of GSDP through the Expenditure Approach is part of the ongoing efforts to strengthen the compilation of State-level National Accounts and to facilitate a systematic and consistent approach to the estimation of expenditure-side aggregates at the State/UT level.

The Guideline have been developed with the objective of providing practical methodological guidance to the State/UT Directorates of Economics and Statistics (DESS) for the compilation of expenditure aggregates. They bring together the concepts, classifications, data requirements, estimation procedures, allocation mechanisms and other technical aspects relevant for the compilation of the Expenditure Approach to GSDP.

The Guideline cover the major expenditure components, namely Private Final Consumption Expenditure (PFCE), Government Final Consumption Expenditure (GFCE), Gross Capital Formation (GCF), Changes in Inventories, Valuables, and Exports and Imports. For each component, efforts have been made to identify appropriate data sources and estimation procedures, with due consideration to the availability, coverage and quality of data at the State/UT level. Wherever direct State-level information is not available, suitable allocation indicators and estimation alternatives have been suggested.

An important consideration in preparing these Guideline has been to strike an appropriate balance between methodological uniformity and the practical realities of data availability at the State/UT level. Accordingly, while a common framework has been prescribed for ensuring consistency and comparability, alternative approaches have been indicated wherever necessary to address differences in data sources, coverage and institutional arrangements across States/UTs.

The Guideline are intended to serve as a working reference for compilers and may also facilitate discussions between MoSPI and State/UT DESS on methodological issues arising during the compilation process. The framework may be reviewed and suitably updated from time to time in the light of improvements in data availability, changes in administrative data systems, methodological developments and experience gained during implementation.

The successful operationalisation of these Guideline will require continued interaction and exchange of experience among MoSPI, State/UT DESS and other stakeholders. It is hoped that the Guideline will facilitate a more systematic, transparent and technically robust compilation of expenditure-side estimates and thereby contribute to the further strengthening of the State-level National Accounts system.

I look forward to the continued cooperation of all concerned in this endeavour.

(Siddhartha Kundu)

MESSAGE

In continuation with MOSPIs commitment towards capacity building of the State Statistical system, National Accounts Division brings out the guideline for estimating expenditure side estimates of Gross State Domestic Product. This guideline will enable the State DES to compile expenditure side components of GSDP following uniform and comparable methodology.

I take this opportunity to acknowledge the valuable cooperation, guidance and technical contributions of all stakeholders involved in the preparation and finalisation of these Guideline.

I would particularly like to place on record my appreciation for the dedicated efforts of Ms. Pooja Rani, Director, and her team in the State Coordination Unit, National Accounts Division (NAD), MoSPI, for their valuable contribution to the overall preparation and coordination of these Guideline.

I also acknowledge the significant contributions of Ms. Meera A.P., Director, towards the compilation of Private Final Consumption Expenditure (PFCE) under the guidance of Ms. Nilanjana Roy, DDG, NAD; Ms. Kratika, Director and Ms. Nigar Fatma, Deputy Director, towards the compilation of Government Final Consumption Expenditure (GFCE) under the guidance of Ms. Radha R. Ashrit, DDG, NAD; and Shri Shirke Shrinivas Vijay, Director, towards the compilation of Gross Capital Formation (GCF) and Net Exports (Exports–Imports) under the guidance of Shri Rajesh Sharma, DDG, NAD.

The sustained efforts, technical expertise and close coordination of these officers and their respective teams have contributed significantly to the preparation, refinement and finalisation of the Guideline. Their commitment and cooperation are gratefully acknowledged.

I sincerely thank all the officers, staff and stakeholders who have contributed to this important endeavour and look forward to their continued cooperation in the effective implementation and further refinement of the Guideline.

(Dr. Subhra Sarker)

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1. Background and Rationale

Gross State Domestic Product (GSDP) is presently estimated primarily through the Production Approach, with Gross State Value Added (GSVA) being compiled industry-wise and appropriate adjustments being made for taxes less subsidies on products. The Expenditure Approach provides an alternative perspective by measuring the expenditure on final goods and services within the economic territory of the State. Under the internationally accepted national accounting framework, GDP from the expenditure side is derived as the sum of final consumption expenditure, gross capital formation and exports, less imports.

The expenditure approach can provide an important cross-check and analytical complement to the production approach, particularly for understanding the sources of demand and expenditure driving economic activity at the State level. It can also strengthen the coherence of State-level accounts by bringing together information on consumption, investment, government expenditure and inter-State/international trade.

2. Concepts & Definition

In this method, the income is calculated as the aggregate of all expenditures incurred by households, firms, government, and foreigners. It is assumed that all the factor income earned is spent in the form of expenditure incurred in the production of the goods and services, and circulated by the businesses in an economy. Therefore, the total final expenditure incurred is the Gross Domestic Product at Market Price. It is often known as the **Income Disposable Method**.

GDP at Market price = $\sum$ Final Expenditure.

Components of Final Expenditure

The different components of final expenditure are as follows:

a. Final Consumption Expenditure

- Private Final Consumption Expenditure (PFCE)
- Government Final Consumption Expenditure (GFCE)

b. Gross Capital Formation

- Gross Fixed Capital Formation (GFCF)
- Changes in Inventories
- Acquisitions less Disposals of Valuables

c. Net Exports

- Exports of Goods and Services

- Imports of Goods and Services

As per the System of National Accounts (SNA), the Expenditure Approach measures Gross Domestic Product (GDP) from the expenditure side by aggregating expenditure on final goods and services within the domestic economic territory, irrespective of whether the expenditure is undertaken by resident or non-resident units. The principal components comprise Private Final Consumption Expenditure (PFCE), Government Final Consumption Expenditure (GFCE), Gross Capital Formation (GCF), and Net Exports of Goods and Services.

Private Final Consumption Expenditure (PFCE): The Private Final Consumption Expenditure (PFCE) compiled as part of National Accounts Statistics (NAS) consists of final consumption expenditure by households as well as Non-Profit Institutions Serving Households (NPISH). Household final consumption expenditure consists of the expenditure, including expenditure whose value must be estimated indirectly, incurred by resident households on individual consumption goods and services, including those sold at prices that are not economically significant and including consumption of goods and services acquired abroad. Final consumption expenditure of NPISHs consists of the expenditure, including expenditure whose value must be estimated indirectly, incurred by resident NPISHs on individual consumption goods and services and possibly on collective consumption services.

Government Final Consumption Expenditure (GFCE): GFCE represents expenditure by general government on goods and services that are provided for final consumption, including collective services such as general public administration, defence and public order, and individual services such as education and health provided by government. Under the SNA, GFCE is derived from government output by deducting sales of goods and services and adding social transfers in kind, as applicable. The expenditure relates to the consumption of government-provided services and goods within the relevant economic territory.

Gross Capital Formation (GCF): GCF covers expenditure on goods and services that are used for purposes of capital accumulation rather than current consumption. It comprises Gross Fixed Capital Formation (GFCF), Changes in Inventories, and Acquisitions less Disposals of Valuables. GFCF includes acquisitions less disposals of produced fixed assets used repeatedly or continuously in production for more than one year, including dwellings, other buildings and structures, machinery and equipment, and intellectual property products. Changes in inventories represent the change in stocks of inventories held by institutional units, while valuables comprise assets acquired primarily as stores of value.

Exports and Imports of Goods and Services: In the SNA, exports consist of transactions in goods and services between residents of the domestic economy and non-residents, while imports represent transactions in goods and services acquired by residents from non-residents. Exports are added to expenditure on domestic production, whereas imports are deducted because imported goods and services may be included in PFCE, GFCE or GCF but are not part of domestic production. Accordingly, the net contribution of external transactions to GDP is measured as Exports minus Imports (X–M).

Thus, from the expenditure side, GDP can be represented as:

$$GDP = PFCE + GFCE + GCF + (Exports - Imports)$$

where $GCF = GFCF + \text{Changes in Inventories} + \text{Acquisitions less Disposals of Valuables}$.

3. Detailed Methodology

3.1 Government Final Consumption Expenditure (GFCE)

3.1.1 Estimation at National Level

3.1.1.1 Coverage

Government Final Consumption Expenditure (GFCE) comprises expenditure incurred by the General Government in production of non-market final goods and services as well as market goods and services provided as social transfers in kind. It consists of expenditure incurred by the General Government on both individual consumption of goods and services, and collective consumption of services.

Individual Consumption: Consumption of goods and services provided by the Government for satisfying the needs or wants of households and their members is referred to as individual consumption. Provision of goods and services like health, education, recreation, etc. are some of the examples of individual consumption. The important characteristic of an individual good or service is that its acquisition by one household, person or group of persons brings no (or very little) benefit to the rest of the community. While the provision of certain individual health or education services (for example, vaccination or immunization) may bring some external benefits to the rest of the community, in general the individuals concerned derive the main benefit.

Collective Consumption: Consumption of services provided by Government simultaneously to benefit all the members of the community or a part of it, is referred to as collective consumption. The collective services provided by Government mainly consist of the provision of security and defence, the maintenance of law and order, legislation and regulation, the maintenance of public health, the protection of the environment, etc. All members of the community can benefit from such services. As the individual usage of collective services cannot be recorded, individuals cannot be charged according to their usage.

Producers of Government services, i.e., the administrative departments of the Government, include ministries and departments of Central, State and Union Territory Governments, as well as urban and rural local authorities engaged in administration, defence and regulation of public order; health, educational, cultural, recreational and other social and welfare services; promotion of economic growth and technological development. The legislature, executive, judiciary and other bodies like public services commission, general research and survey organizations, and

autonomous bodies engaged in administration and regulation, are also included under administrative departments.

3.1.1.2 Data Sources

The main source of data for preparation of GFCE is the budget document of central and state Governments. Besides, annual accounts of local authorities and autonomous institutes are also used to compile the estimates.

3.1.1.3 Estimation Methodology at current prices

The activities of producers of Government services are largely financed by the Government itself and consequently they are considered to be the final consumers of most of the services and goods, which they produce. Their cost structure does not contain an element of operating surplus and is made up, to a substantial extent, of compensation of employees and purchase of goods and services. A very minor part of the gross input of the producers of Government services, sometimes referred to a “Public Goods” is sold in the market as sale of commodities and services (for example the sale of entry tickets to monuments). The receipts are adjusted against the expenditure on purchase of goods and services and only the net purchase of commodities and services is considered for estimating the final consumption expenditure.

Final consumption expenditure of Government can be derived as the value of all types of output of general Government, less the value of output for own account capital formation, less the proceeds from the sales of goods and services at both economically insignificant prices and at economically significant prices, plus the value of goods and services purchased from market producers for delivery to households free or at economically insignificant prices.

Government output produced for own capital formation (e.g. in-house production of a database or software) is an asset; it is capitalized and not included in GFCE. Incidental sales by Government units (e.g. passport fees, statistical publications sold by the statistical office, or sales of souvenirs by the shop at a museum included in the General Government sector) are either included in intermediate consumption if used during a production process, or in Household Final Consumption Expenditure (HFCE), if consumed by households; these are also excluded from GFCE.

The Government often purchases goods and services from market producers for the benefit of households. Where such goods and services are not transformed during the Government’s production process, but are supplied to households, they are not included in Government output. However, the expenditure incurred on such goods and services forms part of GFCE and is treated as social transfers in kind. For instance, Government purchases bicycles, televisions and other articles and provides to individuals. Similarly, Government provides food, shelter, blankets, medicines and other items to victims of war, flood, famine, earthquakes and natural calamities. All such expenditure constitutes transfers in kind.

Following the reclassification of FCI from a market producer to a non-market producer, food subsidy is recorded as a social transfer in kind and included in GFCE, rather than being treated as a product subsidy.

GFCE is estimated using the following formula:

GFCE = Total Government output + goods & services purchased to be provided free to the households (Transfers in kind)- receipts from sale of goods & services.

$$= CE + \text{Net purchase of G \& S} + \text{Transfers in kind} + \text{CFC}$$

3.1.1.4 Estimation Methodology at Constant Prices

Estimates of Government Final Consumption Expenditure at constant prices are prepared separately for compensation of employees, net purchase of commodities and services and Consumption of Fixed Capital (CFC). The constant price estimates of compensation of employees are prepared by deflating the estimates of compensation of employees at current prices by CPI (IW). Estimates of purchase of commodities and services net of sales at constant prices are obtained by deflating current price estimates by the composite index prepared for deflating IC of General Government Sector. With the change in FCI's status from market producer to non-market producer, food subsidy has now been treated as social transfer in kind instead of product subsidy. To estimate constant price values for these transfers, the base year estimates have been moved based on the growth observed in food grain offtake under the National Food Security Act (NFSA). The constant price estimates of CFC are obtained by following the procedure of Perpetual Inventory Model (PIM).

3.1.2 Allocation of GFCE Estimates at State/ UT level

State- GFCE as available in the State budget document of a state will be allocated to that particular state. In case of Central Govt. GFCE, it was proposed to use DDO (Drawing and disbursement officer) location wise PFMS data for allocation among states. The same was agreed to by the subcommittee.

Besides, issue relating to allocation of fertilizer subsidy among states was also revisited. In one of earlier meetings, it was proposed to use State-wise consumption of NPK fertilizer for allocation of fertilizer subsidy among states and same was agreed to by the subcommittee. However, ACNAS suggested to use State-wise production of fertilizer for allocation among states instead of consumption. Subcommittee agreed with the suggestion made by ACNAS.

3.2 Private Final Consumption Expenditure (PFCE)

3.2.1 Estimation at National Level

3.2.1.1 The Private Final Consumption Expenditure (PFCE) compiled as part of National Accounts Statistics (NAS) consists of final consumption expenditure by households as well as Non-Profit Institutions Serving Households (NPISH). In the 2011-12 series, the PFCE estimates were published for 46 items under 12 Broad Groups in the publication National Accounts Statistics. In the new series, the PFCE estimates are compiled for around 128 items and to be published for around 49 items under 13 Broad Groups in the publication National Accounts Statistics.

3.2.1.2 Household final consumption expenditure consists of the expenditure, including expenditure whose value must be estimated indirectly, incurred by resident households on individual consumption goods and services, including those sold at prices that are not economically significant and including consumption of goods and services acquired abroad. This inter-alia includes the estimated value of goods and services produced and consumed by the same household. However, the production of services for own consumption within the same household falls outside the production boundary of the SNA, except for housing services produced by owner-occupiers and services produced by employing paid domestic staff.

3.2.1.3 Final consumption expenditure excludes expenditure on fixed assets in the form of dwellings or on valuables. When dwellings are rented out by their owners, rentals are recorded as output of housing services by owners and final consumption expenditure by tenants. When dwellings are occupied by their owners, the imputed value of the housing services enters into both the output and final consumption expenditure of the owners.

3.2.1.4 Final consumption expenditure of NPISHs consists of the expenditure, including expenditure whose value must be estimated indirectly, incurred by resident NPISHs on individual consumption goods and services and possibly on collective consumption services.

3.2.1.5 Household final consumption expenditure is typically a large aggregate covering a wide range of goods and services. It is thus usually desirable to break down the figure. The SNA 2008 uses four classifications of expenditure according to purpose which are Classification of the Purposes of Non-Profit Institutions Serving Households (COPNI), the Classification of the Functions of Government (COFOG), and the Classification of the Outlays of Producers According to Purpose (COPP) and Classification of Individual Consumption by Purpose (COICOP). These four classifications are used to analyse consumption by different institutional sectors according to the purpose for which the expenditure is undertaken. Among these four classifications COICOP is used to classify only a single kind of outlay – namely, the individual consumption expenditures of households, NPISH, and general government.

3.2.1.6 At its forty-ninth session, the UN Statistical Commission endorsed the revised Classification of Individual Consumption According to Purpose (COICOP), 2018 and recommended that countries use the classification as a statistical standard. Accordingly, COICOP 2018 is adopted to the feasible extent in PFCE compilation in the 2022-23 series. The COICOP 2018 has a hierarchical structure consisting of four (4) levels viz. Division, Group, Class and Subclass.

3.2.1.7 In COICOP 2018, most classes and subclasses comprise either goods or services. Classes and subclasses containing goods are denoted by “ND”, “SD” or “D” indicating non-durable, semi-durable or durable respectively. “S” denotes classes or subclasses consisting of services. The distinction between non-durable and durable goods is based on whether the goods can be used only once, or repeatedly or continuously over a period of considerably more than one year. Moreover, durables, such as motor cars, refrigerators, washing machines and television sets, have a relatively high purchasers’ price. Semi-durable goods differ from durable goods in that their expected lifetime of use, though more than one year, is often significantly shorter and their purchase prices are substantially less.

3.2.1.8 **Some of the key changes due to adoption of COICOP 2018 are given below:**

- (i) Tailoring is now included in the class “Cleaning, repair, tailoring and hire of clothing” which comes under the Division 3: Clothing and footwear. In the old series of NAS, tailoring was considered as part of “Other Services n.e.c”
- (ii) Power sockets, wiring flex etc. which were earlier covered under the Division 05 (Furnishings, household equipment and routine household maintenance) now shifted to Division 04 (Housing, water, electricity, gas and other fuels)
- (iii) In division 07 (Transport) added a group, 07.4 (Transportation services for goods), which had previously been included in the expenditure on the good itself and in group 08.1 (Postal services).
- (iv) Division 08 (earlier Communication) got renamed as “Information and communication” to better reflect its content. COICOP 1999 classes 09.1.1 (Equipment for the reception, recording and reproduction of sound and pictures), 09.1.3 (Information processing equipment) etc. were moved to division 08.
- (v) Division 09 (previously named Recreation and Culture) is renamed as “Recreation, sport and culture” to better reflect its content. Equipment which are now used mainly for information and communication got shifted from earlier Division 09 to new Division 08 as indicated above.
- (vi) Former Division 11 (Restaurants and Hotels) got renamed to “Restaurants and accommodation services” to better reflect the content of the Division.

- (vii) Former division 12 (Miscellaneous goods and services) was split into two: Division 12 (Insurance and financial services) and Division 13 (Personal care, social protection and miscellaneous goods and services).

3.2.1.9 Some of the other changes incorporated in the 2022-23 series are listed below:

- (i) Butter & Ghee and Ice Cream are classified under Oil & Fats and Sugar, confectionery and desserts respectively, whereas they were covered under Milk & Milk Products in 2011-12 series.
- (ii) Social Protection is included in the compilation of PFCE though it will not be published separately.

3.2.2 Data Sources & Methodology

3.2.2.1 In the current revision, the approach adopted for estimating Private Final Consumption Expenditure (PFCE) varies according to the nature of available production/consumption data, particularly whether such data are available in quantity terms or in value terms. Quantity estimates are available for most basic food items while value estimates are available for manufacturing/service items. Moreover, efforts have been made to develop alternative methods to the Commodity Flow approach for deriving independent estimates of PFCE items, to the extent feasible and subject to the availability of reliable data.

3.2.2.2 Several data sets including administrative, survey, study etc. have been used to derive the PFCE estimates for the 2022-23 series. The key data sources used in compilation of PFCE are listed below:

- i. Household Consumption Expenditure Survey (HCES)
- ii. Annual Survey of Industries (ASI)
- iii. Annual Survey of Unincorporated Sector Enterprises (ASUSE)
- iv. Periodic Labour Force Survey (PLFS)
- v. Reserve Bank of India
- vi. Ministry of Road Transport and Highways
- vii. Central Electricity Authority
- viii. M/o Petroleum & Natural Gas
- ix. M/o Food & Public Distribution
- x. M/o Commerce and Industry
- xi. Directorate General of Civil Aviation
- xii. M/o Railways
- xiii. Population Projection estimates of MoH&FW

3.2.2.3 In addition to this, a number of rates and ratios from various studies/surveys are being updated in Commodity Flow to capture the changes over the years. Most of these rates and ratios are derived dynamically from ASI, ASUSE and SUT. Some of the studies are listed below:

- i. Cost of cultivation Study of M/o Agriculture & Farmers Welfare
- ii. Study to determine post-harvest losses of Agri produces in India of M/o Food Processing Industries undertaken through NABCONS
- iii. Estimation of production and Utilisation pattern of Milk and Milk products in India conducted by ICAR- National Dairy Research Institute (NDRI) for MoSPI
- iv. Public Road Transport Services and Repair & Maintenance of Household vehicles conducted by Centre for Study of Regional Development, JNU for MoSPI

3.2.2.4 Further, following changes are incorporated in the 2022-23 series wherever applicable:

- i. Production as compiled as part of production side estimates / as derived from SUT/ASI/ASUSE is considered.
- ii. Wastage ratios/% loss are used from the Report of the study titled "Study to determine post-harvest losses of Agri. produces in India 2022" of M/o Food Processing Industries undertaken through NABCONS
- iii. Seed estimates as computed from Cost of Cultivation Study/ used for production side are considered
- iv. HCES 2022-23 data is used for compiling quantity retained for own consumption and retail prices.
- v. Ex-farm price as compiled for production side is used.
- vi. Inter Industry Consumption, Trade and Transport Margin, Commodity/Item wise Output, Change in Stock, GFCF etc. are used as compiled for Supply Use Table (SUT); otherwise Annual Survey of Industries (ASI)/ Annual Survey of Unincorporated Enterprises (ASUSE) data.
- vii. GFCE is considered from Budget documents/ M/o Food and Public Distribution.

Methodology

3.2.2.5 In general Commodity Flow method was followed in the 2011-12 series for estimating the PFCE for most of the items i.e. Production is adjusted for (i) Intermediate Consumption in agriculture, manufacturing and other industries; (ii) Net Imports; (iii) Change in Stock; (iv) Consumption on government account and (v) Gross Fixed Capital Formation. The 2022-23 series has tried to make a comprehensive change in compilation framework of PFCE using various data sources to make it robust and independent to the extent possible to reflect the dynamic consumption pattern. The approach varies according to the nature of available production/consumption data, particularly whether such data are available in quantity terms or in value terms. The compilation of PFCE items follows multi-pronged approach. The approaches are

based on utilizing the strength of different data sets. The approaches can be broadly grouped into three categories as (i) Enhanced use of HCES Data (ii) Direct estimates using production and other datasets (iii) Commodity Flow.

(i) Enhanced Use of Household Consumption Expenditure Survey (HCES)

3.2.2.6 In addition to using HCES data to derive consumption out of own produced goods, the 2022-23 series derive benchmark estimates for about half of the items from it. For the base year, estimates will be prepared using the value of per capita consumption based on HCES 2022-23 and Population Projection of M/o Health and Family Welfare. The identification of these items is based on several considerations. In general, this method is used for items which are expected to exhibit low-income elasticity or consumed widely across household groups. This ensures that robust and consistent per capita consumption estimates can be obtained from HCES and applying it with population estimates will lead to improved estimate for base year. Additionally, for some items where the estimates based on this method are closely aligned with the level of PFCE as per 2011-12 series, this method is used. The base year estimates are moved using the growth derived from the Commodity Flow of the respective items. Thereby, the estimates have the robustness of benchmark and capture the temporal variation in consumption using the dynamic rates and ratios based on annual data sources and SUT. The items in this category are mainly food items like cereals, pulses, meat etc. For these items the Method of estimation is indicated as “*Direct*” in the **Table presenting the summary of estimation procedure (Refer Annexure).**

3.2.2.7 Also, for few items, the benchmark estimates of the base year derived using the above stated method and for extrapolation Inter Survey Growth in per capita consumption observed between successive rounds of HCES, along with population projections of MoHFW, is used. The approach assumes that over a short period of time, the growth pattern is likely to hold. The next HCES, planned periodically will update the benchmark as well as inter-survey growth. This updation is applicable for those years for which the estimates are open for revision in the NAS in the 2022-23 series and not for the years for which the estimates are finalised in the NAS. The items in this category are mainly recreational & cultural services, water supply, spices, salt, solid fuels etc. For these items the Method of estimation is indicated as “Direct-ISG” in the Table presenting the summary of estimation procedure (**Refer Annexure**).

3.2.2.8 In case of Restaurants and Accommodation Services, growth in GVO is used for extrapolating the benchmark estimates of base year derived using HCES data and population projections.

(ii) Direct Estimates Using Production and Other Datasets

3.2.2.9 Due to availability of additional administrative data, study results and annual survey data, estimates of about a quarter of items are compiled directly using combination of data sets. For some of these items, the administrative data provides direct estimates of private final

consumption which include rail & air transport services, LPG, Kerosene, Purchase of personal vehicles etc. PFCE of some items are estimated using administrative data with study results. For example, combination of E-Vahan data with results of study on “Public Road Transport Services and Repair & Maintenance of Household vehicles” is used to generate estimates for road transport services; operation of personal vehicles. Similarly, combination of Milk production data with results of study on “Production and Utilisation pattern of Milk and Milk products in India” is used to generate estimates for Milk & other dairy products, Butter & Ghee and Ice cream.

3.2.2.10 Moreover, a number of activities are produced predominantly for consumption of Households. Some of these items, as per COICOP classification, are directly mapped to compilation category from production side or its component. Using ASUSE data, the component wise distribution of output is applied to the production estimates to derive the output corresponding to each component, thereby enabling the estimation of household consumption.

(iii) Commodity Flow

3.2.2.11 PFCE in respect of about a quarter of the items are compiled using the Commodity Flow approach. The theoretical framework of Commodity Flow remains the same as used in 2011-12 series. However, unlike the 2011-12 series, the 2022-23 series applies dynamic rates and ratios in Commodity Flow. The availability of ASUSE in addition to ASI is instrumental in this regard. The items in this category include Clothing materials, Sugar confectionary, Footwear, recreational goods and durables etc. The changes incorporated in the Commodity Flow are already discussed earlier.

3.2.2.12 Wherever applicable, the quantity retained by the producers for their own consumption is evaluated at ex-farm prices which is the same as used for the production side and secondly, marketed part is evaluated at retail prices. In case of food items supplied under PDS, PFCE of PDS items are compiled separately using the PDS quantity data from Ministry of Consumer Affairs, Food and Public Distribution and PDS prices as derived from HCES-2022-23. In case of Sugar PDS price from Directorate of Sugar, Department of Food & Public Distribution is used. Further for PDS items, separate price relatives are considered. The detailed item-wise compilation methodology adopted in the 2022-23 series is described below:

(iv) Food and Non-alcoholic Beverages

3.2.2.13 This broad group covers final consumption expenditure on food and non-alcoholic beverages mainly for consumption or preparation at home. The Benchmark estimates of PFCE in respect of cereals and cereal products, meat, eggs, mustard oil, other edible oils, coconut, copra, vegetables, tubers, plantains, cooking bananas and pulses (except Potatoes and vegetable products), gur, other food and non-alcoholic beverages are derived using per capita consumption estimates from HCES 2022-23 and population projections of MoHFW. For subsequent years, the estimates are moved using the growth derived from the Commodity Flow of the respective items.

In case of salt and spices Benchmark estimates are derived using the above cited method and for extrapolation the inter survey growth in per capita consumption observed between successive rounds of HCES, along with population projections of MoHFW, is used.

3.2.2.14 For fish and seafood, groundnut oil, coconut oil, fruits and nuts (except coconut and copra), potatoes, vegetable products, refined sugar, sugar confectionery and oilseeds Commodity Flow is used for deriving the estimates.

3.2.2.15 For the estimation of PFCE on milk and milk products, the various rates and ratios used in the compilation have been updated based on a study conducted by the ICAR National Dairy Research Institute (NDRI), Karnal, which was commissioned by MoSPI. The study, with fieldwork carried out mainly during 2021–22, provided updated information on the utilization of milk production, including the proportion consumed by producer households, losses, the quantity available for sale (marketable surplus), and the distribution of the marketable surplus between liquid milk and different dairy products such as butter, ghee and ice cream. It also provided updated retail prices for these products. These updated rates, ratios and prices have been used for estimating household consumption expenditure on milk, other dairy products, butter and ghee, and ice cream. Since the study collected price information only for 2021–22, the retail prices for subsequent years have been updated using the Consumer Price Index (CPI) for the respective products. However, the farm gate price of milk is taken from the annual production side estimates to ensure consistency between the production and expenditure estimates in the National Accounts.

3.2.2.16 In case of Sugar cane for chewing, the estimates are directly taken from production side.

3.2.2.17 Benchmark estimates of PFCE for Non-alcoholic beverages are derived using per capita consumption estimates from HCES 2022–23 and population projections of Ministry of Health and Family Welfare (MoHFW). For subsequent years, the estimates are extrapolated using growth rates derived from the Commodity Flow of the respective items.

(v) Alcoholic Beverages, Tobacco and Narcotics

3.2.2.18 This broad group covers final consumption expenditure on alcoholic beverages, tobacco products and narcotics regardless of where these are consumed but not provided as part of a food and beverage serving service. Benchmark estimates of PFCE for Alcoholic beverages and tobacco are derived using per capita consumption estimates from HCES 2022–23 and population projections of the Ministry of Health and Family Welfare (MoHFW). For subsequent years, the estimates are extrapolated using growth rates derived from the Commodity Flow of the respective items.

3.2.2.19 Benchmark estimates of Pan & its Ingredients are derived using the same methodology as above and for extrapolation the inter-survey growth in per capita consumption

observed between successive rounds of HCES, along with population projections of MoHFW, is used. In case of opium Commodity Flow is used for deriving the estimates.

(vi) Clothing and Footwear

3.2.2.20 This broad group covers final consumption expenditure on all clothing materials, garments, articles and accessories, footwear, and related services including cleaning, repair and hire of clothing and tailoring. The Benchmark estimates of PFCE in respect of Clothing materials, Garments, Other articles of clothing and clothing accessories and Footwear are derived using Commodity Flow approach.

3.2.2.21 PFCE for cleaning, repair, and hire of clothing is estimated as 100% of the Gross Value Output (GVO) of NIC 95292(Repair and alteration of clothing) and 96010 (Washing and dry cleaning of textile and fur products). The GVO of NIC 95292 is derived as a specific proportion of the GVO of Repair of Computers and Personal and Household Goods, while the GVO of NIC 96010 is derived as a specific proportion of the GVO of Personal Services, including washing, hairdressing, custom tailoring, and funeral-related services. These proportions are estimated annually using ASUSE data. PFCE for tailoring is estimated as 100% of the GVO of NIC 14105 (custom tailoring). The GVO of NIC 14105 is derived as a specific proportion of the GVO of Personal Services, including washing, hairdressing, custom tailoring, and funeral-related services. This proportion is estimated annually using ASUSE data.

(vii) Housing, Water, Electricity, Gas and Other Fuels

3.2.2.22 This broad group covers final consumption expenditure on goods and services for the use of the house or dwelling, its maintenance and repair, the supply of water, energy used for heating or cooling etc. This also include Actual rentals and imputed rentals for housing. PFCE for actual and imputed rental payments made for housing is estimated as the sum of GVO from ownership of dwellings and housing services provided by government. For services of the Maintenance, Repair and Security of the Dwelling: PFCE is estimated as the sum of (i) expenditure on the repair and maintenance of dwellings as compiled from the production approach and (ii) PFCE on security services. PFCE on security services for the base year, is estimated as 50% of the annual consumption expenditure in respect of item: “Security & Driver” using data from HCES 2022–23 and population projections of the Ministry of Health and Family Welfare (MoHFW) and for subsequent years, the estimates are extrapolated using the growth in output of NIC 801 from ASUSE.

3.2.2.23 In case of Security equipment and materials for dwelling maintenance and repair, PFCE estimates are derived using the Commodity Flow approach. For Water supply and Solid fuels Benchmark estimates of PFCE are derived from HCES 2022-23 and population projections of MoHFW and for extrapolation Inter Survey Growth in per capita consumption observed between successive rounds of HCES, along with population projections of MoHFW, is used. PFCE

of Refuse collection, Sewage collection, other services related to the dwelling is computed as 50% of Output of Remediation and Other Utility service.

3.2.2.24 As regards Electricity, for state-wise quantity, CEA data on electricity sold (Domestic) is used and state-wise prices as derived from HCES 2022-23 is used. The price is moved forward using CPI (electricity).

3.2.2.25 For PFCE of LPG, Domestic consumption from "Indian Petroleum & Natural Gas Statistics" and retail price as obtained from HCES 2022-23 are used. Base year retail prices are moved forward using CPI (LPG). For Other Gas, PFCE is estimated as 100% GVO.

3.2.2.26 In case of Liquid fuels, Domestic consumption of kerosene separately for PDS and non-PDS sources are taken from Indian Petroleum & Natural Gas Statistics. Corresponding PDS and retail prices as derived from HCES are used. Base-year PDS and retail prices are moved forward using CPI indices for Kerosene PDS and Kerosene (Other Sources) respectively.

(viii) Furnishings, Household Equipment and Routine Household Maintenance

3.2.2.27 This broad group covers final consumption expenditure on a wide range of products for the equipment of the house or dwelling and the household goods as well as some kind of household services. The Benchmark estimates of PFCE in respect of Furniture and furnishings, Carpets and other floor coverings, Clock and watches are derived using Commodity Flow approach. PFCE of Domestic services and household services is 100% GVO of Private households with employed persons.

3.2.2.28 PFCE for Repair of computer, personal & HHs goods, furniture, furnishings etc. is calculated as 100% of GVO of NIC 95- 95292 (Repair of computers, household goods and other personal goods-other than clothes). GVO of NIC 95-95292 may be derived as a specified proportion of GVO of Repair of computers and personal and household good etc (NIC 95). This share is derived annually using ASUSE data.

3.2.2.29 PFCE of Household textiles, Household appliances, Glassware, tableware and household utensils, tools and equipment for house and garden and non-durable household goods are derived using per capita consumption estimates from HCES 2022-23 and population projections of MoHFW. For subsequent years, the estimates are extrapolated using growth rates derived from the Commodity Flow of the respective items.

(ix) Health

3.2.2.30 This broad group covers final consumption expenditure on medicine and health products and health services. Benchmark estimates of PFCE for medicines and health products are

derived using the Commodity Flow approach and for health services, PFCE is estimated as output less GFCE, adjusted for exports and imports.

(x) Transport

3.2.2.31 This broad group covers final consumption expenditure on four main categories of goods and services for the purpose of transportation: purchase of vehicles, goods and services for the operation of the personal transport equipment, passenger transport services, and transport services for goods. PFCE for motor cars and motorcycles is estimated using sale-price data from Vahan/ MoRTH. PFCE for bicycles and animal-drawn vehicles is estimated using data sourced from the All-India Cycle Manufacturers' Association/ Commodity Flow.

3.2.2.32 To improve the estimation of PFCE on road transport services and personal transport equipment, MoSPI commissioned a study to the Centre for the Study of Regional Development, Jawaharlal Nehru University (JNU). The study, conducted in Uttar Pradesh, Maharashtra, Tamil Nadu, Gujarat, Karnataka and the NCT of Delhi, collected updated information on the earnings of different types of commercial vehicles, the share of these earnings attributable to household use, and household expenditure on fuels, lubricants, repairs, maintenance and other vehicle-related expenses. These findings, together with vehicle registration data from the Vahan Portal, are used to estimate household expenditure on passenger road transport, transport services for goods, fuels and lubricants, parts and accessories, repair and maintenance, and other services related to personal transport equipment. For mechanized passenger transport, the estimates are based on the JNU study and Vahan data, while expenditure on non-mechanized passenger transport is estimated using the ratio of non-mechanized to mechanized transport expenditure derived from HCES 2022–23.

3.2.2.33 For estimating the active stock of vehicles using Vahan data, an average vehicle lifespan of 15 years is assumed. Accordingly, only vehicles registered during the preceding 15 years are considered to be in use for compiling PFCE estimates related to personal transport and road transport services.

3.2.2.34 PFCE for passenger transport by rail is estimated as 90% of passenger earnings using data from Ministry of Railways/ Budget.

3.2.2.35 PFCE for passenger transport by air is estimated using data from the Directorate General of Civil Aviation (DGCA) and BPM6. Passenger revenue, after adjusting for exports, imports, travel expenditure of corporates, and Government expenditure under the object heads Foreign Travel Expenses (FTE) and Domestic Travel Expenses (DTE), is treated as PFCE.

3.2.2.36 PFCE for passenger transport by sea and inland waterways is estimated as 100% of the GVO of the household sector. PFCE for other passenger transport services is derived using the

Commodity Flow approach in respect of services incidental to transport using the Supply and Use Tables (SUT).

(xi) Information and Communication

3.2.2.37 This broad group covers final consumption expenditure on information and communication equipment and information and communication services. The Benchmark estimates of PFCE in respect of fixed telephone equipment, mobile telephone equipment, information processing equipment and software excluding games and equipment for the reception, recording and reproduction of sound and vision are derived using per capita consumption estimates from HCES 2022-23 and population projections of MoHFW. For subsequent years, the estimates are extrapolated using growth rates derived from the Commodity Flow of the respective items. In case of television and radio licenses and fees, subscriptions to audio-visual streaming services and rental of audio-visual content, PFCE estimates for 2022-23 are derived using the above cited method and for extrapolation, Inter Survey Growth in per capita consumption observed between successive rounds of HCES, along with population projections of MoHFW, is used. PFCE estimates for Communication Services are derived using Commodity Flow approach.

(xii) Recreation, Sport and Culture

3.2.2.38 This broad group covers final consumption expenditure on a wide range of goods and services for recreation, sport and culture. PFCE estimates for Recreational durables & other recreational goods are derived using Commodity Flow approach.

3.2.2.39 The Benchmark estimates of PFCE in respect of pets and pet products, cultural goods newspapers, books and stationery are derived using per capita consumption estimates from HCES 2022-23 and population projections of MoHFW. For subsequent years, the estimates are extrapolated using the growth rates derived from the commodity flow of the respective items. However, for garden products, plants and flowers, and recreational and cultural services, the benchmark estimates are derived using the above method, while the estimates for subsequent years are extrapolated using the inter survey growth in per capita consumption observed between successive rounds of HCES, along with the population projections of the Ministry of Health and Family Welfare (MoHFW).

(xiii) Education

3.2.2.40 This broad group covers educational services only and does not include expenditures on other education related goods like school uniforms, text books etc. PFCE for education is estimated as output less GFCE, adjusted for exports and imports.

(xiv) Restaurants and Accommodation Services

3.2.2.41 This broad group covers food and beverage serving services provided by restaurants, cafés and similar facilities and the accommodation services for visitors and other travellers away from their residence. The Benchmark estimates of PFCE in respect of Restaurants and accommodation services are derived using per capita consumption estimates from HCES 2022-23 and population projections of MoHFW. For extrapolating the benchmark estimates growth in GVO is used.

(xv) Insurance and Financial Services

3.2.2.42 This broad group covers insurance and financial services provided by financial corporations which may be paid for explicitly or implicitly. PFCE of life insurance services is estimated as 100% of the life insurance output. PFCE of non-life insurance services is estimated using the Commodity Flow approach.

3.2.2.43 PFCE in respect of FISIM is considered as FISIM allocated to the Household (personal) sector. PFCE of explicit charges by deposit-taking corporations and other financial services is estimated as specific proportion of actual receipts (charges). This proportion is derived annually using data from the Reserve Bank of India (RBI) i.e. the share of household loans and household deposits in total loans and deposits in respect of Scheduled Commercial Banks (SCBs).

(xvi) Personal Care, Social Protection and Miscellaneous Goods and Services

3.2.2.44 This broad group covers goods and services for personal care, other personal effects and miscellaneous goods and services. The Benchmark estimates of PFCE in respect of Electric, other appliances, articles and products for personal care are derived using per capita consumption estimates from HCES 2022-23 and population projections of MoHFW. For subsequent years, the estimates are extrapolated using growth rates derived from the Commodity Flow of the respective items. In case of Hairdressing salons and personal grooming establishments, PFCE estimates are derived using the above cited method and for extrapolation, Inter Survey Growth in per capita consumption observed between successive rounds of HCES, along with population projections of MoHFW, is used. PFCE for Other personal effects is derived using Commodity Flow approach.

3.2.2.45 PFCE for religious services is estimated as 100% of the GVO of NIC 9491. The GVO of NIC 9491 is derived as a specific proportion of the GVO of activities of membership organizations. This proportion is estimated annually using ASUSE data. PFCE for legal services is estimated as 50% of the output of legal services. PFCE for funeral services is estimated as 100 per cent of the GVO of NIC 96030. The GVO of NIC 96030 is derived as a specific proportion of the GVO of personal services including washing, hairdressing, custom tailoring, and funeral-related services. This proportion is estimated annually using ASUSE data. PFCE for business services is estimated as 100% of the respective GVO of the household sector.

3.2.2.46 PFCE on social protection is considered as 100% of the estimated output of NIC 87 (Residential Care Activities) and NIC 88 (Social Work Activities without Accommodation).

3.2.3 Use of Price Index as Deflator/Inflator

3.2.3.1 Price indices are used to deflate/inflate the current/constant price estimates depending on data source. If data sources are for compilation of an item estimate is in value terms, then index will be used to deflate whereas if it is available in volume terms, it will be used to inflate to estimate.

3.2.3.2 In the 2011-12 series, in general PFCE items were derived by deflating/inflating estimates by relevant CPI at Group/ Sub Group level or by using Implicit Price Deflator (IPD) of GVO barring few exceptions where volume extrapolation was used. SNA recommends deflation of Household consumption expenditure at as detailed a degree as possible. Accordingly, in the 2022-23 series, CPIs at disaggregated item level, to the extent feasible, is used. Also, for some items IPD of GVO is considered due to unavailability of relevant CPI. Volume extrapolation is used for passenger transport by railway using growth of passenger kilometer. Also Banking Services Price Index (BkSPI) (Direct) is used in case of explicit charges by deposit taking corporations, other financial services. The item-wise details of price indices/ volume indicator considered are given in the Table indicating the summary of estimation procedure (**Refer Annexure**).

3.2.4 Allocation of PFCE Estimates at State/ UT level

3.2.4.1 At present, none of the States /UTs are preparing a complete set of Expenditure-side estimates. Though some States/ UTs are preparing GFCF and GFCE estimates, PFCE estimates are not being compiled at State/UT level. Accordingly, proposals were presented before the Sub - Committee of ACNAS on Regional Accounts as well as Advisory Committee on National Accounts Statistics. The details of the method approved by ACNAS for allocation of the current price PFCE estimates are discussed in subsequent paras.

3.2.4.2 As agreed by ACNAS the HCES data may be utilized to derive State-wise PFCE estimates to the feasible extent. For distributing PFCE (mostly at disseminating group level), the proportions derived from State/UT wise consumption expenditure (estimated using per capita expenditure from HCES and Population Projection of M/o Health and Family Welfare) may be used. In cases where direct mapping of items of PFCE to HCES items is not available, the proportions in respect of complementary item from HCES may be considered.

3.2.4.3 **As data on Banking and Insurance services are not available from HCES, for allocation of All India level PFCE among State/UTs, proportions derived from the following sources may be considered:**

- a) State/ UT wise data of RBI on Deposits of SCBs and RRBs and Personal Loans by SCBs for FISIM and Explicit charges by deposit-taking corporations, other financial services. Also, incorporation of State/ UT-wise data on credits from Money Lenders from AIDIS need to be explored for further refinement of the allocation.
- b) State/ UT- wise data of IRDAI on Individual new business (Life) underwritten-Premium for Life Insurance.
- c) IRDAI data on premium rates for Motor insurance (MTPI), State/ UT- wise data on Gross Direct Premium – Motor Own Damage, Motor Third Party and Miscellaneous and e-VAHAN data for Non-Life Insurance.

3.2.4.4 Moreover, Administrative data from the following sources may be used for deriving State/ UT-wise estimates of respective items:

- a) Electricity: Central Electricity Authority (CEA)’s data on State/ UT-wise domestic consumption of electricity and State/ UT-wise price derived from HCES.
- b) LPG and Kerosene: Proportions derived from M/o Petroleum & Natural Gas’s data on State/ UT-wise consumption (end use).
- c) Purchase of Motor Cars and Motor Cycles: State/ UT wise sale price data from Vahan Portal.
- d) Operation of personal transport equipment which include Parts and accessories for personal transport equipment, Fuels and lubricants for personal transport equipment, Maintenance and repair of personal transport equipment, other services related to personal transport equipment: Proportions derived from State/ UT-wise data on number of personal Vehicles using Vahan data (considering 15 years as average life span).
- e) Passenger transport by road and Transport services for goods: Proportions derived from State/ UT-wise data on number of respective Vehicles using Vahan data (considering 15 years as average life span).
- f) Passenger transport by air: Proportions derived from Airport Authority of India’s (AAI) data on Airport-wise number of passengers
- g) Communication Services: Proportions derived from Telecom Regulatory Authority of India (TRAI)’s data on State/ UT-wise Telephone Subscription and State/UT wise per capita consumption expenditure from HCES.

3.2.4.5 For Actual and Imputed rental payments made for housing and Domestic services and household services, the proportions derived from State/ UT-wise production side estimates may be used.

3.2.4.6 The proportions obtained from HCES to distribute the national PFCE in States may be revised as and when new HCES is available. Also, the latest census data may replace the projected population data, once it becomes available.

3.2.4.7 Further the State/ UT-wise proportion of GVO derived from ASUSE may be used for the State/ UT allocation of PFCE of following services:

- Cleaning, repair and hire of clothing
- Tailoring
- Repair of computer, personal & Hhs goods, furniture, furnishings and floor coverings (s)
- Passenger transport by sea and inland waterway
- Religious services
- Funeral services
- Business services
- Social protection

3.2.4.8 States/ UTs are advised not to disseminate PFCE estimates below the level at which National level estimates are published.

The detailed item-wise methodology of compilation is given in the Annexure.

3.3 Gross Capital Formation (GCF)

Gross Capital Formation (GCF) is one of the key aggregates in the compilation of National Accounts Statistics both at national and State/UT income estimates, representing the addition to an economy's stock of productive produced assets during an accounting period. These Guideline have been prepared to assist State/UT Directorates of Economics and Statistics (DES) in undertaking the compilation of GCF at the State/UT level, building upon the methodology followed at the National level and the recommendations of the Sub-Committee constituted to examine the feasibility, data sources, and indicators for Expenditure side aggregates of Gross State Domestic Product.

The Guideline elaborate on:

- (i) GCF and its components,
- (ii) List the asset categories covered under Gross Fixed Capital Formation (GFCF) as per the System of National Accounts (SNA),
- (iii) Describes the methodology followed at the National level for each component, and
- (iv) Provide indicators and data sources recommended for compilation of each component of GCF, sector-wise and asset-wise, along with the current status of data availability and the road map for components where compilation is being deferred pending further data development.

- (v) Compilation of imports and exports of goods.

3.3.1 Coverage of Gross Capital Formation

3.3.1.1 As per the SNA, Gross Capital Formation comprises three components:

- **Gross Fixed Capital Formation (GFCF)** - net acquisition of fixed assets (tangible and intangible) used repeatedly in production for more than one year
- **Changes in Inventories (Change in Stock)** - net addition to stocks of raw materials, work-in-progress, finished goods, and goods for resale
- **Acquisitions less Disposals of Valuables** - precious metals, precious stones, and other valuables held as a store of value rather than for production or consumption

Compilation of Gross Fixed Capital Formation (GFCF)

3.3.2 Assets Covered in GFCF as per SNA

3.3.2.1 The SNA classifies fixed assets covered under GFCF into the following broad categories, which form the basis for asset-wise compilation of GFCF at both the National and State/UT level:

- Dwellings, Other Buildings and Structures (DOBS) which includes (i) dwellings; (ii) non-residential buildings; (iii) Other Structures; (iv) Land Improvements; and (v) Roads and Bridges.
- Machinery and Equipment which covers (i) Transport equipments ;(ii) Information and Communication Technology (ICT) Equipments; (iii) Other Machinery Equipments; and (iv) Weapons Systems
- Cultivated Biological Resources — comprising (i) Tree, crop and plant resources yielding repeat products, and (ii) Animal resources yielding repeat products
- Intellectual Property Products (IPP) — comprising of (i) Research and Development; (ii) Mineral Exploration and Evaluation; (iii) Computer Software and Databases; (iv) Entertainment, Literary or Artistic Originals; and (v) Other Intellectual Property Products

3.3.2.2 It is recommended that State/UT DES may compile GFCF estimates disaggregated by the asset categories, and further by institutional sector (General Government, Departmental Enterprises, Non-Departmental Enterprises, Private Corporations, and Quasi Corporations/Household Sector), consistent with the National-level classification.

Compilation Methodology for GFCF in National Accounts Statistics in new series of GDP base year 2022-23

3.3.2.3 At the National level, the Commodity Flow Approach is used for estimating all-India GFCF in Dwellings, Other Buildings and Structures (DOBS) and Machinery & Equipment. GFCF reported in these assets by General Government (from analysis of budget documents), Departmental Enterprises (from analysis of budget documents), Non-Departmental Enterprises (from analysis of annual reports), and Private Corporations (from MCA database) is subtracted from the total GFCF estimated using the commodity flow approach, and GFCF of the unincorporated sector (household sector and quasi corporations) is derived as a residual.

3.3.2.4 The industry-wise break-up of GFCF in these assets is available in respect of all institutional sectors except for the unincorporated sector (which includes quasi corporations and household sector) wherein the GFCF allocation among industries has been carried out using results of the All-India Debt & Investment Survey (AIDIS) and the Annual Survey of Unincorporated Sector Enterprises (ASUSE).

3.3.2.5 For Cultivated Biological Resources, total GFCF is estimated using a bottom-up approach. For Tree, crop and plant resources, the incremental area under plantation (reported by State/UT DES and the Ministry of Agriculture & Farmers Welfare) is combined with year-wise, State-wise, crop/plantation-wise expenditure per hectare data from NABARD. The incremental area multiplied by per hectare expenditure gives the total expenditure on asset creation. For Animal resources yielding repeat products, results of the Livestock Census are used to estimate the State-wise increment in livestock available for repeat use and yielding repeat products, combined with price data from State/UT DES to arrive at incremental value of livestock which can be treated as capital asset.

3.3.2.6 GFCF in Computer Software and Databases is derived using total software production in the economy, adjusted for net imports and software and databases used as intermediate consumption. GFCF in other IPP assets is estimated based on institutional sector-wise reporting from their respective data sources.

Estimation Methodology for Constant Price Estimates at the National Level

3.3.2.7 **Constant Price estimates of GFCF in DOBS assets:** For constant prices estimation of GFCF in DOBS asset except for land improvement, a composite index is derived by taking ratio of sum of current prices value of material inputs and services inputs used in construction and the sum of deflated values of these components. Producer Price Index of relevant items are used for deflating the input wise estimate at current prices (estimated as a part of commodity flow method), service inputs are deflated by Consumer Price Index. The index so derived has the advantage that the weights of different input components are dynamically updated and hence reflect the changing intensity of consumption of different inputs. For constant price estimate of GFCF in land improvement, the current price GFCF is deflated by Consumer Price

Index-Rural. The GFCF of household sector in ‘Dwellings’ asset is prepared as the weighted index of material inputs, services inputs and factor costs used in construction of dwellings with weights derived from the Pilot Survey on Construction conducted by NSSO.

3.3.2.8 **Constant price estimates of GFCF in machinery and equipment (M&E) assets:**

For constant price estimation of GFCF in M&E assets, basket of suitable items in Producer Price Index (PPI) are prepared for each industry. Since the GFCF in machinery and equipments are industry specific, the weighted index of items from PPI for industry specific machinery and equipments are used as deflators. For example: Weighted index based on PPI for Agricultural Machinery & Implements is used for deflating GFCF estimated in the category ‘other machinery and equipments’ for agriculture industry, Weighted index based on PPI for machinery used mining, quarrying etc. Similarly, the transport equipments and ICT equipments are deflated by the weighted index of relevant items from PPI item basket.

3.3.2.9 **Constant price estimates of GFCF in cultivated biological resources:** For animal resources yielding repeat products, an implicit price index using the current year estimate divided by increment in livestock in current year multiplied by base year prices is compiled as is used for deflating the current price estimate of GFCF in this asset. Consumer Price Index (Rural) is used for deflating the GFCF in tree, crops and plantation yielding repeat products.

3.3.2.10 **Constant price estimates of IPP assets**

- (a) Research & Development: CPI (Industrial Workers) is used as deflator for deflating GFCF in this asset for public sector and CPI(Urban) is used as deflator for GFCF in this asset by private sector.
- (b) Mineral Exploration and Evaluation: CPI(General) is used as deflator
- (c) Computer Software and databases: CPI(Urban) is used as deflator
- (d) Entertainment, literary and other artistic originals: CPI (Recreation) is used as deflator.
- (e) Other IPP products: For other IPP products CPI-Urban is used as deflator.

3.3.2.11 **Change in Stock:** PPI based composite price indices specific to each industry are compiled and used as deflators for constant price estimates.

3.3.2.12 **Valuables**

Composite index based on Consumer Price Index of relevant items from CPI basket is used as deflator for constant price estimate of valuables.

Institutional Sector-wise Guideline for State/UT-Level Compilation of GFCF

Public Sector (General Government, Departmental Enterprises and Non-Departmental Enterprises)

3.3.2.13 GFCF for General Government (State Admin) and State Departmental Enterprises are being compiled by the respective State/UT from analysis of budget documents. The central portion of GFCF is available State/UT-wise from DDO-wise location wise PFMS data, which contains information on asset-wise, DDO-location-wise expenditure on GFCF. Annual Reports of State Non-Departmental Enterprises (NDEs) are also being analyzed by the respective State DES for compilation of GFCF. GFCF of Central NDEs is to be allocated to States/UTs using information from the Department of Public Enterprises publication for multi-State NDEs, while GFCF of single-State NDEs is to be assigned directly to the respective State/UT. Since all requisite data for the public sector are available with the States, State/UT DES are in a position to compile asset-wise, industry-wise GFCF for the public sector following same methodology as that at the National level.

Private Corporations

3.3.2.14 Since the MCA database used for GFCF compilation at the National level is maintained at the enterprise level and does not have regional markers, State-wise GFCF data for private corporations cannot be compiled directly. Suitable indicators are therefore required for allocating National-level GFCF among States/UTs, except for the Manufacturing sector, where Block C of the Annual Survey of Industries (ASI) — containing asset-wise GFCF. The asset wise net additions reported in ASI along with the type of organization codes reported in Block B namely codes 3 (Limited Liability Partnership), 6 (Non-Government Company – Public), and 7 (Non-Government Company – Private). Once results of the Annual Survey of Incorporated Service Sector Enterprises (ASISSE), covering Water supply; sewerage, waste management and remediation activities, Construction and Services (excluding Financial and insurance activities, transport by railways and pipelines and public administration and defence) become available, all-India industry-wise and asset-wise GFCF can be allocated to States/UTs using the fixed assets block (block 3) of this survey. The ASISSE Survey has been launched by MoSPI from 2026 wherein the reference period or accounting period is the Financial Year 2024 - 2025 (FY 2024-25), i.e. covering the period from April, 2024 to March, 2025. In absence of survey data for FY 2022-23 and 2023-24, following approach has been suggested. This approach can be used for GFCF allocation for assets Dwellings, Other Buildings and Structures (DOBS), Machinery & Equipments (M&E) and Intellectual Property Products (IPP). The method for estimation of GFCF in Cultivated Biological Resources is mentioned subsequently.

Estimation of asset-wise GFCF of private corporations using Capital-Output Ratios (COR):

3.3.2.15 This method is applied specifically where direct capital expenditure data is not available at the State/UT level. It serves as a practical alternative until direct survey-based sources from ASISSE become available. Estimates of GFCF are derived indirectly, by first deriving an implied capital stock and then taking the year-on-year change in that stock — rather than compiling GFCF directly from capital expenditure data.

Step 1: To estimate the state-wise, industry-wise and asset-wise Net Fixed Capital Stock

$$\text{Capital Stock}_t = \text{COR (National, Industry)} \times \text{GVA}_t (\text{State/UT, Industry})$$

Where t represents the financial year for which the compilation is being undertaken. The Capital-Output Ratio which is the net capital stock per GVA is computed at the National level for a given industry (using the National Fixed Capital Stock, which has been compiled by using Perpetual Inventory Method, divided by all-India GVA for that industry), and then applied to the State/UT's GVA for that industry to derive an implied State-level capital stock.

Step 2: To estimate the GFCF

$$\text{GFCF}_t (\text{State/UT}) = \text{Capital Stock}_t - \text{Capital Stock}_{t-1}$$

The difference between two consecutive years' implied capital stock gives the estimated GFCF for that year.

3.3.2.16 **Advantages of this approach are:**

- (a) It requires only State-level GVA compiled using production approach and National-level COR;
- (b) Since the COR is anchored to the National capital stock/GVA relationship, State-level estimates aggregate back sensibly to the National total.
- (c) Easily replicable across States and industries in absence of direct estimates.

3.3.2.17 However, the limitation of this approach is that it assumes uniform capital intensity across States i.e. the same national COR is applied to every State, ignoring genuine regional differences in technology, scale, mechanization, and capital vintage. Since the Capital-Output Ratio is a technical coefficient, it is reasonably stable and does not change drastically, the approach is the best possible way in absence of suitable regional data. This method is best understood as an interim, second-best technique useful because it needs so little State-specific data, but explicitly intended to be replaced by direct, survey-based GFCF compilation (via ASISSE) once such data sources become available, consistent with a phased approach to improving State-level GCF compilation.

3.3.2.18 The recommended indicators for allocation of industry-wise GFCF for Private Corporations are summarized in Table 1 below:

Table 1: Indicators for Allocation of All-India GFCF among States/UTs — Private Corporations

Industry	Indicator for Allocation of All-India Asset-wise GFCF
Agriculture: Crops, Livestock, Fisheries	National-level Capital-Output Ratio multiplied by State/UT GVA to derive Capital Stock for the current year; the difference between capital stock of two consecutive years gives GFCF for the current year. State/UT-wise GFCF so estimated is used to derive ratios for proportionate allocation of all-India GFCF.
Forestry	Area under private forests from Forestry Statistics in India (published by FSI), used to allocate the national GFCF among States/UTs.
Mining & Quarrying	National-level Capital-Output Ratio multiplied by State/UT GVA to derive Capital Stock for the current year; the difference between capital stock of two consecutive years gives GFCF for the current year. State/UT-wise GFCF so estimated is used to derive ratios for proportionate allocation of all-India GFCF.
Manufacturing	Block C of ASI for type of organization codes 3, 6, and 7 in Block B, used to derive State/UT-wise GFCF ratios for allocation of the National total.
Electricity	Analysis of State/UT-wise balance sheets of private corporations engaged in generation and transmission; Central Electricity Authority data on year-on-year State-wise increase in installed capacity may also be used as in indicator although it is a volume measure / physical indicator.
Gas	Analysis of State/UT-wise balance sheets of private corporations engaged in generation and transmission.
Water Supply, Remediation & Other Utility Services, Construction, Non-Financial Services, Financial Services.	National-level Capital-Output Ratio multiplied by State/UT GVA to derive Capital Stock for the current year; the difference between capital stock of two consecutive years gives GFCF for the current year. State/UT-wise GFCF so estimated is used to derive ratios for proportionate allocation of all-India GFCF. This approach will be used for FY 2022-23 and 2023-24 and

Industry	Indicator for Allocation of All-India Asset-wise GFCF
	then to be refined using ASISSE results once available for Water Supply, Remediation & Other Utility Services, Construction and Non-Financial Services. For financial services, National-level Capital-Output Ratio multiplied by State/UT GVA

Unincorporated Sector (Quasi Corporations and Household Sector)

3.3.2.19 With the availability of results of the Annual Survey of Unincorporated Sector Enterprises (ASUSE), allocation of all-India GFCF for industries covered under this survey can be carried out based on ratios derived from industry-wise, State-wise, and asset-wise GFCF (net additions to fixed assets) reported therein in Block 10. For Agriculture (Crops and Livestock), results of the All-India Debt & Investment Survey (AIDIS) 2019 are to be used for State/UT-wise allocation, which will be updated at later stage using results of latest AIDIS round being conducted during July-2026 to June 2027 when they are. Recommended indicators for allocation of all India GFCF are given in Table 2.

Table 2: Indicators for Allocation of All-India GFCF among States/UTs — Quasi Corporations and Household Sector

Industry	Indicator for Allocation of All-India Asset-wise GFCF
Agriculture: Crops, Livestock	Ratios derived from State/UT-wise and asset-wise capital expenditure reported in AIDIS-2019, to be updated using the latest available AIDIS round.
Fisheries	National-level Capital-Output Ratio multiplied by State/UT GVA to derive Capital Stock for the current year; the difference between capital stock of two consecutive years gives GFCF for the current year. State/UT-wise GFCF so estimated is used to derive ratios for proportionate allocation of all-India GFCF.
Forestry	Area under private forests from Forestry Statistics in India (published by FSI).
Mining & Quarrying	State/UT DES data cover production of minor minerals only; GFCF data are not reported. National-level Capital-Output Ratio multiplied by State/UT GVA to derive Capital Stock for the current year; the difference between

Industry	Indicator for Allocation of All-India Asset-wise GFCF
	capital stock of two consecutive years gives GFCF for the current year. State/UT-wise GFCF so estimated is used to derive ratios for proportionate allocation of all-India GFCF.
Manufacturing, Electricity, Water Supply, Remediation & Other Utility Services, Non-Financial Services	Ratios derived from industry-wise, State-wise, and asset-wise GFCF (net additions to fixed assets) reported in ASUSE. For Quasi Corporations covered in ASI (type of organization code 1,2,8 and 9 reported in block B), Block C of ASI for these types of organization codes reported in Block B to be used to derive State/UT-wise GFCF.
Construction	National-level Capital-Output Ratio multiplied by State/UT GVA to derive Capital Stock for the current year; the difference between capital stock of two consecutive years gives GFCF for the current year. State/UT-wise GFCF so estimated is used to derive ratios for proportionate allocation of all-India GFCF.
Ownership of Dwellings	State-wise GFCF in Rural Residential Buildings (RRB) and Urban Residential Buildings (URB) are compiled using results of AIDIS-2019. The all India GFCF of this industry will be allocated as per shares/ratios derived from State-wise GFCF in RRB and URB.

Estimation of GFCF in Cultivated Biological Resources

3.3.2.20 **Tree, crop and plant resources yielding repeat products:** The incremental area under plantation (reported by State/UT DES and the Ministry of Agriculture & Farmers Welfare) is multiple with year-wise, State-wise, crop/plantation-wise expenditure per hectare data from NABARD. The incremental area multiplied by per hectare expenditure gives the total expenditure on asset creation and hence is available State-wise.

3.3.2.21 **For Animal resources yielding repeat products,** results of the Livestock Census are used to estimate the State-wise increment in livestock available for repeat use and yielding repeat products, combined with price data from State/UT DES to arrive at incremental value of livestock which can be treated as capital asset.

3.3.2.22 Subtracting the GFCF in above assets reported by public sector, the GFCF of private sector (private corporations and unincorporated sector) can be compiled State/UT-wise.

3.3.3 Change in Stock (CIS)

3.3.3.1 Change in Stock is one of the three components of Gross Capital Formation under the SNA, covering the net addition to inventories — the value of inventories acquired by an enterprise, less the value of inventories disposed of, during the accounting period. Inventories themselves comprise raw materials, work-in-progress, finished goods, and goods held for resale.

3.3.3.2 **Public Sector:** While data on Change in Stock for General Government, Departmental Enterprises, and Non-Departmental Enterprises are available from the data sources used in compilation of GSVA, corresponding data for Private Corporations and Quasi Corporations covered in ASI are not available except for the Manufacturing sector (where opening and closing stock data are available from ASI). Information on inventories for industries covered under ASUSE is separately available.

3.3.3.3 **Private Corporations:** Since Private Corporations have a significant share in CIS at the National level and relevant State-wise data are currently lacking, compilation of CIS for Private Corporations at the State/UT level can be undertaken once ASISSE results become available for the industries covered in these surveys. For FY 2022-23 and 2024-25, following methodology based on National-Level Inventory-to-Output Ratio Method for deriving State-wise Closing Inventory may be adopted. This approach estimates State-wise closing inventory (and, by extension, Change in Stock) indirectly in a manner analogous to the Capital-Output Ratio method used for GFCF i.e. by applying a National-level, industry-wise Inventory-to-Output Ratio to each State's own output (GVO), rather than compiling inventory data directly at the State level.

Step 1: Derive Closing Inventory Stock:

$$\text{Closing Inventory}_t (\text{State/UT}) = \text{Inventory-to-Output Ratio (National, Industry)} \times \text{GVO}_t (\text{State/UT, Industry})$$

3.3.3.4 The National Inventory-to-Output Ratio which is the stock of inventories held per unit of output for a given industry is computed at the National level (All-India inventory stock ÷ All-India GVO for that industry), and then applied to the State's own GVO for the same industry to derive an implied State-level closing inventory stock.

Step 2: Derive Change in Stock:

$$\text{Change in Stock}_t (\text{State/UT}) = \text{Closing Inventory}_t - \text{Opening Inventory}_t (= \text{Closing Inventory}_{t-1})$$

3.3.3.5 This above step is to be done carefully to strip out holding gains i.e. the derived closing/opening inventory figures are to be expressed on a comparable price basis before differencing, consistent with the SNA's treatment of holding gains in inventory valuation.

Step 3: The opening and closing stock are deflated by the price index relevant to their own point in time (last quarter of the previous FY for opening, last quarter of the current FY for closing) in order to arrive at opening and closing stocks at common real/constant-price basis. Since both

closing and opening stock are expressed in the same base-year prices, any pure price-level difference between the two periods has been removed — only the genuine change in physical quantity (valued consistently) remains. (d) Differencing these two constant-price figures for closing and opening stock therefore gives the change in stock in real/volume terms — this is your constant-price change in stock, and it is free from holding-gain, since both ends of the comparison are stripped to a single price level. The constant price estimates of change in stock are re-inflating by the annual average price index to convert the real volume change into a current-price-equivalent value.

3.3.3.6 The above method may be followed for all Industries of private corporate sector except for Manufacturing wherein the State-wise Change in Stock can be compiled from Block-D item 7 (Total inventory) of ASI for type of organization codes 3,6 and 7. Similarly, for quasi corporations in ASI (type of organization codes 1, 2, 8 and 9), opening and closing inventory values are to be compiled using Block-D item 7 (Total inventory).

3.3.3.7 **Unincorporated sector:** State-wise inventory to output ratios are available from ASUSE for industries covered in ASUSE. Hence, using step (2) and (3) mentioned above can be used to estimate change in stock for these industries covered in ASUSE. ASUSE does not cover agriculture and allied sectors, mining and quarrying and construction. For livestock, the categories of animals which form part of increase in livestock are bulls and bullocks over three years not in use for breeding or work, cows over three years not in use for breeding, young male and female cattle stock, goats, sheep, camel and horses, ponies, donkey, mules, yak, maithun under one year, and goats, sheep, camel and other animals of one year and above and not in milk, or not reared for wool clipping or not used as draught animals etc. In case of the pigs and poultry, the entire incremental livestock is taken into compilation of change in stock estimate. The state-wise incremental value of livestock and proportions of livestock of each type which are to be considered as change in stock are available from latest Livestock Census. Using the estimated number of incremental livestock considered as CIS and their per unit value, CIS for livestock sector can be estimated. The estimated value of draught animals which are eligible to be considered as CIS are then assigned crop sector.

3.3.3.8 For Mining and Quarrying, All-India Inventory-to-Output Ratio multiplied by each State's output (GVO) may be used as in case of private corporations and steps (1) to (3) mentioned above may be carried out to compile CIS for unincorporated sector. For Construction, State-wise inventory to output ratios are available from Pilot Survey on Construction (which covered unincorporated sector of Construction industry) conducted by MoSPI in 2025. Hence, using step (2) and (3) mentioned above can be used to estimate change in stock.

3.3.4 Valuables

3.3.4.1 At the National level, Valuables are compiled using data on production and net imports, after deducting inter-industry use and adjusting for Trade and Transport Margins. Production data are sourced from the Indian Bureau of Mines (IBM) for gold and silver, and from

ASI/ASUSE (after adjustment for NDE and MCA-reported production); import and export data are sourced from DGCI&S. State-wise compilation is presently constrained since State-wise data on international imports of items treated as valuables are not available. GST E-Way Bill data, which captures inter-State movement of goods along with the reason for transportation (supply, import, export, line sales, etc.), may be used to estimate import and export (international as well as inter-state). Following approach is suggested for compilation of State-wise estimates of Valuables.

Step 1: The production data of gold and silver in the economy is available State-wise from Indian Bureau of Mines (IBM). The production data is then to be adjusted for imports and exports of gold and silver (from E-way Bill data) and for inter-industry consumption (gold and silver used as input in manufacturing) to arrive at net availability of gold and silver at basic prices. Trade and Transport Margins (from SUT) and Product Taxes are then added to arrive at estimates at market prices.

Step 2: The State-wise production of manufactured valuables (jewellery and ornaments of gold, silver, and platinum embedded with diamonds, precious stones etc) are compiled using results of Annual Survey of Industries and ASUSE. These are then to be adjusted by state-wise import and export compiled from E-way Bill data to arrive at State level availability of valuables (production + imports -exports). Adjustment for product taxes and Trade and Transport Margins (from SUT) are to be done to arrive at State level availability of these valuables at market price.

Step 3: Combining the values of availability of valuables from step(1) and (2), ratios are derived (Valuables estimated at State Level) / sum of valuables estimated for all States which are then used for allocating all-India estimate of Valuables.

3.4 Import and Export of Goods and Services

At the National level, data on import and export of goods are sourced from DGCI&S, and for services from the RBI. State-wise data on international exports of goods are compiled by DGCI&S; however, State-wise data on international imports of goods are not available. For inter-State trade in goods, DGCI&S publishes data on Inter-State Movement/Flow of Goods by Rail, River and Air (available FY 2019-20 to FY 2024-25), and on Movement/Flow of Goods through Road Transport based on E-Way Bill data (available for FY 2022-23 and FY 2023-24), which also captures the reason for transportation. Using these data, the state-wise import and export of goods can be compiled.

In respect of services, State-wise data on international import and export of services, as well as inter-State trade in services, are not available from RBI or other sources at present. Accordingly, compilation of import and export of goods and services at the State/UT level is to be deferred until relevant data become available as per recommendation of Sub-Committee on Regional Accounts and ACNAS.

3.5 Supra Regional Sector

Compilation of State-wise estimates of Gross Fixed Capital Formation for Supra-Regional sectors

The estimates of Gross Fixed capital formation (GFCF) in respect of supra-regional sectors are prepared by the National Statistics Office (NSO) and supplied to State Directorates of Economics and Statistics (DESS) for incorporating the same in their estimates. The GFCF estimates of Supra-regional sectors are prepared at current prices only.

3.5.1 Compilation of State-wise GFCF Estimates for Central Govt. Sector

3.5.1.1 Central Government Gross Fixed Capital Formation (GFCF) is allocated among states as per DDO location-wise capital expenditure incurred.

3.5.2 Compilation of State-wise GFCF Estimates for Communication and Services Related to Broadcasting Sector (Public and Private)

3.5.2.1 State-wise GFCF for Communication and Services Related to Broadcasting is compiled by aggregating estimates state-wise from both Public and Private Communication Sectors.

Public communication

3.5.2.2 Public Communication comprises one Departmental Enterprise, i.e., the Department of Posts, and various Non-Departmental Enterprises (NDEs), such as BSNL, BBNL, Film Corporations, Prasar Bharati, Power Grid Teleservices Limited, MTNL, RailTel and other State NDEs. State-wise GFCF of the Department of Posts is estimated using circle-wise data on capital expenditure obtained from the Department of Posts. In cases where a circle covers more than one State/UT, the capital expenditure is allocated among the States/UTs based on the number of post offices in each State/UT within the respective circle. For BSNL, MTNL and Power Grid Teleservices Limited, State-wise information on capital formation is obtained directly from the respective organisations, and the All-India GFCF is allocated among States/UTs accordingly.

3.5.2.3 For other State NDEs, the balance sheets of the respective enterprises are used for estimating GFCF, while in the case of Central NDEs, the All-India GFCF is allocated among States/UTs based on their respective shares in the increase in Gross Block, i.e., the difference between the Gross Block of the current year and the previous year. The requisite information is available in the Public Enterprises Survey published annually by the Department of Public Enterprises. For Prasar Bharati, the All-India GFCF is allocated among States/UTs in the ratio of State-wise total GFCF of BSNL, MTNL & Post.

Allocation of GFCG of Private Communication to the States

3.5.2.4 The All-India estimate of GFCF for the Private Sector communication is allocated to the States/UTs based on State/UT's share in the Gross Value Added (GVA) of Private Communication.

3.5.3 Compilation of State-wise GFCF Estimates for Financial Services Sector (Public and Private)

3.5.3.1 The GFCF estimates for this sector are prepared separately for other sub-sectors.

- (a) Public Sector Banks: Total GFCF of Public Banks is allocated among States/UTs using **State-wise data** on Construction and Machinery & Equipment (including Intellectual Property Product) collected from these banks through correspondence.
- (b) Private Sector Banks: Total GFCF of Private Banks is allocated among States/UTs using State-wise data on Construction, Machinery & Equipment and Intellectual Property Product (IPP) received directly from Private banks.
- (c) Financial Investment Companies (FIC): All India estimates of FIC, is allocated across states based on each state's share in the GVA of the Financial Services Sector.
- (d) Central Financial Corporations: For Central corporation All India estimates are allocated to the States on the basis of State-wise data of expenditure on construction and Machinery & Equipment (including Intellectual Property Product) made available by the respective institutions.
- (e) State Financial Corporation: Estimates of GFCF from State Financial Corporation are being compiled from annual reports of these corporations directly.
- (f) Central and State Financial Companies: Total GFCF of Central Companies is allocated using State-wise Value of expenditure on construction of buildings & acquisition of machinery/equipment (including IPP). Data received from State Finance Companies is added to obtain the consolidated State-wise estimates.
- (g) Insurance Corporation: For Public Sector Insurance Corporations, All India estimates allocated to States on the basis of State-wise figures of expenditure on construction and machinery & equipment (including IPP) collected from these Corporations.
- (h) Regional Rural Banks: All India estimates allocated to States on the basis of State-wise number of branches are taken directly from RBI website.

- (i) Co-operative Credit Societies: All India estimates are allocated to States on the basis of State-wise total working capital of State Cooperative Banks, District Cooperative Banks and Primary Agriculture Credit Society supplied by National Federation of State Cooperative Banks Ltd. (NAFSCOB) / NABARD.
- (j) Reserve Bank of India: All India estimates allocated to States on the basis of State-wise data of expenditure on construction and Machinery & Equipment (including IPP) made available by RBI.
- (k) Money Lender: GFCF of Money Lender is allocated using Ratio of State-wise estimated Gross Assets derive from ASUSE Survey.
- (l) Employees' Provident Fund Organisation (EPFO): The All India GFCF of EPFO is distributed in the ratio of State-wise number of branches available in State profile report of EPFO.
- (m) Other Financial Companies of Centre and State: For other financial companies, the estimates are based on State-wise data on construction and Machinery & Equipment expenditure provided by the respective institutions.

3.5.4 Compilation of State-wise GFCF Estimates for Railway Sector

3.5.4.1 The State-wise GFCF estimates for the Railway sector are compiled by aggregating the GFCF of Departmental Enterprises (DEs), Private Railways, and Non-Departmental Enterprises (NDEs).

GFCF of Departmental Enterprises

3.5.4.2 This sector covers the activities of the railways including railway workshops and factories and also construction including major repairs undertaken by the railways. The capital expenditure during the year is derived as revised outlay given in the publication of Railway Board “Works, Machinery and Rolling Stock Programme of Railways (Detailed Programme)”. The estimates of state-wise GFCF are prepared for (a) buildings, (b) constructions, including construction of new lines, doubling of lines, track renewals, cables route, electrification and (c) Machinery & Equipment including expenditure on computerization, signalling and telecommunication works and other electrical installations.

3.5.4.3 The expenditure on buildings, construction and machinery & equipment is distributed among various states on the basis of the location of projects mentioned in the source documents.

3.5.4.4 However, the expenditure on new lines, track renewals and other items of machinery is allocated to different states on the basis of section-wise data given in the source documents. If a section covers more than one state, the allocation to different states is done on the basis of new lines, track renewal and other items of machinery falling within the concerned states. This is done on the basis of railway map of India. The difference between the national level GFCF (excluding rolling stock) and the estimates prepared by the above method is allocated on the pro-rata basis.

GFCF of Private Railways

3.5.4.5 For estimation of company-wise GFCF, Balance Sheet variables (Produced Tangible, Produced Intangible, Capital Work in Progress, Intangible Assets under Development) of respected companies given in phase-3 of INDAS and C&I database are used for calculating company wise GFCF. GFCF is allocated to the state, based on state code embedded in CIN of a particular company. The same variables for the previous year are also used for calculating the difference from the current year's variables. Then the difference among all 4 variables is calculated between two years i.e. Current Year-Previous Year. Thereafter, the total of the difference is called GFCF. Total GFCF of Private Railways is distributed among the states based on their share GFCF estimates taken from MCA data bases as described above.

GFCF of Non-Departmental Enterprises

3.5.4.6 For other State NDEs, the balance sheets of the respective enterprises are used for estimating GFCF, while in the case of Central NDEs, the All-India GFCF is allocated among States/UTs based on their respective shares in the increase in Gross Block, i.e., the difference between the Gross Block of the current year and the previous year. The requisite information is available in the Public Enterprises Survey published annually by the Department of Public Enterprises.

Item-wise methodology of PFCE compilation

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01	Food and non-alcoholic beverages					
01.1	Food					
01.1.1	Cereals and cereal products				HCES, Population Projections	Using the proportions derived from State/UT wise consumption expenditure estimated using per capita expenditure from HCES and Population Projection of M/o Health and Family Welfare
01.1.1.1	Wheat and wheat products	HCES, Population Projections, CPI. For Commodity flow: details are given in Para 3.2.2.4 and 3.2.2.11	Constant price estimates are inflated using: Non PDS: Composite index of CPI of wheat/atta Other sources, maida, suji, rawa (as per 2012 basket)/	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
			Composite index of CPI of wheat, wheat atta Other wheat products, maida, suji, rawa (as per 2024 basket) PDS: Composite index of CPI of wheat PDS, wheat atta PDS			
01.1.1.2	Rice and rice products	Same as item 01.1.1.1	Constant price estimates are inflated using: Non PDS: Composite index of CPI of CPI of Rice Other sources, other rice products, chira/ chidwa, muri PDS: CPI of rice PDS	Direct		
01.1.1.3	Sorghum and sorghum products	Same as item 01.1.1.1	Constant price estimates are inflated using: CPI of jowar and its products	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.1.1.4	Pearl Millet and Pearl Millet products	Same as item 01.1.1.1	Constant price estimates are inflated using: CPI of bajra and its products	Direct		
01.1.1.5	Finger Millet and Finger Millet products	Same as item 01.1.1.1	Constant price estimates are inflated using: CPI of ragi and its products	Direct		
01.1.1.6	Other cereals and cereal products	Same as item 01.1.1.1	Constant price estimates are inflated using: Composite index of CPI of other cereals, maize and products, small millets and their products (as per 2012 basket)/ Composite index of CPI of other cereals & products, maize & its products, small millets & its products (as per 2024 basket)	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.1.1.7	Bread and bakery products	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of bread (bakery), biscuits; chocolates; etc. (as per 2012 basket)/Composite index of CPI of bread (bakery), Biscuits (as per 2024 basket)		
01.1.2	Meat				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.1.2.1	Chicken	Same as item 01.1.1.1	Constant price estimates are inflated using CPI of chicken	Direct		
01.1.2.2	Beef/ Buffalo meat	Same as item 01.1.1.1	Constant price estimates are inflated using CPI of beef/ buffalo meat	Direct		
01.1.2.3	Pork	Same as item 01.1.1.1	Constant price estimates are inflated using CPI of pork	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.1.2.4	Mutton/ Goat meat	Same as item 01.1.1.1	Constant price estimates are inflated using CPI of goat meat/ mutton	Direct		
01.1.2.5	Other meat	Same as item 01.1.1.1	Direct	Current price estimates are deflated using CPI of others: birds, crab, oyster, etc.		
01.1.3	Fish and seafood	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of others: CPI of fish, prawn	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.1.4	Milk, other dairy products and eggs					
01.1.4.1	Milk and other dairy products	- Data from the study “Production and Utilization pattern of Milk and Milk products in India” - Same as for production side estimates	Same as the method indicated in case of constant price estimates except that prices used are current prices. For obtaining current price, retail prices are moved using CPI as detailed below:	Using updated rates/ratios and retail prices based on the study done through NDRI in 2021-22 for compilation of estimates. Since the study provided prices in respect of 2021-22 for extrapolating the same for obtaining	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		• CPI	Milk: CPI of milk liquid Other dairy products: Composite index of CPI of other milk products, condensed/powder, curd (as per 2012 basket)/ Composite index of CPI of condensed/powder, curd, yogurt, other milk products (as per 2024 basket). In case of ex-farm price (milk), the current year prices as calculated for the compilation of production side estimates are used.	price for 2022-23, growth in CPI of respective items is used in case of retail price as detailed below: Milk: CPI of milk liquid Other dairy products: Composite index of CPI of other milk products, condensed/powder, curd (as per 2012 basket)/ Composite index of CPI of condensed/powder, curd, yogurt, other milk products etc. (as per 2024 basket). In case of ex-farm price (milk), the base year prices as		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				calculated for the compilation of production side estimates is used.		
01.1.4.2	Eggs	Same as item 01.1.1.1	Constant price estimates are inflated using CPI of eggs (no.)	Direct	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.1.5	Oils and fats				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.1.5.1	Groundnut oil	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Constant price estimates are inflated using CPI of Groundnut oil	Commodity Flow		
01.1.5.2	Coconut oil	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Constant price estimates are inflated using CPI of Coconut oil	Commodity Flow		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.1.5.3	Mustard oil	Same as item 01.1.1.1	Direct	By deflating current price estimates using CPI of mustard oil		
01.1.5.4	Butter and Ghee	- Data from the study “Production and Utilization pattern of Milk and Milk products in India” - Same as for production side estimates - CPI	Same as indicated against Item No. 01.1.4.1 except that the CPI considered is that of Ghee, butter.	Same as indicated against Item No. 01.1.4.1 except that the CPI considered is that of Ghee, butter.		
01.1.5.5	Other edible oils	Same as item 01.1.1.1	By inflating Constant Price estimates using Composite index of CPI of refined oil, Vanaspati & margarine (as per 2012 basket)/ Composite index of CPI of refined oil, edible oils, Vanaspati &	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
			margarine (as per 2024 basket)			
01.1.6	Fruits and nuts				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.1.6.1	Banana	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	By inflating Constant Price estimates using CPI of Banana	Commodity Flow		
01.1.6.2	Mango	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	By inflating Constant Price estimates using CPI of Mango	Commodity Flow		
01.1.6.3	Coconut	Same as item 01.1.1.1	By inflating Constant Price estimates using Composite index of CPI of Coconut, green coconut	Direct		
01.1.6.4	Citrus fruits	As per the details given in Para 3.2.2.4 and 3.2.2.11	By inflating Constant Price estimates using Composite index of	Commodity Flow		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		CPI	CPI of orange, mausami, lemon			
01.1.6.5	Grapes	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	By inflating Constant Price estimates using CPI of grapes	Commodity Flow		
01.1.6.6	Copra	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of coconut: copra	Direct		
01.1.6.7	Cashew kernels	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	By inflating Constant Price estimates using CPI of cashew nut	Commodity Flow		
01.1.6.8	Groundnut	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	By inflating Constant Price estimates using CPI of Groundnut	Commodity Flow		
01.1.6.9	Other fruits	As per the details given in Para 3.2.2.4 and 3.2.2.11	By inflating Constant Price estimates using Composite index of CPI of jackfruit, watermelon,	Commodity Flow		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		CPI	pineapple, guava, singara, papaya, kharbooza, pears/ nashpati, berries, litchi, apple, dates, other nuts, raisin; kishmish and monacca; other fresh fruits, other dry fruits etc.			
01.1.6.10	Fruit products	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	By deflating Current price estimates using composite index of CPI of all items considered under item “fruits and nuts”		
01.1.7	Vegetables , tubers, plantains, cooking bananas and pulses				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.1.7.1	Onions	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of onions	Direct		
01.1.7.2	Potatoes	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	By inflating Constant Price estimates using CPI of Potato	Commodity Flow		
01.1.7.3	Other vegetables and tubers	Same as item 01.1.1.1	By inflating Constant Price estimates using Composite index of CPI of radish, carrot, garlic, palak/other leafy vegetables, tomato, brinjal, cauliflower, cabbage, green chillies, lady's finger, parwal/ patal, kundru, gourd, pumpkin, Peas, beans, barbati, potato, cereal substitute: tapioca, other vegetables etc. (as per 2012 basket) / CPI of radish, carrot,	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
			garlic, palak/other leafy vegetables, tomato, brinjal, cauliflower, cabbage, green chillies, lady's finger, parwal/ patal, kundru, gourd, pumpkin, Peas, beans, barbati, potato, other vegetables, etc. (As per 2024 basket)			
01.1.7.4	Vegetable products	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	By Deflating Current price estimates using Composite index of CPI of all items considered under PFCE items Onions and other vegetables and tubers		
01.1.7.5	Green gram	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of moong	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.1.7.6	Black gram	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of urd	Direct		
01.1.7.7	Gram whole	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of gram: whole	Direct		
01.1.7.8	Pigeon peas	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of arhar, tur	Direct		
01.1.7.9	Masoor	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of masur	Direct		
01.1.7.10	Other pulses	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of other pulses	Direct		
01.1.7.11	Gram Products	Same as item 01.1.1.1	Direct	By deflating the current price estimates using CPI of gram products (as per 2012 basket)/ CPI of besan, gram products (as per 2024 basket)		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.1.8	Sugar, confectionery and desserts				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.1.8.1	Gur	Same as item 01.1.1.1	By inflating Constant Price estimates using CPI of jaggery (gur)	Direct		
01.1.8.2	Refined Sugar	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Constant price estimates are inflated using: Non PDS: CPI of sugar other sources PDS: CPI of sugar PDS	Commodity Flow		
01.1.8.3	Sugar confectionery	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of candy, misri, honey, sauce, mayonnaise, jam, jelly, prepared sweets etc.		
01.1.8.4	Ice cream	Data from the study	Same as indicated against Item No.	Same as indicated against Item No.		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		“Production and Utilisation pattern of Milk and Milk products in India” • Same as for production side estimates • CPI	01.1.4.1 except that the CPI considered is that of Ice cream.	01.1.4.1 except that the CPI considered is that of Ice cream.		
01.1.9	Ready-made food and other food products				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.1.9.1	Salt	• HCES and Population projections • CPI	Direct-ISG	Current price estimates are deflated using CPI of salt (as per 2012 basket) / Composite index of CPI of salt other sources and salt- PDS (as per 2024 basket)		
01.1.9.2	Oilseeds	• As per the details given	By inflating the constant price	Commodity Flow		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		in Para 3.2.2.4 and 3.2.2.11 • CPI	estimates using CPI of oil seeds			
01.1.9.3	Spices	• HCES and Population projections • As per the details given in Para 3.2.2.4 and 3.2.2.11 • CPI	Direct-ISG	Current price estimates are deflated using CPI of spices		
01.1.9.4	Sugar cane for chewing	• Production side data • CPI	As compiled in production side	Current price estimates are deflated using CPI of sugar other sources		
01.1.9.5	Other food	Same as item 01.1.1.1	Direct	By deflating current price estimates using Composite index of CPI of baby food, pickles, papad, bhujia, namkeen, mixture, chanachur, other packaged processed food, chips (as per		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				2012 basket)/ Composite index of CPI of baby food, pickles, papad, bhujia, namkeen, mixture, chanachur, other packaged processed food, chips, nachos, puffs, wafers, etc. (as per 2024 basket)		
01.2	Non-alcoholic beverages					
01.2.1	Coffee, tea and cocoa drinks				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
01.2.1.1	Coffee	Same as item 01.1.1.1	By inflating the constant price estimates using CPI of coffee: powder	Direct		
01.2.1.2	Tea	Same as item 01.1.1.1	By inflating the constant price estimates using CPI of tea: leaf	Direct		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
01.2.1.3	Cocoa	Same as item 01.1.1.1	Direct	By deflating current price estimates using CPI of beverages: cocoa; chocolate.		
01.2.2	Water, Soft drinks, Fruit and vegetable juices, Other non-alcoholic beverages	Same as item 01.1.1.1	Direct	By deflating current price estimates using Composite index of CPI of mineral water, cold beverages: bottled/canned, fruit juice and shake (as per 2012 basket)/ Composite index of CPI of packaged water, other cold beverages, fruit juice (as per 2024 basket)	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
02	Alcoholic beverages, tobacco and narcotics					
02.1	Alcoholic beverages	Same as item 01.1.1.1	Direct	By deflating current price estimates using Composite index of CPI of country liquor	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				foreign/ refined liquor or wine, toddy, beer		
02.2	Tobacco				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
02.2.1	Cigarettes	Same as item 01.1.1.1	Direct	By deflating current price estimates using CPI of cigarettes		
02.2.2	Tobacco chewing	Same as item 01.1.1.1	Direct	By deflating current price estimates using CPI of leaf tobacco		
02.2.3	Bidi	Same as item 01.1.1.1	Direct	By deflating current price estimates using CPI of bidi		
02.2.4	Other tobacco products	Same as item 01.1.1.1	Direct	By deflating current price estimates using Composite index of CPI of other tobacco products, hookah tobacco, cheroot		
02.3	Narcotics				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
02.3.1	Pan & Its Ingredients	- HCES and Population Projections - CPI	Direct-ISG	Current price estimates are deflated using Composite index of CPI of paan: leaf, paan: finished, ingredients for paan		
02.3.2	Opium	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	By inflating the constant price estimates using CPI of other intoxicants	Commodity Flow		
03	Clothing and footwear					
03.1	Clothing					
03.1.1	Clothing materials	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of Clothing	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
03.1.2	Garments, Other articles of clothing and	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of Clothing		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
	clothing accessories					
03.1.3	Cleaning, repair, tailoring and hire of clothing					
03.1.3.1	Cleaning, repair and hire of clothing	• Same as for production side • ASUSE • CPI	100% of GVO of NIC 95292 and 96010 is considered as PFCE. GVO of NIC 95292 may be derived as certain % of GVO of Repair of computers and personal and household good and GVO of NIC 96010 is derived as certain % of GVO of Personal services including-washing, hair dressing, custom tailoring and funeral related services. These shares are derived annually using ASUSE.	Current price estimates are deflated using CPI of washerman; laundry; ironing (as per 2012 basket)/ CPI of washerman, laundry, ironing, dry cleaning, dyeing (as per 2024 basket)	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT allocation of National estimates

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
03.1.3.2	Tailoring	- Same as for production side - ASUSE - CPI	100% of GVO of NIC 14105 is considered as PFCE. This GVO is derived as certain % of GVO of Personal services including-washing, hair dressing, custom tailoring and funeral related services. This share is derived annually using ASUSE	Current price estimates are deflated using CPI of tailor	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT allocation of National estimates
03.2	Footwear	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of Footwear	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
04	Housing, water, electricity, gas and other fuels					
04.1	Gross rentals, equipment and material for housing					
04.1.1	Actual and imputed rental payments	Same as for production side	PFCE is computed as sum of GVO of Ownership of Dwelling and Housing	PFCE is computed as sum of GVO of Ownership of Dwelling at constant prices and Housing	Production side estimates	National level estimates are allocated to States/ UTs using proportions derived from State/ UT wise

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
	made for housing		services provided by the Govt.	services provided by the Govt. at constant prices.		production side estimates.
04.1.2	Services for the maintenance, repair and security of the dwelling	• Same as for production side • HCES • Population Projections • CPI	PFCE is computed as Sum of Cost of Repair & Maintenance of Dwelling (compiled as part of production side estimates) and PFCE of Security services. For the base year, PFCE of Security services is considered as 50% of the annual consumption expenditure in respect of item: Security & Driver derived from HCES-2022-23 and Population	PFCE is computed as Sum of Cost of Repair & Maintenance of Dwelling at constant prices (compiled as part of production side estimates) and PFCE of Security services at constant prices. PFCE of Security services at constant prices is derived by deflating the current price estimates using CPI of watchman charges [other cons taxes] (as per 2012 basket)/ CPI of watchmen/security guard (as per 2024 basket)	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
			Projection of M/oHFW. Growth in respect of Output of NIC 801 from ASUSE is used for extrapolation in respect of security services.			
04.1.3	Security equipment and materials for dwelling maintenance and repair	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of plugs, switches & other electrical fittings		
04.2	Water supply and miscellaneous services relating to the dwelling				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
04.2.1	Water supply	• HCES and Population projections • CPI	Direct-ISG	Current price estimates are deflated using CPI of water charges		
04.2.2	Refuse collection, Sewage collection, Other services related to the dwelling	Same as for production side	50% of Output of Remediation and Other Utility service	Current price estimates are deflated using IPD of GVO of Remediation & other utility services.		
04.3	Electricity, gas and other fuels					
04.3.1	Electricity	• HCES • CEA • CPI	Same as the method used for constant price estimates where prices are moved forward using CPI- electricity	For electricity, for state-wise quantity, CEA data on electricity sold (Domestic) is used and state-wise prices as derived from HCES 2022-23 are used.	HCES CEA	Using Central Electricity Authority (CEA)'s data on State/ UT-wise domestic consumption of electricity and State/ UT-wise price derived from HCES.
04.3.2	Gas					

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
04.3.2.1	LPG	- Indian Petroleum & Natural Gas Statistics - HCES - CPI	Same as method used for constant price estimates where base year retail prices are moved forward using CPI -LPG excl. conveyance (as per 2012 basket)/ LPG cylinder and piped natural gas (as per 2024 basket).	Domestic consumption from “Indian Petroleum & Natural Gas Statistics” and retail price as obtained from HCES 2022-23 are used.	M/o Petroleum and Natural Gas	National level estimates to be allocated to States using proportions derived from M/o Petroleum & Natural Gas’s data on State/ UT-wise consumption (end use).
04.3.2.2	Other Gas	- Same as for production side - CPI	PFCE is considered as 100% GVO	Current price estimates are deflated using CPI of other fuel as per 2012 basket / Fuel (biogas and gobar gas) as per 2024 basket	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
04.3.3	Liquid fuels	- Indian Petroleum & Natural Gas Statistics - HCES - CPI	Same as the method for constant prices where base year PDS and retail prices are moved forward using CPI (Kerosene-PDS) and CPI (Kerosene-	Domestic consumption separately for PDS and Non PDS from Indian Petroleum & Natural Gas Statistics and PDS and retail	M/o Petroleum and Natural Gas	National level estimates to be allocated to States using proportions derived from M/o Petroleum & Natural Gas’s data on State/

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
			Other sources) respectively.	price as obtained from HCES is used.		UT-wise consumption (end use).
04.3.4	Solid fuels	- HCES and Population Projections - CPI	Direct-ISG	Current price estimates are deflated using Composite index of CPI of Coal, firewood and chips, charcoal, dung cake, other fuel (as per 2012 basket)/ Composite index of CPI of Coal, firewood and chips, charcoal, dung cake (as per 2024 basket)	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
05	Furnishings, household equipment and routine household maintenance					
05.1	Furniture and furnishing, carpets and other floor coverings					

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
05.1.1	Furniture and furnishings	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using Composite index of CPI of almirah, dressing table, chair, stool, bench, table, other furniture & fixtures (couch, sofa, etc.), bedstead, cloth for upholstery, curtains, tablecloth etc.	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
05.1.2	Carpets and other floor coverings	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of carpet, daree & other floor mattings		
05.1.3	Clock and watches	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity Flow	Current price estimates are deflated using CPI of clock, watch (As per 2012 basket)/ CPI of clock, watch, smartwatch, fitness		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				tracker (As per 2024 basket)		
05.1.4	Repair of computer, personal & HHs goods, furniture, furnishings etc.	- Same as for production side - ASUSE	100% of GVO of NIC 95-95292 is considered as PFCE. GVO of NIC 95-95292 is be derived as certain % of GVO of Repair of computers and personal and household good etc. This share is derived annually using ASUSE	Current price estimates are deflated using IPD of GVO of trade and repair services	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT allocation of National estimates
05.2	Household textiles	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of bed sheet, bed cover (no.), mosquito net (no.), bedding: others, rug, blanket (no.), pillow; quilt; mattress (no.) (as per 2012 basket)/	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				CPI of bed sheet, bed cover (no.), mosquito net (no.), bedding: others, rug, blanket (no.), pillow, cushion (no.), quilt; mattress (no.) (as per 2024 basket)		
05.3	Household appliances	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of inverter, sewing machine, washing machine, stove; gas burner, refrigerator, electric fan, water purifier, electric iron, heater, toaster, oven & other electric heating appliances, other cooking/ household appliances, other durables (as per 2012 basket)/ Composite	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				index of CPI of inverter, generators, stabilizers, sewing machine, washing machine, stove, gas burner, induction, refrigerator/ freezers, electric fan, water purifier, electric iron, heater, toaster, micro-oven, other cooking/ household appliance, other durables (as per 2024 basket)		
05.4	Glassware, tableware and household utensils	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of glassware, pressure cooker/ pressure pan, earthenware, stainless steel utensils, other metal utensils, other crockery and utensils (as per 2012 basket)/ Composite index of	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				CPI of glassware, pressure cooker/ pressure pan, earthenware, paperware, thermocol plates, etc., stainless steel utensils, other metal utensils (non-stick cookware, etc.), other crockery & utensils (as per 2024 basket)		
05.5	Tools and equipment for house and garden	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of electric bulb; tubelight, electric batteries, torch, lock (as per 2012 basket)/ CPI of other electric bulb, tubelight, decorative lights, electric batteries, other minor durable-	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				type goods (as per 2024 basket)		
05.6	Goods and services for routine household maintenance					
05.6.1	Non-durable household goods	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of candle (no.), coir, rope, etc. , washing soap/soda/powder, other washing requisites, incense (agarbatti), room freshener, mosquito repellent, insecticide, acid etc., other petty articles(as per 2012 basket)/ composite index of CPI of candle (no.), other petty articles, washing soap/ soda/ powder/ liquid detergent, other washing requisite, incense (agarbatti),	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				room freshener, mosquito repellent, insecticide, anti-rodent, etc.(as per 2024 basket)		
05.6.2	Domestic services and household services	- Same as for production side - CPI	100% GVO of Private households with employed persons	Current price estimates are deflated using Composite index of CPI of domestic helper/cook, sweeper	Production side estimates	National level estimates to be allocated to States/UTs using proportions derived from State/UT wise production side estimates.
06	Health					
06.1	Health Services	- Same as for production side estimates - Budget documents - M/o Commerce and Industry - CPI	PFCE is computed as GVO-GFCE-Exports + Imports.	Current price estimates are deflated using CPI of Health	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
06.2	Medicines and Health products	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity flow.	Current price estimates are deflated using CPI of Health	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
07	Transport					
07.1	Purchase of vehicles					
07.1.1	Motor cars	- E Vahan/ MoRTH - CPI	Using data from Vahan (Sale price)	Current price estimates are deflated using CPI of motor car, jeep	Vahan Portal/ MoRTH	Using State/ UT wise sale price data from Vahan Portal.
07.1.2	Motorcycles	- E Vahan/ MoRTH - CPI	Using data from Vahan (Sale price)	Current price estimates are deflated using CPI of motor cycle, scooter	Vahan Portal/ MoRTH	Using State/ UT wise sale price data from Vahan Portal.
07.1.3	Bicycles and animal drawn vehicles	- All India Cycle Manufacturers' Association - As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Using data from All India Cycle Manufacturers' Association / Commodity Flow	Current price estimates are deflated using CPI of bicycle	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
07.2	Operation of personal transport equipment				Vahan portal/ MoRTH	National level estimates to be allocated to States/UTs using proportions derived from State/ UT-wise data on number of personal Vehicles using Vahan data (considering 15 years as average life span).
07.2.1	Parts and accessories for personal transport equipment	- Data from study on “Public Road Transport Services and Repair & Maintenance of Household vehicles” - E Vahan/ MoRTH - CPI	Same method as adopted for constant price estimates except that cost considered are for current year. The cost from the study is moved using CPI of tyres & tubes for deriving current year’s cost.	Using data from study undertaken through JNU and E Vahan/ MoRTH. The cost from the study is moved using CPI of tyres & tubes for deriving base year cost.		
07.2.2	Fuels and lubricants for	Data from study on “Public Road	Same method as adopted for constant price estimates except	Using data from study undertaken through JNU and E Vahan/		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
	personal transport equipment	Transport Services and Repair & Maintenance of Household vehicles” • E Vahan/MoRTH • CPI	that cost considered are for current year. The cost from the study is moved using Composite index of CPI of petrol and diesel for deriving current year’s cost.	MoRTH. The cost from the study is moved using Composite index of CPI of petrol and diesel for deriving base year cost.		
07.2.3	Maintenance and repair of personal transport equipment	• Data from study on “Public Road Transport Services and Repair & Maintenance of Household vehicles” • E Vahan/MoRTH • CPI(IW)	Same method as adopted for constant price estimates except that cost considered are for current year. The cost from the study is moved using CPI(IW) for deriving current year’s cost.	Using data from study undertaken through JNU and E Vahan/MoRTH. The cost from the study is moved using CPI(IW) for deriving base year cost.		
07.2.4	Other services related to personal	• Data from study on “Public Road Transport Services and	Same method as adopted for constant price estimates except that cost considered are for current year.	Using data from study undertaken through JNU and E Vahan/MoRTH. The cost from the study is		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
	transport equipment	Repair & Maintenance of Household vehicles” • E Vahan/MoRTH • Population projections • CPI	The cost from the study is moved using Composite index of CPI-bus/tram fare, taxi, auto-rickshaw fare, school bus, van, etc. (as per 2012 basket)/ Composite index of CPI of bus fare for commuting to work: periodic, bus/tram fare: occasional, auto-rickshaw/e-rickshaw fare, bus fare for school, college: periodic, bus/tram fare for commuting to work: daily, bus /tram fare for school, college: daily, taxi fare (as per 2024 basket) for deriving current year’s cost.	moved using Composite index of CPI-bus/tram fare, taxi, auto-rickshaw fare, school bus, van, etc. (as per 2012 basket)/ Composite index of CPI of bus fare for commuting to work: periodic, bus/tram fare: occasional, auto-rickshaw/e-rickshaw fare, bus fare for school, college: periodic, bus/tram fare for commuting to work: daily, taxi fare (as per 2024 basket) for deriving base year cost.		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
07.3	Passenger transport services					
07.3.1	Passenger transport by railway	M/o Railways/ Budget documents	PFCE is computed as 90% of passenger earnings.	Base year estimates are extrapolated using growth in Passenger Kilometer.	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
07.3.2	Passenger transport by road	- Data from study on “Public Road Transport Services and Repair & Maintenance of Household vehicles” - E Vahan/ MoRTH - CPI	Mechanised part: Same method as adopted for constant price estimates except that cost considered are for current year. The cost from the study is moved using Composite index of CPI of bus/tram fare, taxi, auto-rickshaw fare, school bus, van, etc. (as per 2012 basket)/ Composite index of CPI of bus fare for commuting to work: periodic, bus/tram fare: occasional, auto-rickshaw/e-rickshaw	Mechanised part: Using data from study undertaken through JNU and E Vahan/ MoRTH. The cost from the study is moved using Composite index of CPI of bus/tram fare, taxi, auto-rickshaw fare, school bus, van, etc. (as per 2012 basket)/ Composite index of CPI of bus fare for commuting to work.: periodic, bus/tram fare: occasional, auto-rickshaw/ e-rickshaw	Vahan portal/ MoRTH	National level estimates to be allocated to States/ UTs using proportions derived from State/ UT-wise data on number of respective Vehicles using Vahan data (considering 15 years as average life span).

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
			fare, bus fare for school, college: periodic, bus/tram fare for commuting to work: daily, bus /tram fare for school, college: daily, taxi fare (as per 2024 basket) for deriving current year's cost. Non- mechanized part: By inflating constant price estimates using CPI of rickshaw fare	fare, bus fare for school, college: periodic, bus/tram fare for commuting to work: daily, bus /tram fare for school, college: daily, taxi fare (as per 2024 basket) for deriving base year cost. Non- mechanized part: PFCE is derived using share of Non-mechanized to mechanized in total annual expenditure derived from HCES 2022-23		
07.3.3	Passenger transport by air	- DGCA - M/o Commerce and Industry	Using DGCA and BPM6 data. 100% passenger revenue adjusted for exports, imports, Travel expenses of	Current price estimates are deflated using CPI of Air fare	Airport Authority of India's (AAI)	National level estimates to be allocated to States/UTs using Proportions derived from Airport

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		- Same as for production side - RBI - CPI	Corporates and Govt expenditure (Object Head: FTE and DTE) is considered as PFCE			Authority of India's (AAI) data on Airport-wise number of passengers
07.3.4	Passenger transport by sea and inland waterway	- Same as for production side - CPI	Considered as 100% GVO of Household sector	Current price estimates are deflated using CPI of steamer, boat fare	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT allocation of National estimates
07.3.5	Other passenger transport services	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity flow of Services Incidental to Transport using SUT	Current price estimates are deflated using IPD of GVO of Services Incidental to Transport	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
07.4	Transport services for goods	Data from study on "Public Road Transport Services and Repair & Maintenance of Household vehicles"	Same method as adopted for constant price estimates except that cost considered are for current year. The cost from the study is moved using Composite index of CPIs indicated against	Using data from study undertaken through JNU and E Vahan/ MoRTH. The cost from the study is moved using Composite index of CPIs indicated against item 7.3.2 (Passenger	Vahan portal/ MoRTH	National level estimates to be allocated to States/UTs using proportions derived from State/ UT-wise data on number of respective Vehicles using Vahan data

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		- E Vahan/MoRTH - CPI	item 7.3.2 (Passenger transport by road) for deriving current year's cost.	transport by road) for deriving base year cost.		(considering 15 years as average life span).
08	Information and communication					
08.1	Information and communication equipment				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
08.1.1	Fixed telephone equipment, Mobile telephone equipment	Same as item 01.1.1.1	Direct	Current price estimates are deflated using CPI of mobile handset		
08.1.2	Information processing equipment and software excluding games	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite Index of CPI of PC/Laptop/other peripherals incl. software (As per 2012 basket)/		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				CPI of PC/ Laptop/ tablet, other peripherals incl. software (As per 2024 basket)		
08.1.3	Equipment for the reception, recording and reproduction of sound and vision	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite Index of CPI of television, radio, tape recorder, 2-in-1(As per 2012 basket)/ CPI of television, other goods for recreation (As per 2024 basket)		
08.2	Information and communication services					
08.2.1	Communication Services	- As per the details given in Para 3.2.2.4 and 3.2.2.11 - CPI	Commodity flow	Current price estimates are deflated using Composite Index of CPI of telephone charges: landline, telephone charges: mobile, internet expenses (As per 2012	TRAI HCES	National level estimates to be allocated to State/ UTs proportions derived using Telecom Regulatory Authority of India (TRAI)'s data on State/ UT-wise Telephone

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				basket)/Composite index of CPI of telephone charges: landline, telephone charges: mobile, internet expenses (As per 2024 basket)		Subscription and State/UT wise per capita consumption expenditure from HCES.
08.2.2	Television and radio licenses and fees, Subscriptions to audiovisual streaming services and rental of audiovisual content	- HCES and Population projections - CPI	Direct-ISG	Current price estimates are deflated using CPI of monthly charges for cable TV connection (As per 2012 basket)/ CPI of cable TV/DTH/set top box (As per 2024 basket)	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
09	Recreation, sport and culture					
09.1	Recreational durables	As per the details given	Commodity flow	Current price estimates are deflated using Composite	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		in Para 3.2.2.4 and 3.2.2.11 • CPI		index of CPI of camera & photographic equipment, goods for recreation and hobbies (As per 2012 basket)/Composite index of CPI of camera & photographic equipment, other goods for recreation (As per 2024 basket)		
09.2	Other recreational goods	• As per the details given in Para 3.2.2.4 and 3.2.2.11 • CPI	Commodity Flow	Current price estimates are deflated using Composite index of CPI of sports goods, toys etc., goods for recreation and hobbies (as per 2012 basket)/ Composite index of CPI of sports goods, other goods for	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				recreation (As per 2024 basket)		
09.3	Garden products and pets				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
09.3.1	Garden products, plants and flowers	• HCES and Population Projections • CPI	Direct-ISG	Current price estimates are deflated using CPI of flower (fresh)		
09.3.2	Pets and pet products	Same as item 01.1.1.1	Direct	Current price estimates are deflated using CPI of goods for recreation and hobbies (As per 2012 basket)/ CPI of pet animals (As per 2024 basket)		
09.4	Recreational and Cultural services	• HCES and Population projections • CPI	Direct-ISG	Current price estimates are deflated using Composite index of CPI of Cinema: new release (normal day), club fees, other	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				entertainment (As per 2012 basket)/ Composite index of CPI of Cinema, theatre, club, gym, swimming fees & other subscription, other entertainment (mela, fair, picnic, etc.) (as per 2024 basket)		
09.5	Cultural goods				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
09.5.1	Musical instruments	Same as item 01.1.1.1	Direct	Current price estimates are deflated using CPI of goods for recreation and hobbies (As per 2012 basket)/ CPI of musical instruments (As per 2024 basket)		
09.5.2	Audiovisual media	Same as item 01.1.1.1	Direct	Current price estimates are deflated		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				using CPI of CD, DVD, audio/video cassette, etc. (As per 2012 basket)/ CPI of pen-drive, external hard disk (As per 2024 basket)		
09.6	Newspapers, books and stationery	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of books, journals, newspapers, periodicals, stationery	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
10	Education	• Same as for production side • M/o Commerce and Industry • CPI	Output deducting GFCE, adjusted for exports and imports is considered as PFCE	Current price estimates are deflated using CPI of Education	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
11	Restaurants and accommodation services	• HCES • Population Projections • Same as for production side • CPI	Benchmark estimates are derived from HCES 2022-23 and population projections. For extrapolating the benchmark estimates growth in GVO is used.	Current price estimates are deflated using Composite Index of CPI of tea: cups (no.), coffee: cups (no.), cooked meals, cooked snacks, hotel lodging charges	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
12	Insurance and financial services					
12.1	Insurance					
12.1.1	Life insurance	Same as for production side	100% of Life Insurance Output	Current price estimates are deflated using IPD of GVO of Life Insurance	IRDAI	National level estimate to be allocated to State/ UTs using proportions derived from State/ UT- wise data of IRDAI on Individual new business (Life) underwritten-Premium
12.1.2	Non-life insurance	As per the details given in Para	Commodity flow	Current price estimates are deflated	IRDAI Vahan portal/ MoRTH	National level estimate to be allocated to State/ UTs

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		3.2.2.4 and 3.2.2.11		using IPD of GVO of Non-Life Insurance		using proportions derived from IRDAI data on premium rates for Motor insurance (MTPI), State/ UT-wise data on Gross Direct Premium – Motor Own Damage, Motor Third Party and Miscellaneous and e-VAHAN data
12.2	Financial services					
12.2.1	Financial intermediation services indirectly measured	• Same as for production side • RBI	PFCE is considered as FISIM allocated to Household (personal) sector	Current price estimates are deflated using IPD of GVO of S-122-Deposit taking Corporations except Central Bank; S-125-Other Financial Intermediaries except insurance corporations and pension funds; and S-127: Moneylenders and remaining unorganised segment	RBI AIDIS	National level estimate to be allocated to State/ UTs using proportions derived from State/ UT wise data of RBI on Deposits of SCBs and RRBs and Personal Loans by SCBs. To explore incorporation of State/ UT-wise data on credits from Money Lenders from AIDIS

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				except insurance agents		for further refinement of the allocation.
12.2.2	Explicit charges by deposit-taking corporations (S), Other financial services (S)	- Same as for production side - RBI	PFCE is considered as certain % of Actual Receipts (Charges). This % is derived annually using RBI data i.e. Share of Household Loan + Household Deposit in total Loan + Deposit in respect of SCBs	Current price estimates are deflated using Banking Services Price Index (BkSPI) (Direct)	Same sources as indicated for Item 12.2.1	Same method as indicated for Item 12.2.1
13	Personal care, social protection and miscellaneous goods and services					
13.1	Personal care				Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
13.1.1	Electric, other appliances, articles and products for personal care	Same as item 01.1.1.1	Direct	Current price estimates are deflated using Composite index of CPI of toilet soap, toothpaste, toothbrush, comb, etc., powder, snow, cream, lotion and		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				perfume, hair oil, shampoo, hair cream, shaving cream, aftershave lotion, sanitary napkins, suitcase, trunk, box, handbag and other travel goods (As per 2012 basket)/ Composite index of CPI of toilet soap, body-wash, hand-wash, shower gel and face wash, toothpaste, mouthwash, toothbrush, etc., powder, cream, body lotion and moisturizers, hair oil, hair colour, shampoo, conditioner, hair serum/gel and hair cream shaving cream, shaving foam,		

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				aftershave lotion, and aftershave balm, sanitary napkins, suitcase, trolley bag, duffle bag, trunk etc. (As per 2024 basket)		
13.1.2	Hairdressing salons and personal grooming establishments	• HCES and Population projections • CPI	Direct-ISG	Current price estimates are deflated using CPI of barber, beautician, spas, etc.		
13.2	Other personal effects	• As per the details given in Para 3.2.2.4 and 3.2.2.11 • CPI	Commodity flow	Current price estimates are deflated using Composite index of CPI of umbrella, raincoat, any other personal goods (As per 2012 basket)/ Composite index of CPI of umbrella, raincoat, helmet, other	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
				personal goods (As per 2024 basket)		
13.3	Other services					
13.3.1	Religious services	- Same as for production side - ASUSE - CPI	100% of GVO of NIC 9491 is considered as PFCE. GVO of NIC 9491 is derived as certain % of GVO of Activities of Membership organisations. This share is derived annually using ASUSE.	Current price estimates are deflated using IPD of GVO/ CPI Priest (As per 2024 basket)	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT allocation of National estimates
13.3.2	Legal services	- Same as for production side - CPI	Considered as 50% of Output of legal service.	Current price estimates are deflated using IPD of GVO of Legal Services/ CPI Legal (As per 2024 basket)	Same sources as indicated for Item 01.1.1	Same method as indicated for Item 01.1.1
13.3.3	Funeral services	- Same as for production side - ASUSE	100% of GVO of NIC 96030 is considered as PFCE. This GVO is derived as certain % of	Current price estimates are deflated using IPD of GVO of Personal Services/	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT

Item Codes	Items	National level estimation			State / UT-wise allocation / compilation	
		Data Source	Method of estimation		Data Source	Method
			At Current Prices	At constant (2022-23) prices		
		CPI	GVO of Personal services including-washing, hair dressing, custom tailoring and funeral related services. This share is derived annually using ASUSE.	CPI Priest (As per 2024 basket)		allocation of National estimates
13.3.4	Business services	Same as for production side	Considered as 100% GVO of Household sector	Current price estimates are deflated using IPD of GVO of Business Services	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT allocation of National estimates
13.3.5	Social protection	- Same as for production side - ASUSE - CPI	Considered as 100% of estimated Output of NIC 87 (Residential care activities) and 88 (Social work activities without accommodation).	Current price estimates are deflated using Composite index of CPI of Health & Education	ASUSE	To use State/ UT-wise proportion of GVO derived from ASUSE for the State/ UT allocation of National estimates.

Note: Though in general the CPI inflators / deflators are indicated in the table, for valuation of quantity retained for own consumption, ex-farm price of base year/ current year is used as the case may be wherever applicable. NIC referred to in the compilation methodology in respect of PFCE are NIC 2008. Also, in case of State/ UT allocation using HCES data and population projections the following may be noted:

- Allocation may be done at disseminating group level wherever feasible.
- If the same is not feasible and if there are more than one item within a group belonging to this category, then the National level PFCE of such items may be combined and then allocation may be done.
- Only in the remaining cases belonging to this category item-wise allocation may be done.

States/ UTs are advised not to disseminate PFCE estimates below the level at which National level estimates are published

ACRONYMS / ABBREVIATIONS	
AAI	Airport Authority of India
ACNAS	Advisory Committee on National Accounts Statistics
AIDIS	All India Debt and Investment Survey
ASI	Annual Survey of Industries
ASUSE	Annual Survey of Unincorporated Sector Enterprises
BkSPI	Banking Services Price Index
CEA	Central Electricity Authority
COFOG	Classification of the Functions of Government
COICOP	Classification of Individual Consumption by Purpose
COPNI	Classification of the Purposes of Non-Profit Institutions Serving Households
COPP	Classification of the Outlays of Producers According to Purpose
COR	Capital-Output Ratios
CPI	Consumer Price Index
DDO	Drawing and Disbursement officer
DGCA	Directorate General of Civil Aviation
DOBS	Dwellings, Other Buildings and Structures
DTE	Domestic Travel Expenses
FISIM	Financial Intermediation Services Indirectly Measured.
FTE	Foreign Travel Expenses
GCF	Gross Capital Formation
GDP	Gross Domestic Product
GFCE	Government Final Consumption Expenditure
GFCF	Gross Fixed Capital Formation

ACRONYMS / ABBREVIATIONS	
GSDP	Gross State Domestic Product
GVO	Gross Value of Output
HCES	Household Consumer Expenditure Survey
IBM	Indian Bureau of Mines
ICAR	Indian Council of Agricultural Research
ICT	Information and Communication Technology
IPD	Implicit Price Deflator
IPP	Intellectual Property Products
IRDAI	Insurance Regulatory and Development Authority of India
LPG	Liquefied Petroleum Gas
MCA	Ministry of Corporate Affairs
MoHFW	Ministry of Health and Family Welfare
MoRTH	Ministry of Road Transport and Highways
MTPI	Motor Third-Party Insurance
NABARD	National Bank for Agriculture and Rural Development
NDRI	National Dairy Research Institute
NIC	National Industrial Classification
PDS	Public Distribution System
PFCE	Private Final Consumption Expenditure
PFMS	Public Financial Management System
PLFS	Periodic Labour Force Survey
SCBs	Scheduled Commercial Banks
SNA	System of National Accounts

ACRONYMS / ABBREVIATIONS	
TRAI	Telecom Regulatory Authority of India
URB	Urban Residential Buildings



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