Methodological Improvements in compilation of GDP from Expenditure Approach

Ministry of Statistics and Programme Implementation (MoSPI) is in the process of revising the base year of national accounts. An Advisory Committee on National Account Statistics (ACNAS) has been constituted under the chairmanship of Prof. B.N. Goldar to advise MoSPI on the inclusion of new data sources for improving the estimates and the methodology for compilation and presentation of National Accounts Statistics. The Committee has representation from various Central Ministries and Departments, State Governments, Reserve Bank of India, Academia and Research Institutions.

2. Following the recommendation of ACNAS, FY 2022–23 has been identified as the base year for the upcoming series. Its estimates are scheduled for release on 27 February 2026 as per Advance Release Calendar (ARC). The Ministry has initiated a structured dissemination process through a set of discussion papers to familiarize users with the methodological changes and new data sources being used in the new series. While the first discussion paper, released on 21 November 2025, informs revisions related to the production/income approach, the present paper, the second in the series focuses on refinements in the compilation of aggregates of expenditure approach. The expenditure approach is compiled by estimating the components *viz.*, Private Final Consumption Expenditure, Gross Capital Formation, Government Finale Consumption Expenditure and Net Export (Export *minus* Import).

A. Expenditure approach to GDP

3. GDP is the market value of all final goods and services produced by the resident economic units within a specific period of time. The following identity establishes relationship between GDP and its component from expenditure side or final demand:

$$GDP = C + G + I + X - M$$

where Private final consumption (C), Government final consumption (G), investment (I) (also called Gross Capital Formation in National Accounts), exports (X) and import (M).

- 4. The compilation of National Accounts Statistics is based on recommendations contained in System of National Accounts (SNA). The major SNA recommendations are adhered to the Production, Consumption and Asset Boundaries. These boundaries set the coverage criteria and are interlinked to maintain consistency between production and expenditure estimates. In order to apply the SNA boundaries, various set of classification are used in collection and compilation of the estimates.
- 5. In the production boundary, all goods and services produced as outputs such that they can be sold on markets or at least be capable of being provided by one unit to another, with or without charge. The SNA includes within the production boundary all production actually destined for the market, whether for sale or barter. It also includes all goods and services provided free to individual households or collectively to the community by government units or Non-Profit institutions serving households (NPISHs). The production of goods for own use are included whereas production of services for own final consumption within households (except for the services produced by employing paid domestic staff and the own-account production of housing services by owner occupiers) are excluded from the production boundary. For consumption boundary, the range of goods and services that are included in final consumption expenditures is governed by the production boundary to make the estimates from different approaches conceptually consistent.
- 6. Assets as defined in the SNA are entities that must be owned by some unit, or units, and from which economic benefits are derived by their owner(s) by holding or using them over a period of time. In the expenditure component, Gross Capital Formation is recorded as net acquisition of assets in the

accounting period, it is typically limited to produced assets. With this background, the component-wise compilation methodology and data sources used therein is briefly discussed in the subsequent sections of the paper.

B. Private Final Consumption Expenditure (PFCE)

7. Commodity flow approach is followed in the 2011-12 series for estimating the PFCE of most of the items. It implies deriving marketed surplus of various items of consumption, considering (i) production; (ii) intermediate consumption in agriculture, manufacturing and other industries; (iii) net imports; (iv) change in stock; (v) consumption on government account and wastage, etc., wherever applicable. This approach mainly derives the consumption estimates which are delinked from the household consumption survey data. Nonetheless, the information on consumption out of own production was used from the consumption survey data and a few items were benchmarked from it in the base year 2011-12. Moreover, the purchaser price as available in consumption survey was also used in the current series. The private final consumption expenditure (PFCE) in National Accounts Statistics (NAS), consists of final consumption expenditure by households as well as final consumption expenditure of NPISHs. This is primarily due to non-availability of independent and reliable data sources for NPISHs. In production approach, the estimates of NPISHs are clubbed with Household sector.

I. Adoption of COICOP 2018 and reclassification of items in the revised series

- 8. As per SNA, the estimates of PFCE should be classified and compiled as per Classification of Individual Consumption according to Purpose (COICOP). The latest available classification is COICOP 2018. COICOP is an internationally recognized standard developed by the United Nations Statistics Division to categorize household consumption expenditures based on their functional purpose. The adoption of COICOP enhances comparability as well as analytical usefulness. The 2011-12 series is based on COICOP 1999, which was the latest at the time of last base revision. The current revision incorporates the changes due to adoption of COICOP 2018, and the key changes includes:
 - a. 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."
 - b. 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)
 - c. 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).
 - d. 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.
 - e. 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.
 - f. Former Division 11 (Restaurants and Hotels) got renamed to "Restaurants and accommodation services" to better reflect the content of the Division.

g. 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).

II. Data Sources used in PFCE Compilation

- 9. 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, the approach is to find an alternative to the commodity flow to derive an independent estimate of the PFCE items to the extent of reliable and robust data availability. The present base revision exercise has analysed the survey data in greater detail to derive estimates from it for base year. Therefore, several other data sets have also been used to derive the PFCE estimates independently of the commodity flow. Nonetheless, a number of items are still proposed to be estimated using commodity flow due to inconsistent estimates available from consumption survey. Some of the data sources used in compilation of PFCE are as follows (dataset/source):
 - 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. E-Vahan Data
 - vii. Central Electricity Authority
 - viii. M/o Petroleum & Natural Gas
 - ix. M/o Food & Public Distribution
 - x. Exim Data Bank, M/o Commerce
 - xi. Directorate General of Civil Aviation
 - xii. M/o Railways
 - xiii. Population projection estimates of MoH&FW
- 10. 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 proposed to be 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 for Seed input
 - ii. Post-harvest losses of Agriculture produce in India 2022 of M/o Food Processing Industries undertaken through NABCONS
 - iii. Utilisation pattern of Milk and Milk products conducted by 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

III. Item-wise estimation of PFCE

11. Using the above-mentioned data sets, the compilation of PFCE items is proposed to follow multi-pronged approach. The approaches are based on utilizing the strength of different data sets to make PFCE estimates more accurate and reliable. The approaches can be broadly categorized in following three categories:

- i. Enhanced use of HCES Data
- ii. Direct estimates using production and other datasets
- iii. Commodity flow

IV. Enhanced Use of HCES 2022-23 and 2023-24

- 12. In addition to using HCES data to derive consumption out of own produced goods, the revised series proposes to derive benchmark estimates for sixty-one items from it. The identification of these items is based on several considerations. First criteria, the items are widely consumed across the different categories of household and are unlikely to significantly differ over a period of time. 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. For subsequent years, the estimates would be moved using the growth derived from the commodity flow of the respective items. Thereby, the estimates would have the robustness of benchmark as well as 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 products like cereals, pulses, meats, tobacco etc.
- 13. Secondly, for some of the items HCES provides consistent per capita estimates with production data but are unlikely to remain unchanged over the years due to expanding consumption in the population. For these items, the benchmark estimates of the base year are proposed to be moved using the growth in per capita consumption from HCES 2022-23 to 2023-24 and projected population of the respective years. The approach assumes that over a short period of time, the growth pattern is likely to hold true. The next HCES, planned every three years will update the benchmark as well as inter-survey growth. The items in this category are mainly information services, recreational & cultural services, some items of personal services, water supply, spices, etc.

V. Direct estimates using production and other datasets

- 14. Due to availability of additional administrative data, study results and annual survey data, estimates of thirty-four items will be compiled directly using combination of data sets. For some of these items, the administrative data provides direct estimates of private final consumption which includes rail & air transport services, fuels (LPG, Kerosene), Purchase of personal vehicles etc. Some items are proposed to be estimated using administrative data with study results. Under this category, combination of E-Vahan data with study results on "Public Road Transport Services and Repair & Maintenance of Household vehicles" will be used to generate estimates for road transport services; operation of personal vehicles. Similarly, combination of Milk production data with study on "Utilisation pattern of Milk and Milk products" will be used to generate estimates for items covered under different categories of COICOP such as Milk & other dairy products, Oils & fats and Sugar confectionary & desserts.
- 15. 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 the ASI and ASUSE data, the component wise share is being proposed to get the output of components of production side and thereby getting the estimates of consumption. The items in this category are mainly items of personal services (funeral, religious etc.); educational services (excluding GFCE); domestic & household services; housing services; repair & maintenance of dwellings; cleaning, repair & hire of clothing; tailoring; part of financial & insurance services etc.

VI. Commodity flow

16. Due to unavailability of robust benchmark estimates or relevant datasets, thirty-four items are proposed to be 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 revised series proposes to apply dynamic rates and ratios in commodity flow. The availability of ASUSE in addition to ASI is instrumental as a number of goods & services are either produced or consumed by units operating in unorganized sector. The items of PFCE are mapped to survey products in order to derive share of output and intermediate consumption from the relevant activity to ensure that the products predominantly used by industry as intermediate or capital formation are not covered in PFCE. Most of the manufacturing items used by household are proposed under this category like, garments; footwear; furniture & furnishings; some of the household durable items; drugs & medicines; sugar & confectionary etc. Moreover, some items of agriculture products are also covered in this approach like, some of fruits & nuts, fish and fish products etc. Some services covered under this approach are health services, part of financial & insurance services; communication services etc.

VII. Use of price index as deflator/inflator

- 17. 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. Forty-three items are compiled in volume terms therefore price index will be used to derive current price index. These items are from the food categories.
- 18. In the 2011-12 series, PFCE items are derived by deflating/inflating estimates by relevant CPI at Group/ Sub Group level or by using Implicit Price Deflator (IPD) of GVO. In some cases, volume extrapolation is used resulting in independently derived current and constant price estimates. In the revised series, CPIs at disaggregated item level, to the extent feasible, is proposed. Also, for some items IPD of GVO will be considered due to absence of relevant CPI and direct mapping of the production with consumption item. Volume extrapolation will be used in one item of railway transport using growth of passenger kilometre. The item-wise compilation methodology explained above and use of price index is provided in the annexure.

C. Government Final Consumption Expenditure (GFCE)

- 19. Final consumption expenditure of government is defined as the value of output of general government, less the value of output for own account capital formation, less the value of sales of goods and services, plus the value of goods and services purchased from market producers for delivery to households free or at economically insignificant prices.
- 20. Major methodological improvements undertaken in the revised series that directly affect GFCE estimates such as adjustments in pension payments, imputation of accommodation provided by govt in lieu of HRA etc. have already been described in the first discussion paper.
- 21. Besides, the issue of re-classification of institutional units in various institutional Sectors has also been examined depending on their nature as provider of market or non-market goods and services. Accordingly, FCI is now considered as a part of Government sector instead of corporate sector and Government financing to FCI will be treated as a social transfer in kind (part of GFCE and adjusted PFCE) rather than a product subsidy.

Constant price estimates of GFCE

- 22. Estimates of government final consumption expenditure at constant prices are prepared separately for each of the components, namely, compensation of employees, net purchase of commodities and services and consumption of fixed capital (CFC). In the present series, constant price estimates of compensation of employees are prepared by deflating the estimates of compensation of employees at current prices by CPI (General). Estimates of net purchase of commodities and services at constant prices are obtained by deflating current price estimates by the composite weighted index, where weights are the expenditure of government on different items.
- 23. In the revised series, constant price estimates of compensation of employees will be prepared by deflating the estimates of compensation of employees at current prices by CPI-IW. Estimates of net purchase of commodities and services at constant prices will be obtained by deflating current price estimates by the composite weighted index with weights updated for FY 2022-23. For computing the estimate of constant price values for transfer in kind (in case of FCI), the base year estimates will be moved based on the growth in food grain offtake under the National Food Security Act (NFSA).

D. Gross Capital Formation (GCF)

- 24. Gross capital formation reflects the acquisitions less disposal of different kinds of produced assets in the economy. There are three components to gross capital formation, which are discussed in the following units:
 - i) Gross fixed capital formation (GFCF)
 - ii) Change in Stock (CIS)
 - iii) Valuables

I. Gross Fixed Capital Formation (GFCF)

- 25. Industry-wise and asset-wise estimation of GFCF is carried out separately for each institutional sector. The institutional sector-wise data sources used in compilation of GFCF are:
 - a) General Government & Departmental Enterprises based on analysis of Budget Documents
 - b) Non-Departmental Enterprises compiled using analysis of Annual Reports and M/o Corporate Affairs database
 - c) Private Corporations compiled using M/o Corporate Affairs database
 - d) Quasi Corporations compiled from Annual Survey of Unincorporated Sector Enterprises
 - e) Household Sector: Derived as residual (through commodity flow approach)
- 26. As per SNA, GFCF is recommended to be compiled for four category of assets, namely, Dwellings, Other Buildings & Structures, Machinery & Equipment, Cultivated Biological Resources, Intellectual Property Products. Methodology for deriving estimates at current prices for key components of GFCF are as follows:
- 27. **Dwellings, Other Buildings & Structures (DOBS):** The value of output of construction industry attributed to new construction including major alterations/repair form part of DOBS. The estimate of value of output of construction industry (production side) is carried out using commodity flow approach wherein total availability of material inputs for construction in the economy is estimated using commodity flow approach (domestic production adjusted for inter-industry use + product taxesnet exports + trade and transport margins). Thereafter, the material inputs available for use by the household sector are derived by using residual approach i.e. by subtracting the value of material inputs used in construction activity by organized sector, (*viz.* General Government, Departmental enterprises,

Non-departmental enterprises and Private Corporations). Further, the material Input to GVO and GVA to GVO ratio for the household sector is estimated based on the results of the Pilot Survey on Construction Sector carried out by National Sample Survey Office, MoSPI during 2025. These ratios will be applied on the estimated residual material inputs to arrive at GVO and GVA of household sector. The GVO attributed to new construction in unincorporated/household sector is essentially the Gross Fixed Capital Formation. Industry-wise and asset-wise allocation (dwellings, non-residential buildings and other structures) of GFCF of household sector is carried out using results of Annual Survey of Unincorporated Sector Enterprises (ASUSE) and All India Debt and Investment Survey.

28. **Machinery & Equipment(M&E):** The GFCF in this asset category is derived using commodity flow approach.

M&E asset = Total value of total domestically produced capital goods

- + Net imports of capital goods + product taxes
- + Trade & Transport Margins (from latest Supply Use Table)
- 29. In the total GFCF for M&E asset, the GFCF reported from institutional sectors (*viz.* General Government, Departmental enterprises, Non-departmental enterprises and Private Corporations) are deducted to derive GFCF in M&E asset from household sector as residual. Results of Annual Survey of Industries (ASI) and Annual Survey of Unincorporated Sector Enterprises will be used (along with appropriate adjustments for corresponding output estimated in the manufacturing sector by adopting enterprise approach) to arrive at total GFCF in M&E asset.
- 30. **Cultivated Biological Resources**: The GFCF in the asset-category, 'Tree, crop and plant resources' yielding repeat products is estimated using Increment in area under cultivation from the data sourced from State/UTs Directorate of Economics & Statistics and total capital expenditure on plantations sourced from the data maintained by NABARD. After deducting the GFCF reported in this asset by institutional sector, (*viz.* General Government, Departmental enterprises, Non-departmental enterprises and Private Corporations), the GFCF in this asset by household sector is derived as residual.
- 31. GFCF in the asset-category, 'Animal resources yielding repeat products' is estimated using Increment in livestock (for breeding, dairying and draught animals) used as capital asset has been estimated using results of latest Livestock Census. After deducting the GFCF reported in this asset by institutional sector, (viz. General Government, Departmental enterprises, Non-departmental enterprises and Private Corporations), the GFCF in this asset by household sector is derived as residual.
- 32. **Intellectual Property Products (IPP)**: Expenditure approach will be followed for compilation of GFCF in Intellectual Property Products (IPP) asset. Based on the capital expenditure reported by institutional sectors on these assets, the GFCF is estimated. Results of latest available Annual Survey of Industries(ASI), Annual Survey of Unincorporated Sector Enterprises(ASUSE), Household Consumption Expenditure Surveys(HCES) for deriving proportions of dual use goods (partially capital goods) treated as capital goods, All India Debt and Investment Survey, Survey on Construction, plantation and state specific unit cost studies by NABARD (for Tree, crop and plant resources yielding repeat products) and Supply and Use Tables will be used in estimation of GFCF.
- 33. **GFCF at constant prices will be compiled** separately for each institutional sector, industry and asset type. For DOBS assets, a composite index of WPI/PPI¹ (relevant item level index of material

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¹ Subject to on availability of PPI

inputs) and CPI (factor costs) will be used. Relevant industry specific elementary (item level) WPI/PPI for Machinery & Equipment items (basket of items specially curated for each industry based on machinery and equipment relevant for that industry) will be used for deflating GFCF in Machinery & Equipment assets. Cultivated Biological Resources and IPP assets will be deflated by CPI based indices.

II. Change in Stock

- 34. The estimates of Change in Stock (CIS) at Current Price and Constant Price are compiled separately for all the institutional sectors (General Government, Departmental Enterprises, Non-Departmental Enterprises, Private corporations and Household sector). The institutional sector-wise data sources in the new series are:
 - a) General Government & Departmental Enterprises compiled by analyzing the budget documents
 - b) Non-Departmental Enterprises compiled from detailed analysis of Annual Reports and M/o Corporate Affairs database
 - c) Private Corporations compiled using M/o Corporate Affairs database
 - d) Quasi Corporations and Household Sector compiled using results of Annual Survey of Unincorporated Sector Enterprises (ASUSE) for industries covered, results of Land and Livestock Holding of Households and Situation Assessment of Agricultural Households and Livestock Census (for agriculture and allied sectors), Indian Bureau of Mines data (for Mining & Quarrying sector) and Pilot Survey on Construction (for construction inventories).
- 35. Suitable adjustment for stock appreciation due to change in the value of stocks during each year attributable to price changes is carried out by re-valuing the stock available at the beginning of the year and at the end of the year using average annual prices. The constant price estimates of CIS are carried for each industry using relevant WPI based indices.

III. Valuables

- 36. Valuables are expenditures made on net acquisition of valuables on precious items like gold, gems, ornaments and precious stones etc. The total availability of domestically produced valuables is estimated using data from Indian Bureau of Mines and production data from relevant manufacturing industries. The ratios of inter-industry use (for gold, silver etc) have been updated using results of Annual Survey of Industries (ASI), Annual Survey on Unincorporated Sector Enterprises (ASUSE). Net Imports (Imports Exports) of the above items which are treated as valuables, will be added to the available items available through domestic production to determine total availability of valuables in the country. Constant price estimates of valuables will be compiled using relevant item-wise elementary CPI index as against WPI based indices used in current series.
- 37. **Finances for Gross Capital Formation**: This refers to the sources of funds used in an economy to finance investment in fixed assets, inventories, and valuables. It is a financing-side view of GCF, complementary to the expenditure-side used in the national accounts. The estimates, in this approach are compiled using institutional sector-wise gross savings and net capital inflow from Rest of the World. The difference in estimates of Gross Capital Formation due to use of two independent approaches and data sources are treated as errors and omissions as per the System of National Accounts (SNA) followed world over.

E. Exports and Imports of Goods and Services

- 38. Exports and Imports of goods and services are compiled from the data sourced from Directorate General of Commercial Intelligence & Statistics (DGCI&S), M/o Commerce & Industry and Reserve Bank of India.
- 39. Constant price estimates of Import and Export of Goods and Services: Unit Value Indices published by DGCI&S are used as deflator for constant price estimates in respect of imports and export of goods. Implicit Price Deflator (IPD) for non-financial services is being as deflator for constant price estimates of trade in services. In the new series, changes in deflators for constant price estimates of trade in services are planned. In respect of export of services (from India), the service specific IPD (GVO current / GVO Constant) will be used as a deflator. In respect of import of services, service specific imports will be deflated separately using PPI or IPD (after adjustments for exchange rate fluctuations) for trading partner countries. This change has been introduced to better reflect the price effects in constant price estimates of trade in services.

F. Consumption of Fixed Capital

- 40. Consumption of fixed capital (CFC) is the term for the value of the capital used up in the production in a period of time and is considered as cost of production. Net domestic product (NDP) or net value added (NVA) takes CFC into account. Other than arriving at net figures for key macroeconomic aggregates, CFC is also used for estimation of GVA of non-market producers (General Government and Departmental Enterprises institutional sectors) wherein NVA is estimated by analyzing the Budget Documents and GVA is derived as sum of NVA and CFC. The most recommended method used for the measuring of fixed capital is the Perpetual Inventory Method (PIM). The core of the method lies in accumulation of flows (GFCF) over time to arrive at the stock values. Based on the simple idea that a given point in time the Capital Stock consist of past investments corrected for retirement and efficiency loss.
- 41. This method requires use of reliable average useful life of each type of assets separately for each industry and institutional sector. The average life of assets is revisited periodically to account for technological changes and obsolescence, changes in operating environment, maintenance practices, regulations in force etc. After extensive discussions/consultations with stakeholders (Ministries/Departments, PSUs, Industry Associations, Research Institutions, Maintenance manuals, General Financial Rules, guidelines by Government Accounting Standards Advisory Board Office of the Comptroller & Auditor General of India, Indian Railway Finance Code, Annual Reports of the companies, guidelines by Regulators, etc.), the average life of assets have been revised for use in the new series. Asset-wise deflators for constant price estimates of CFC will be the same as those used in compilation of constant price estimates of GFCF. A comparative statement of average life of assets (in years) in the current series and the new series is indicated below:

Sr.No.	Asset	2011-12 (Current Series)	2022-23 (New Series)
1	Dwellings, Other Buildings and Structures		

1.1	Dwellings	70 to 80	60 to 75
1.2	Non-Residential Buildings	47 to 70	45 to 75
1.3	Other Structures	25 to 50	30 to 55
1.4	Land Improvements	20 to 30	20 to 30
1.5	Roads & bridges	60 to 100	60 to 75
2	Machinery and Equipment		
2.1	Transport Equipment	8 to 15	8 to 15
2.2	ICT equipment	5	5
2.3	Other Machinery & Equipment	11 to 30	11 to 25
3	Cultivated Biological Resources		
3.1	Cultivated Biological Resources Tree Crop and plant resources	20	20
		-	20
3.1	Tree Crop and plant resources	-	20
3.1	Tree Crop and plant resources Intellectual Property products (IPF	P)	
3.1 4 4.1	Tree Crop and plant resources Intellectual Property products (IPF Research & Development	10	10
3.1 4 4.1 4.2	Tree Crop and plant resources Intellectual Property products (IPF Research & Development Mineral Exploration	10 14	10 30

G. Supply and Use Table framework and Treatment of Discrepancy

- 42. Although the SNA ensures conceptual consistency between the different approach that in general does not emerge naturally from data compilations. This is because of the wide disparity of data sources that is used in compilation and the fact that any error in any source will lead to a difference between the GDP measures. Even with very sophisticated data collection methods, discrepancies between different estimates will persist due to differences in coverage, valuation and lags in recording. In addition, dependence to a greater or lesser extent on administrative sources of data may not be able to ensure the statistical standards required therein.
- 43. In this scenario, two approaches are open to a statistical office. The first is to be open about the problem and publish a statistical discrepancy. When this is done, it is usual to attach it to the variant of GDP the compiler feels is least accurate. Till now, MoSPI has followed this strategy and attaches discrepancy in Expenditure estimates to match with production estimates, as it is more reliable and accurate in view of existing data flows.

- 44. The alternative is to remove the discrepancy by examining the data in the light of the many accounting constraints in the SNA, making the best judgement possible about where the errors are likely to have arisen and modifying the data accordingly. To do this exercise, SNA recommends to use the supply and use framework. The supply and use tables in the form of matrices record how supplies of different kinds of goods and services originate from domestic industries and imports and how those supplies are allocated between various intermediate or final uses, including exports. These tables involve the compilation of a set of integrated production and generation of income accounts for industries by drawing upon detailed data from various sources. The supply and use tables provide an accounting framework within which the product flow method of compiling national accounts, whereby the total supplies and uses of individual types of goods and services have to be balanced with each other, can be systematically exploited.
- 45. In the revised series, it is proposed to integrate the supply and use table with compilation of annual accounts to ensure that discrepancies are limited in the early estimates and finally eliminated when full set of data becomes available at the time of final estimates. The methodological improvements brought out in production estimates, explained in the first discussion paper, as well as in expenditure estimates will be instrumental in making it operational. Moreover, the extensive use of ASUSE and ASI, in addition to detailed study of annual accounts of corporation and administrative data sets will be used to achieve the balancing in the supply and use framework.

H. GDP Advance Release Calendar (ARC) & Revision Schedule

- 46. Until 2017, India released only one Advance Estimates (AE) in February, alongside the Union Budget, followed by Provisional Estimates (PE) at the end of May and revised estimates based on progressively more complete data from administrative and survey sources. With the preponement of Budget Session, in 2017, the First Advance Estimates (FAE) were introduced in ARC for 7th January and the February estimate was renamed as Second Advance Estimates (SAE).
- 47. In consultation with major stakeholders from data suppliers and users, the third Revised Estimates (TRE) was discontinued and the Second Revised Estimates (SRE) of GDP became the Final Estimates (FE). Now, there are five vintages of annual GDP estimates:
 - i. First Advance Estimates (FAE) 7th January
 - ii. Second Advance Estimates (SAE) last working day of February
 - iii. Provisional Estimates (PE) last working day of May, released alongside Q4 estimates
 - iv. First Revised Estimates (FRE) last working day of February of the following year
 - v. Final Estimates (FE) last working day of February (one year after FRE)
- 48. Quarterly GDP estimates are released as follows:
 - Q1 last working day of August
 - Q2 last working day of November
 - Q3 last working day of February
 - Q4 last working day of May (released together with Provisional Estimates)
- 49. Besides, at the time of revision in the Annual Estimates of a particular year, all the quarterly estimates of that year are also revised. It is planned to continue the existing Release Calendar and Revision Schedule of Annual and Quarterly GDP estimates in the new series of GDP estimates. However, the Paper also seeks to get users feedback and suggestion on the ARC.

I. Back series of GDP estimates

50. GDP back series estimates are historical economic data points that have been recalculated to be consistent with a newer, revised methodology and base year. On launch of the new series of GDP estimates with the Base Year: 2022-23 on 27.02.2026, it is planned to publish the back series of GDP estimates on the revised base year within one year.

J. Beyond the current revision

51. The current revision exercise is primarily based on SNA 2008, the latest version being used international. The new version i.e. SNA 2025 has been approved by the United Nation Statistical Commission has been adopted in March 2025. This is planned to be implemented by 2029-30 as per IMF communication. In view of this, Ministry intends to examine the data requirement and methodological changes for implementation of SNA 2025. A separate sub-committee under the ACNAS has been constituted for this purpose. Some of the proposed changes are going to affect the core accounts of GDP. One of it relates to treatment of Central Bank. The current revision in that respect complies with the SNA 2025 methodology.

Annexure

Proposed Method for compilation of PFCE items in 2022-23 series

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
1	Food and non- alcoholic beverages		
1.1	Food		
01.1.1	Cereals and cereal products		
01.1.1.1	Wheat and wheat products	Benchmark estimates moved with growth from commodity flow	CPI of wheat/ atta Other sources, maida, suji, rawa Wheat- PDS: CPI of wheat/ atta PDS
01.1.1.2	Rice and rice products	Benchmark estimates moved with growth from commodity flow	CPI of Rice Other sources, other rice products, chira, muri Rice- PDS: CPI of rice PDS
01.1.1.3	Sorghum and sorghum products	Benchmark estimates moved with growth from commodity flow	CPI of jowar and its products (as per current basket)/ CPI of jowar (as per new basket)
01.1.1.4	Pearl Millet and Pearl Millet products	Benchmark estimates moved with growth from commodity flow	CPI of bajra and its products (as per current basket)/ CPI of bajra (as per new basket)
01.1.1.5	Finger Millet and Finger Millet products	Benchmark estimates moved with growth from commodity flow	CPI of ragi and its products (as per current basket)/
01.1.1.6	Other cereals and cereal products	Benchmark estimates moved with growth from commodity flow	CPI of ragi (as per new basket) CPI of other cereals, maize and products, small millets and their products (as per current basket)/ CPI of other cereals & products, maize, small millets (as per new basket)
01.1.1.7	Bread and bakery products	Benchmark estimates moved with growth from commodity flow	CPI of bread (bakery), biscuits; chocolates; etc.(as per current basket)/ CPI of bread (bakery), Biscuits(as per new basket)
01.1.2	Meat		
01.1.2.1	Chicken	Benchmark estimates moved with growth from commodity flow	CPI of chicken

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
01.1.2.2	Beef/ Buffalo meat	Benchmark estimates moved with growth from commodity flow	CPI of beef/ buffalo meat
01.1.2.3	Pork	Benchmark estimates moved with growth from commodity flow	CPI of pork
01.1.2.4	Mutton/ Goat meat	Benchmark estimates moved with growth from commodity flow	CPI of goat meat
01.1.2.5	Other meat	Benchmark estimates moved with growth from commodity flow	CPI of others: birds, crab, oyster, etc.
01.1.3	Fish and seafood	Commodity Flow	CPI of fish, prawn
01.1.4	Milk, other dairy products and eggs		
01.1.4.1	Milk and other dairy products	To use updated rates/ratios and retail prices based on the study done through NDRI in 2021-22 for compilation of estimates using Commodity Flow approach. Since the study provided prices in respect of 2021-22 for extrapolating the same growth in CPI of respective items will be used in case of retail price. In case of exfarm price (milk), the price as calculated for the compilation of production side estimate for respective years will be used.	Milk: CPI of milk liquid (litre) Other dairy products: CPI of other milk products, condensed/powder, curd (as per current basket)/ CPI of other milk products, condensed/powder, curd, yogurt (as per new basket)
01.1.4.2	Eggs	Benchmark estimates moved with growth from commodity flow	CPI of eggs(no.)
01.1.5	Oils and fats		
01.1.5.1	Groundnut oil	Commodity Flow	CPI of Groundnut oil
01.1.5.2	Coconut oil	Commodity Flow	CPI of Coconut oil
01.1.5.3	Mustard oil	Benchmark estimates moved with growth from commodity flow	CPI of mustard oil

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
01.1.5.4	Butter and Ghee	To use updated rates/ratios and retail prices based on the study done through NDRI in 2021-22 for compilation of estimates using Commodity Flow approach. Since the study provided prices in respect of 2021-22 for extrapolating the same the growth in CPI of respective items will be used in case of retail price. In case of exfarm price (milk), the price as calculated for the compilation of production side estimate for respective years will be used.	CPI of Ghee, butter
01.1.5.5	Other edible oils	Benchmark estimates moved with growth from commodity flow	CPI of refined oil, Vanaspati & margarine
01.1.6	Fruits and nuts		
01.1.6.1	Banana	Commodity Flow	CPI of Banana
01.1.6.2	Mango	Commodity Flow	CPI of Mango
01.1.6.3	Coconut	Benchmark estimates moved with growth from commodity flow	CPI of Coconut, green coconut (no.)
01.1.6.4	Citrus fruits	Commodity Flow	CPI of orange, mausami, lemon
01.1.6.5	Grapes	Commodity Flow	CPI of grapes
01.1.6.6	Copra	Benchmark estimates moved with growth from commodity flow	CPI of coconut: copra
01.1.6.7	Cashew kernels	Commodity Flow	CPI of cashew nut
01.1.6.8	Groundnut	Commodity Flow	CPI of Groundnut
01.1.6.9	Other fruits	Commodity Flow	CPI of other fresh fruits, jackfruit, watermelon, pineapple, guava, singara, papaya, kharbooza, pears/nashpati, berries, litchi, apple, dates, other nuts raisin; kishmish; monacca; etc. other dry fruits
01.1.6.10	Fruit products	Commodity Flow	CPI of all items considered under PFCE item fruits and nuts
01.1.7	Vegetables, tubers, plantains, cooking bananas and pulses		

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
01.1.7.1	Onions	Benchmark estimates moved with growth from commodity flow	CPI of onions
01.1.7.2	Potatoes	Commodity Flow	CPI of Potato
01.1.7.3	Other vegetables and tubers	Benchmark estimates moved with growth from commodity flow	CPI of other vegetables, radish, carrot, garlic, palak/other leafy vegetables, tomato, brinjal, cauliflower, cabbage, green chillies, lady's finger, parwal/ patal, kundru, gourd, pumpkin, Peas, beans, barbate, potato, cereal substitute: tapioca, etc
01.1.7.4	Vegetable products	Commodity Flow	CPI of all items considered under PFCE items Onions and other vegetables and tubers
01.1.7.5	Green gram	Benchmark estimates moved with growth from commodity flow	CPI of moong
01.1.7.6	Black gram	Benchmark estimates moved with growth from commodity flow	CPI of urd
01.1.7.7	Gram whole	Benchmark estimates moved with growth from commodity flow	CPI of gram whole
01.1.7.8	Pigeon peas	Benchmark estimates moved with growth from commodity flow	CPI of arhar, tur
01.1.7.9	Masoor	Benchmark estimates moved with growth from commodity flow	CPI of masur
01.1.7.10	Other pulses	Benchmark estimates moved with growth from commodity flow	CPI of other pulses
01.1.7.11	Gram Products	Benchmark estimates moved with growth from commodity	CPI of gram products (as per current basket)/
31.1.7.11		flow	CPI of besan, gram products (as per new basket)
01.1.8	Sugar, confectionery and desserts		
01.1.8.1	Gur	Benchmark estimates moved with growth from commodity flow	CPI of jaggery (gur)
01.1.8.2	Refined Sugar	Commodity Flow	CPI of sugar other sources PDS: CPI of sugar PDS

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
01.1.8.3	Sugar confectionery	Commodity Flow	CPI of candy, misri, honey, sauce, jam, jelly, mayonnaise (gm), prepared sweets
01.1.8.4	Ice cream	To use updated rates/ratios and retail prices based on the study done through NDRI in 2021-22 for compilation of estimates using Commodity Flow approach. Since the study provided prices in respect of 2021-22 for extrapolating the same growth in CPI of respective items will be used in case of retail price.	CPI of Ice cream
01.1.9	Ready-made food and other food products		
01.1.9.1	Salt	Benchmark estimates moved with inter-survey growth	CPI of salt (as per current basket) / CPI of salt other sources and salt- PDS (as per new basket)
01.1.9.2	Oilseeds	Commodity Flow	CPI of oil seeds
01.1.9.3	Spices	Benchmark estimates moved with inter-survey growth	CPI of spices
01.1.9.4	Sugar cane for chewing	As compiled in production side	CPI of sugar other sources
01.1.9.5	Other food	Benchmark estimates moved with growth from commodity flow	CPI of baby food, pickles, papad, bhujia, namkeen, mixture, chanachur, other packaged processed food, chips, nachos, puffs, wafers, etc. (as per new basket)
1.2	Non-alcoholic		
	beverages Coffee, tea and cocoa		
01.2.1	drinks		
01.2.1.1	Coffee	Benchmark estimates moved with growth from commodity flow	CPI of coffee: powder
01.2.1.2	Tea	Benchmark estimates moved with growth from commodity flow	CPI of tea: leaf
01.2.1.3	Cocoa	Benchmark estimates moved with growth from commodity flow	CPI of other beverages: cocoa; chocolate; etc.

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
01.2.2	Water, Soft drinks, Fruit and vegetable juices, Other non- alcoholic beverages	Benchmark estimates moved with growth from commodity flow	CPI of mineral water (litre), other cold beverages: bottled/canned (litre), fruit juice and shake, sugarcane/date-palm juice (as per new basket)
2	Alcoholic beverages, tobacco and narcotics		
2.1	Alcoholic beverages	Benchmark estimates moved with growth from commodity flow	CPI of country liquor (litre), foreign/refined liquor or wine (litre), toddy (litre), beer (litre)
2.2	Tobacco		
02.2.1	Cigarettes	Benchmark estimates moved with growth from commodity flow	CPI of cigarettes (no.)
02.2.2	Tobacco chewing	Benchmark estimates moved with growth from commodity flow	CPI of leaf tobacco (gm)
02.2.3	Bidi	Benchmark estimates moved with growth from commodity flow	CPI of bidi (no.)
02.2.4	Other tobacco products	Benchmark estimates moved with growth from commodity flow	CPI of other tobacco products, hookah tobacco (gm), cheroot (no.)
2.3	Narcotics		
02.3.1	Pan	Benchmark estimates moved with inter-survey growth	CPI of pan: leaf (no.), pan: finished (no.)
02.3.2	Arecanut	Commodity Flow	CPI of ingredients for pan (gm)
02.3.3	Opium	Commodity Flow	CPI of other intoxicants
3	Clothing and footwear		
3.1	Clothing		
03.1.1	Clothing materials	Commodity Flow	CPI of Clothing
03.1.2	Garments, Other articles of clothing and clothing accessories	Commodity Flow	CPI of Clothing
03.1.3	Cleaning, repair, tailoring and hire of clothing		

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
03.1.3.1	Cleaning, repair and hire of clothing	and 96010 may be 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 may be derived as certain % of GVO of Personal services includingwashing, hair dressing, custom tailoring and funeral related services. These shares may be derived annually using ASUSE.	CPI of washerman, laundry, ironing, dry cleaning, dyeing (as per new basket)
03.1.3.2	Tailoring	100% of GVO of NIC 14105 may be considered as PFCE. This GVO may be derived as certain % of GVO of Personal services includingwashing, hair dressing, custom tailoring and funeral related services. This share may be derived annually using ASUSE.	CPI of tailor
3.2	Footwear	Commodity Flow	CPI of Footwear
4	Housing, water, electricity, gas and other fuels		
4.1	Gross rentals, equipment and material for housing		
04.1.1	Actual and imputed rental payments made for housing	PFCE may be computed as sum of GVO of Ownership of Dwelling and Housing services provided by the Govt.	PFCE may be computed as sum of GVO of Ownership of Dwelling at constant prices and Housing services provided by the Govt. at constant prices.

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
04.1.2	Services for the maintenance, repair and security of the dwelling	To include security services as well in the item. PFCE may be computed as Sum of Repair & Maintenance Cost of Dwelling and PFCE of Security services. For the base year, PFCE of Security services may be considered as 50% of the annual consumption expenditure in respect of item: Security & Driver derived using the value of per capita consumption derived from HCES 2022-23 and Population Projection of M/o Health and Family Welfare. Growth in respect of NIC 801 from ASUSE may be used for extrapolation in respect of security services.	CPI of residential building & land (cost of minor repairs), watchmen/security guard, driver (as per new basket)
04.1.3	Security equipment and materials for dwelling maintenance and repair	Commodity Flow	CPI of plugs, switches & other electrical fittings
4.2	Water supply and miscellaneous services relating to the dwelling		
04.2.1	Water supply	Benchmark estimates moved with inter-survey growth	CPI of water charges
04.2.2	Refuse collection, Sewage collection, Other services related to the dwelling	50% of Output of Remediation and Other Utility service	Using IPD of GVO of Remediation & other utility services.
4.3	Electricity, gas and other fuels		
04.3.1	Electricity	For electricity, for quantity, CEA data on electricity sold (Domestic) may be used and prices as derived from HCES 2022-23 may be used. The price may be moved forward using CPI (electricity).	CPI of Electricity
04.3.2	Gas		

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
04.3.2.1	LPG	Domestic consumption from "Indian Petroleum & Natural Gas Statistics" and retail price as obtained from HCES 2022-23 may be used. Base year retail price may be moved forward using CPI(LPG).	CPI of LPG excl conveyance
04.3.2.2	Other Gas (Gober Gas)	For Gober gas PFCE may be considered as 100% GVO	CPI of other fuel
04.3.3	Liquid fuels (Kerosene)	Domestic consumption separately for PDS and Non PDS from Indian Petroleum & Natural Gas Statistics and PDS and retail price as obtained from HCES may be used. Base year PDS and retail price may be moved forward using CPI(Kerosene-PDS) and CPI(Kerosene-Other sources) respectively subject to availability of separate price relatives; otherwise Kerosene(PDS) price will be same as base year. Price will be updated on availability of new price data.	PDS: CPI of kerosene PDS (ltr) Non-PDS: CPI of kerosene other sources (ltr)
04.3.4	Solid fuels	Benchmark estimates moved with inter-survey growth	CPI of Coal, firewood and chips, charcoal, dung cake, other fuel
5	Furnishings, household equipment and routine household maintenance		
5.1	Furniture and furnishing, carpets and other floor coverings		
05.1.1	Furniture and furnishings	Commodity Flow	CPI of almirah, dressing table, chair, stool, bench, table, other furniture & fixtures (couch, sofa, etc.), bedstead, cloth for upholstery, curtains, tablecloth, etc.
05.1.2	Carpets and other floor coverings	Commodity Flow	CPI of carpet, daree & other floor mattings

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
05.1.3	Clock and watches	Commodity Flow	CPI of clock, watch, smartwatch, fitness tracker(As per new basket)
05.1.4	Repair of computer, personal & HHs goods, furniture, furnishings etc.	100% of GVO of NIC 95- 95292 may be considered as PFCE. GVO of NIC 95- 95292 may be derived as certain % of GVO of Repair of computers and personal and household good etc. This share may be derived annually using ASUSE.	Using IPD of GVO of trade and repair services
5.2	Household textiles	Benchmark estimates moved with growth from commodity flow	CPI of bed sheet, bed cover (no.), mosquito net (no.), bedding: others, rug, blanket (no.), pillow, cushion (no.)(as per new basket)
5.3	Household appliances	Benchmark estimates moved with growth from commodity flow	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 new basket)
5.4	Glassware, tableware and household utensils	Benchmark estimates moved with growth from commodity flow	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 (jars & containers, cutl (as per new basket)
5.5	Tools and equipment for house and garden	Benchmark estimates moved with growth from commodity flow	CPI of other electric bulb, tubelight, decorative lights, electric batteries, other minor durable-type goods like torch, lock (as per new basket)
5.6	Goods and services for routine household maintenance		

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
05.6.1	Non-durable household goods	Benchmark estimates moved with growth from commodity flow	CPI of candle (no.), other petty articles like coir, rope, door mat no., washing soap/ soda/ powder/ liquid detergent, other washing requisite, incense (agarbatti), room freshener, mosquito repellent, insecticide, anti-rodent, etc.(as per new basket)
05.6.2	Domestic services and household services	100% GVO of Private households with employed persons	CPI of domestic helper/cook, sweeper
6	Health		
6.1	Health Services	PFCE of Health Services may be computed as GVO- GFCE-Exports + Imports.	CPI of Health
6.2	Medicines and Health products	PFCE in respect of Medicines and Health products may be computed using Commodity flow.	CPI of Health
7	Transport		
7.1	Purchase of vehicles		
07.1.1	Motor cars	Using data from Vahan (Sale price)	CPI of motor car, jeep
07.1.2	Motorcycles	Using data from Vahan (Sale price)	CPI of motor cycle, scooter
07.1.3	Bicycles and animal drawn vehicles	Commodity Flow/ Using data from All India Cycle Manufacturers' Association (subject to availability)	CPI of bicycle
7.2	Operation of personal transport equipment		
07.2.1	Parts and accessories for personal transport equipment	Using data from study being undertaken through JNU	CPI of tyres & tubes
07.2.2	Fuels and lubricants for personal transport equipment	Using data from study being undertaken through JNU	CPI of petrol for vehicle, diesel for vehicle
07.2.3	Maintenance and repair of personal transport equipment	Using data from study being undertaken through JNU	For inflating base year cost - CPI(IW)

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
07.2.4	Other services related to personal transport equipment	Using data from study being undertaken through JNU	CPI of bus fare for commuting to work.: periodic (lumpsum), bus/tram fare: occasional, auto-rickshaw/e-rickshaw fare, bus fare for school, college, etc.: periodic (lump.), bus/tram fare for commuting to work: daily (miscel.), bus/tram fare for school, college: daily (miscell.), taxi fare (as per new basket)
7.3	Passenger transport services		
07.3.1	Passenger transport by railway	PFCE may be computed as 90% of passenger earning	Base year estimates may be extrapolated using growth in Passenger Kilometer
07.3.2	Passenger transport by road	Using data from study being undertaken through JNU for Mechanised part. For non mechanised part PFCE may be derived using share of Non mechanised to Mechanised in total annual expenditure derived from HCES 2022-23	Mechanised: For inflating base year earnings/ cost: CPI of bus fare for commuting to work.: periodic (lumpsum), bus/tram fare: occasional, auto-rickshaw/e-rickshaw fare, bus fare for school, college, etc.: periodic (lump.), bus/tram fare for commuting to work: daily (miscel.), bus/tram fare for school, college: daily (miscell), taxi fare(as per new basket) Non mechanized: CPI of rickshaw (hand-drawn & cycle) fare
07.3.3	Passenger transport by air	Using DGCA and BPM6 data. 100% passenger revenue adjusted for exports and imports and Govt expenditure (Object Head: FTE and DTE)) may be taken as PFCE	CPI of Air fare
07.3.4	Passenger transport by sea and inland waterway	To be considered as 100% GVO of Household sector as PFCE	CPI of steamer, boat fare
07.3.5	Other passenger transport services	Commodity flow of Services Incidental to Transport using SUT	IPD of GVO of Services Incidental to Transport
7.4	Transport services for goods	Using data from study	CPI as indicated against item 7.3.2 (Passenger transport by road)

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
8	Information and communication		
8.1	Information and communication equipment		
08.1.1	Fixed telephone equipment, Mobile telephone equipment	Benchmark estimates moved with growth from commodity flow	CPI of mobile handset
08.1.2	Information processing equipment and software excluding games	Benchmark estimates moved with growth from commodity flow	CPI of PC/ Laptop/ tablet, other peripherals incl. software (As per new basket)
08.1.3	Equipment for the reception, recording and reproduction of sound and vision	Benchmark estimates moved with growth from commodity flow	CPI of television, other goods for recreation (incl. radio, VCR/VCD) (As per new basket)
8.2	Information and communication services		
08.2.1	Communication Services	Commodity flow	CPI of telephone charges: landline*(incl. broadband charges), telephone charges: mobile*(incl. data charges), internet expenses (cable broadband, mobile data charges) (As per new basket)
08.2.2	Television and radio licences and fees, Subscriptions to audiovisual streaming services and rental of audiovisual content	Benchmark estimates moved with inter-survey growth	CPI of cable TV/DTH/set top box (incl. broadband charges) (As per new basket)
9	Recreation, sport and culture		
9.1	Recreational durables	Commodity flow	CPI of camera & photographic equipment, other goods for recreation (incl. radio, VCR/VCD) (As per new basket)
9.2	Other recreational goods	Commodity Flow	CPI of sports goods (badminton, racket, shuttle cock, football, other sports goods), other goods for recreation (incl. radio, VCR/VCD) (As per new basket)
9.3	Garden products and pets		

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
09.3.1	Garden products, plants and flowers	Benchmark estimates moved with inter-survey growth	CPI of flower (fresh): all purposes
09.3.2	Pets and pet products	Benchmark estimates moved with growth from commodity flow	CPI of pet animals (incl. birds, fish) (As per new basket)
9.4	Recreational services, Cultural services	Benchmark estimates moved with inter-survey growth	CPI of Cinema, theatre, club, gym, swimming fees & other subscription, other entertainment (mela, fair, picnic, VCD/DVD) (as per new basket)
9.5	Cultural goods		
09.5.1	Musical instruments	Benchmark estimates moved with growth from commodity flow	CPI of musical instruments (As per new basket)
09.5.2	Audiovisual media	Benchmark estimates moved with growth from commodity flow	CPI of CD, DVD, pen-drive, external hard disk (As per new basket)
9.6	Newspapers, books and stationery	Benchmark estimates moved with growth from commodity flow	CPI of books, journals (incl. e-books, audio books), newspapers, periodicals, stationery, photocopying charges
10	Education	Output-GFCE may be considered as PFCE	CPI of Education
11	Restaurants and accommodation services	Benchmark estimates to be derived from HCES 2022-23. For extrapolating the benchmark estimates growth in GVO may be used.	CPI of tea: cups (no.), coffee: cups (no.), cooked meals purchased (no.), cooked snacks purchased, hotel lodging charges
12	Insurance and financial services		
12.1	Insurance		
12.1.1	Life insurance	100% of Life Insurance Output	IPD of GVO of Life Insurance
12.1.2	Non-life insurance	Commodity flow	IPD of GVO of Non-Life Insurance
12.2	Financial services		
12.2.1	Financial intermediation services indirectly measured (FISIM)	PFCE may be considered as FISIM allocated to Household (personal) sector	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 except insurance agents

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
12.2.2	Explicit charges by deposit-taking corporations (S), Other financial services (S)	PFCE may be considered as certain % of Actual Receipts (Charges). This % may be derived annually using RBI data i.e. Share of Household Loan + Household Deposit in total Loan + Deposit in respect of SCBs	Banking Services Price Index (BkSPI) (Benchmark estimates moved with growth from commodity flow) (Presently Experimental)
13	Personal care, social protection and miscellaneous goods and services		
13.1	Personal care		
13.1.1	Electric, other appliances, articles and products for personal care	Benchmark estimates moved with growth from commodity flow	CPI of toilet soap, body-wash, hand-wash, shower gel, toothpaste, mouthwash, toothbrush, etc., powder, cream, body lotion, moisturizers, hair oil, hair colour, shaving cream, shaving foam, aftershave lotion, sanitary napkins, suitcase, trolley bag, duffle bag, trunk, etc. (As per new basket)
13.1.2	Hairdressing salons and personal grooming establishments	Benchmark estimates moved with inter-survey growth	CPI of barber, beautician, spas, etc.
13.2	Other personal effects	Commodity flow	CPI of umbrella, raincoat, helmet, any other personal goods (power banks, hair dryers) (As per new basket)
13.3	Other services		
13.3.1	Religious services	100% of GVO of NIC 9491 may be considered as PFCE. GVO of NIC 9491 may be derived as certain % of GVO of Activities of Membership organisations. This share may be derived annually using ASUSE	IPD of GVO/ CPI Priest (As per new basket)
13.3.2	Legal services	50% of Output of legal service	IPD of GVO of Legal Services/ CPI Legal (As per new basket)

PFCE Codes: 2022-23 series	PFCE Items: 2022-23 series	Method of compilation	Method for Deflation/Inflation-Using CPI Item, composite index of CPIs/ Group/ Sub group/ Other alternate method
13.3.3	Funeral services	100% of GVO of NIC 96030 may be considered as PFCE. This GVO may be derived as certain % of GVO of Personal services includingwashing, hair dressing, custom tailoring and funeral related services. This share may be derived annually using ASUSE	IPD of GVO of Personal Services/ CPI Priest (As per new basket)
13.3.4	Business services	To be considered as 100% GVO of Household sector as PFCE	IPD of GVO of Business Services
13.3.5	Social protection	To include 100% of estimated Outputs of enterprises (both Market and Non Profit) with NIC code 87 (Residential care activities) and 88 (Social work activities without accommodation) as PFCE.	CPI of Health & Education