

116

PART IV
PUBLIC SECTOR

CHAPTER XXI PUBLIC SECTOR

Coverage

21.1. Public sector comprises government administrative departments as well as government departmental and non-departmental enterprises. Government administrative departments include all offices and other bodies engaged in administration, defence and regulation of the public order. Departmental enterprises are unincorporated enterprises, owned and controlled by the public authorities like railways, posts and telegraphs, navigation, drainage and power projects. Non-departmental enterprises cover government companies, wholly or mainly owned and/or controlled by the public authorities and public corporations excluding port trusts, housing boards, municipal corporations, and improvement trusts.

21.2. The NAS presents domestic product, capital formation, and final consumption expenditure both at current and constant (1970-71) prices, saving, economic and purpose classification of expenditure of the government administrative departments and accounts of public authorities (administrative departments and departmental enterprises) and non-departmental enterprises. Government departmental and non-departmental enterprises are classified into various industrial categories according to the nature of their activities and the net/gross domestic product of these enterprises are included in the respective industrial categories.

Methodology and Source Material Domestic product at current prices

21.3. The domestic product from government administrative departments and defence, comprises compensation of employees. In the case of departmental and non-departmental enterprises net domestic product at current prices is obtained as the sum of compensation of employees and operating surplus. This is also equivalent to gross output less inputs in the form of purchases of goods and services, consumption of fixed capital and indirect taxes. The methodology and the source material used in the estimation at current prices have already been presented under respective industrial categories of national product.

21.4. The estimates relating to government administration and departmental enterprises are obtained by analysing the budget documents and the annual accounts of the central and State Governments, union territories and local authorities. The estimates in the case of non-departmental enterprises are obtained by analysing the annual accounts contained in their reports.

Domestic product at constant prices

21.5.1. The estimates of gross domestic product for individual industrial categories at 1970-71 prices are prepared using either the method of deflation by relevant price index numbers or quantum indices of volume of activity.

21.5.2. The price indices implicit in the total domestic production in agricultural and forestry sector are used for the purpose of deflation of such activities in the public sector. The current price estimates of mining and manufacturing are deflated by the price indices which are based on the data on quantity and value of output/sales in the public sector culled out from the annual reports of the corresponding enterprises. The price index for mining industry is based on the output of six important public sector enterprises, covering the output of coal, gold, manganese ore, crude-petroleum, natural gas and zinc. Similarly, for manufacturing industry the price index is based on the data of sales of more important of the enterprises such as : Bharat Earth Movers Limited; Bharat Heavy Electricals Limited; Heavy Engineering Corporation Limited; Hindustan Antibiotics Limited; Hindustan Cables Limited; Hindustan Machine Tools Limited; Hindustan Teleprinters Limited; Hindustan Steels Limited; Visveswaraya Iron & Steel Limited; Indian Oil Corporation Limited; Madras Refineries Limited; Cochin Refineries Limited; Fertilizer & Chemicals (Travancore) Limited; and Fertilizer Corporation of India Limited. In case of electricity the base year (1970-71) estimates of gross value added are carried forward to other years with the help of quantum index prepared from the data on quantity of energy sold by the public sector as available annually in *Public Sector Electricity Supply—All India Statistics* (CEA, Commercial Directorate of Ministry of Energy). For water supply the base year estimates are moved to other years with the help of index of employment in public sector water supply services. In respect of trade, hotels and restaurants, base year estimates of gross value added are projected by using the indicators of volume of goods handled in Food Corporation of India, State Trading Corporation, Minerals and Metals Trading Corporation of India, and Indian Dairy Corporation. Value added in public sector activities in construction and other services comprises mainly compensation of employees. The current price estimates for these sectors are adjusted by the deflator implicit in the estimates of value added in public administration and defence. For non-departmental construction enterprises, however, the overall implicit price index for construction sector is used. For transport (rail, road, air, water, port trusts, ports

and pilotages etc.), communication and banking and insurance the methodology for constant price estimates is discussed in the respective chapters.

Final consumption expenditure of administrative departments at current prices

21.6. Final consumption expenditure of administrative departments is equivalent to the compensation of employees and the items of inputs or intermediate consumption, net of sales. The sources of data are budget documents and annual accounts of central and State Governments, union territories and local authorities. The economic analysis of the budgets and identification of the transactions according to their nature enables the measurement of the relevant items of expenditure.

Final consumption expenditure of administrative departments at constant prices

21.7.1. Estimates of government final consumption expenditure at 1970-71 prices are prepared separately for compensation of employees and net purchase of commodities and services. The constant price estimates of compensation of employees for central and State Governments and local authorities are already prepared as a component of gross domestic product (i.e. domestic product of government administration at 1970-71 prices). Estimates of purchases of commodities and services, net of sales, are obtained by deflating the current price figures by weighted average price indices of items of expenditure. For commodities, price data are obtained from *Index Number of Purchase Prices (DGS&D)*. Price indices for services are the same as used for preparation of constant price estimates of value added/output of the respective sectors/sub-sectors for the economy as a whole.

21.7.2. The price indices of different commodities and services are combined to obtain overall indices separately for central and State Government expenditures. The commodity composition of central and State Government expenditure in the base year, which is determined from the detailed analysis of budget documents is used as weight. Direct data on patterns of office expenditure are also obtained from different administrative departments/ministries. In the absence of detailed data on commodity composition of expenditure of local authorities, the corresponding index prepared for State Government expenditure is used.

Capital formation at current prices

21.8. For estimating the capital formation of the public sector at current prices sources of data are the budget documents of central government, State Government, local bodies and annual reports of public sector enterprises. Estimates are obtained by analysing the budgets in the case of public authorities and annual reports in case of non-departmental enterprises. The capital formation estimates are prepared separately in respect of gross fixed capital formation, change in stocks, and purchase and sale of second

hand physical assets. These are determined from the details giving the actual expenditures incurred under each of the items.

Capital formation at constant prices

21.9.1. The estimates of gross capital formation at 1970-71 prices in the public sector are compiled separately for (i) construction; (ii) machinery and equipment; (iii) net purchase of second hand physical assets; and (iv) change in stocks, for each industry group. The method consists of deflation of current price estimates by relevant price indices.

21.9.2. The estimates of capital formation in construction at current prices in all the industry groups are deflated by the index of cost of pucca construction prepared by using prices of different building materials and wage rates of rural and urban construction workers. Data on price indices of public sector purchases in respect of cement, steel, paints, and varnishes, glass, and electrical goods as available from *Index Number of Purchase Prices (DGS&D)* are used. Data on prices of bricks and timber and wages of urban construction workers as available from *Prices of Building Material and Wage Rate of Building Labour (NBO)* and for lime, the *Index of Wholesale Prices (Ministry of Industry)* are used. Data on wages of rural construction workers available from the *DESAg Ministry of Agriculture & Irrigation* are used. The input structure for public sector construction is assumed to be the same as for general pucca construction for the economy as a whole.

21.9.3. For deflation of capital formation in machinery and equipment two sets of indices are prepared. The first is an overall price index of purchases of machinery items by the public sector and the second pertains to purchase prices of road and water transport equipments. Both the indices are based on the purchase price data contained in *Index Number of Purchase Prices (DGS&D)*, weights being the value of purchases in the base year. In the case of electricity, gas and water supply industry, however, price index implicit in the global estimates of capital formation in machinery and equipment used by this industry is used.

21.9.4. The current prices estimates of net purchases of second hand physical assets in all the industry groups are deflated by the average implicit cost of investment index prepared from the public sector figures at current and constant prices of construction and machinery and equipment of respective industry groups.

21.9.5. The current price estimates of change in stock in respect of mining and quarrying, manufacturing, construction, road and water transport and banking and insurance are deflated by the index number of purchase prices of *DGS&D*. For agriculture, implicit price indices of value of output of items other than foodgrains, for electricity, gas and water supply, EA's index number of wholesale prices of electrical goods,

and for air transport, trade hotels and restaurants, public administration and defence and other services, indices of wholesale prices of all commodities are used to deflate the current price estimates.

Saving at current prices

21.10. The saving of Government administrative departments is obtained by deducting the current expenditures from the current receipts. The items of expenditure include (i) consumption expenditure; (ii) interest on public debt; (iii) subsidies; and (iv) current transfers, while the items of receipts are (i) direct taxes; (ii) indirect taxes; (iii) income from entrepreneurship and property; and (iv) miscellaneous receipts.

21.11. The net saving of government companies and statutory corporations including the RBI and LIC, are estimated using the results of the analysis of the annual accounts of these companies and corporation. The net saving is obtained as an aggregate of net transfers to balance sheet and net transfers to reserve. Expenditure/income relating to previous year and capital gains/losses are excluded. The net saving of the Banking Department of the RBI is estimated as the sum of the annual changes in (i) National Agricultural Credit (Long Term Operations) Fund; (ii) National Agricultural Credit (Stabilisation) Fund; and (iii) National Industrial Credit (Long Term Operations) Fund. In the case of LIC, only the saving arising out of its general insurance business is considered.

Economic accounts of the public sector at current prices

21.12. In addition to the estimation of value added, final current consumption expenditure, capital formation and saving from public administration and defence and domestic producer, capital formation and saving from departmental and non-departmental enterprises, the economic accounts of the public sector for the different sub-sectors are also prepared annually.⁷⁵ The economic accounts of government administration and departmental enterprises are somewhat different from those of non-departmental enterprises because of the differences in the set-up and characters of these activities/enterprises.

21.13. The economic accounts of government administration and departmental enterprises comprise (i) income and outlay account of government administration; (ii) operating account of departmental enterprises; and (iii) capital finance account of general government (administration and departmental enterprises). The 'receipts' in the income and outlay account are classified into categories like direct taxes, indirect taxes, fees and miscellaneous receipts, and income from entrepreneurship and property while outlays give consumption expenditure (separated into compensation of employees and purchase of com-

modities and services, net of sales), interest on public debt, subsidies and current transfers to other sectors of the economy. Saving in this account represents the difference between receipts and expenditures. The operating account of departmental enterprises shows the current operations of the enterprises i.e., receipts from sales of commodities and services and expenditures on intermediate consumption, compensation of employees, interest, profit and consumption of fixed capital. The receipts of capital finance account include saving, transferred from income and outlay account of government administrative departments, consumption of fixed capital, transferred from operating account of departmental enterprises, capital transfers from the rest of the world, net borrowings at home and abroad and other liabilities. The expenditure side shows change in stocks, gross fixed capital formation, net purchase of physical assets and capital transfers.

21.14. Non-departmental enterprises are classified into two broad groups of financial and non-financial enterprises for the preparation of the accounts. For each group, a set of three accounts, namely, production, income and outlay and capital finance are presented.

21.15. For compiling the economic accounts various items of transactions, which appear in the budget documents and annual reports are classified into different economic categories. In this process, it is necessary to classify these transactions into current and capital expenditures, segregate administrative services from entrepreneurial activities and separate the transactions relating to current consumption from financial transactions.

21.16. The annual reports of non-departmental enterprises present the data in the form of trading/contract/manufacturing account, profit and loss account, appropriation account, expenditure during construction account and the balance sheet. The data from accounts other than appropriation account and the balance sheet are used for construction of the production account of the enterprises. Appropriation account along with the profit and loss account provide the data for income and outlay account and balance sheet the information for the preparation of capital finance account.

Purpose classification of expenditure of government administrative departments at current prices

21.17. Further to the economic classification of expenditures of government administrative departments, a purposewise classification of the expenditure is also undertaken, cross classifying them according to the economic character of the expenditures. Thus the classification in terms of consumption expenditure, capital formation, current and capital transfers and loans and advances etc. are cross classified according to the

⁷⁵ National Accounts Statistics, 1970-71—1976-77 (January 1979), Statements 24-33.

purpose of the expenditure. The more important of the purposewise categories are general public services, defence, education, health, housing and community amenities and economic services.⁷⁶

Reliability, Objectivity and Current Status of Data

21.18. The budget documents are the main source of information on the activities of government administrative departments and departmental enterprises. These details generally give the necessary information for the preparation of the estimates of value added, capital formation and saving and construction of the accounts. Expenditure shown in the detailed 'demand' does not always tally with that shown in the annual financial statement of budget. In such cases the financial statement data are accepted and necessary adjustments are made. Also in a number of cases inter-account transfers do not agree and render reconciliation difficult. Details of expenditure do not always correspond to the summary figures and adjustments are made on the basis

of the available details. The lack of details regarding expenditure on 'plan schemes' also makes the task of economic classification difficult.

21.19. The report *Augmentation of Financial Resources of Urban Local Bodies* (Central Council of Local Self Government, 1963) contains consolidated information on income and expenditure of municipalities and notified town area committees for the year 1960-61, but the coverage is not complete. Municipal Year Books containing information in respect of municipal bodies are available for some of the State governments. The consolidated accounts of panchayati raj institutions are also available for some states. However, the information available for local bodies is not adequate for economic classification of various items.

21.20. There is a considerable non-response in the case of non-departmental enterprises. Most of these enterprises finalise their accounts after a considerable time lag. In a number of cases, use is made of provisional accounts. Further, the details available in many cases are also not adequate for the purpose of economic classification.

⁷⁶. Details of concepts, scope and coverage are available in the *Final Report of the Committee on Regional Accounts*, (CSO, 1976).