

PART III
CONSUMPTION, SAVING AND CAPITAL FORMATION

CHAPTER XVIII

PRIVATE FINAL CONSUMPTION EXPENDITURE

Coverage

18.1. Private final consumption is defined here to cover the expenditure on current account of resident and non-resident households in the domestic market and non-profit making bodies serving households. The expenditure relates to outlays on new durable as well as non-durable goods (except land) and on services reduced by net sales (sales less purchases) of second-hand goods, scraps and wastes. This definition is based on the concept of expenditure within the domestic territory of the country and is not in line with the concept of 'national' product for a parallel 'national' concept, it is necessary to take into account the expenditures on current account of only the resident households and the national non-profit institutions serving households. Due to non-availability of data, it has not been possible to take account of the direct purchases made by the resident households from abroad and deduct the purchases of non-resident households in the domestic market to derive the measure of final expenditure of resident households only.

18.2. In the present estimates, expenditure includes the imputed gross rent of owner-occupied dwellings, consumption of own-account production evaluated at producers' prices and payment by households of wages and salaries in kind valued at cost, e.g. provision for food shelter and clothing to the employees.

18.3. The final consumption expenditure of non-profit bodies serving households included in the total is equivalent to the value of goods and services produced for own use on current account, i.e., the value of gross output reduced by the sum of the value of their commodity and non-commodity sales. This would include transfers in kind of non-durable goods and services from government administration, industries and rest of the world. In the estimate prepared, the expenditure of non-profits institutions serving households is taken account of by implication and not by separate estimation. In other words, while measuring final consumption expenditure by commodity flow method from the total value of output, the expenditure incurred by industries as intermediate consumption and all final consumption (including exports & imports) other than those by households and non-profit institutions are deducted to obtain the estimates of private final consumption expenditure. The use of this method also implies that consumption expenditure refers to the value of all goods and services which become available during the reference year for consumption purposes. The quantum of net availability of goods thus estimated are evaluated at market prices except for that part of the consumption which is from re-

tention by the producers for own consumption. In the case of the latter the evaluation is at producers' prices. As the estimates are by the commodity flow method, it has not been possible to take account of expenditure on second-hand goods. This can be measured only through an approach of aggregation of retail sales.

Methodology and Source Material

Estimates at current prices

18.4. The 'commodity (product) flow' method used for estimation implies working of commodity balances relating to various items of consumption, taking into account production, intermediate consumption in agriculture, manufacturing and other industries; net imports; stock variations; consumption on government account and household and non-household final consumption. The quantity of final consumption obtained from commodity balances have to be evaluated at market prices. This is done in stages by initially evaluating them at approximate factor cost and then adding trade and transport margins which are separately ascertained for various commodities/commodity groups on the basis of price data at various levels (i.e., producers', wholesale, retail etc.) For services, the estimate of final consumption expenditure is arrived at from the total output (as measured by the gross earnings) of the agencies providing these services to the consumers after netting out the expenditure of producers on these services, during the year, if any. The gross earnings of any particular service during a given period is the sum total of the payments received from the consumers of these services in lieu of the services rendered to them and generally the primary utilisation in the case of social and personal services is by the final consumers.

18.5. The basic data on output are available from independent sources. The norms for intermediate consumption of agricultural commodities i.e., seed, livestock feed and wastages have been developed on the basis of various 'Marketing and Commodity Reports' (DMI). The main sources of data relating to inter-industry consumption are the DMI reports, ASI (Census and Sample Sectors) and similar other sources giving intermediate consumption of different sectors details of which are collected and analysed in the course of measurement of the value added in different sectors. The data on imports and exports are available on a regular basis, both in quantity and value term, from the *Monthly Statistics of Foreign Trade of India* published by the Directorate General of Commercial Intelligence and Statistics (DGCIS), Calcutta. The mark-ups for con-

version of value at producers' prices to market prices are based on data on retail prices of agricultural commodities compiled by the DESAg, Ministry of Agriculture and rural retail prices collected every month by the NSSO. The estimates of stock variations as well as those relating to appropriation of partly capital goods to capital formation and to final consumption are based on the data utilized for the preparation of the estimates of capital formation by the commodity flow method. The estimates relating to government consumption are based on the information on 'orders placed' contained in the *Directory of Government Purchases* published annually by the Director General Supplies and Disposals (DGS&D) and on the analysis of the annual budget documents. The total government expenditure on goods and services for different years are obtained independently from the economic analysis of the budget. The total expenditure on goods is distributed over twenty-five groups on the basis of the pattern obtainable from the details contained in the budgets of the central and State governments. The group-wise expenditure is further disaggregated into individual items comprising the groups, on the basis of DGS&D data on 'orders placed' during the year.

18.6. For the purpose of preparing the estimates, the entire expenditure is divided into two broad groups viz., food and non-food and services, and the estimates have been prepared by twentytwo expenditure categories. These categories *inter-se*, cover seven sub-groups comprising 78 major items under 'food' and fifteen sub-groups comprising in all 86 major items under the non-food & services group. These sub-groups under food are cereals and cereal substitutes; milk & milk products; edible oils including oil seeds; meat, egg and fish; sugar, salt; and other food. The last sub-group viz., other food, consists of the following : (a) pulses, (b) spices, (c) fruits & vegetables and (d) beverages & other food.

Cereal & cereal substitutes

18.7. The cereal items covered include, rice, wheat, jowar, bajra, maize, barley, ragi, small millets, gram (whole), other grains, tapioca and sweet potato, the last two being cereal substitutes. The data on domestic production of cereals are published annually in the *Estimates of Area, Out-turn and Yield per Acre of Principal Crops*, (DESAg). The data on 'seed and feed' are obtained from the State governments in connection with the preparation of value added estimates in the agricultural sector. The norms for estimation of marketable surplus relating to rice, wheat, jowar and gram are obtained from annual data on market arrivals brought out by the DESAg. For other cereals the norms used are based on data contained in the relevant Marketing Reports of the DMI. The same source is used for obtaining percentage norms for wastage in the disposal of cereals between pre-marketing and the marketing transactions. The wastage in the latter only is taken

account of for the present exercise. The quantity retained for own consumption is a residual of production after deduction of intermediate use viz., seed, feed etc. and marketable surplus.

18.8. The norms for inter-industry consumption of cereals are taken from the relevant DMI reports and the quantities of cereals used as inputs in the production of various cereal products are calculated with the help of these norms. The inputs are evaluated by the prices of the relevant input commodities available from ASI. These are however marked up by the distributive margins suggested in the DMI reports to account for retail purchase by producers. For the years for which the ASI data on prices are not available, index numbers are utilised for measuring the change in prices.

18.9. The estimates of stock variations relating to cereals are based on the corresponding information utilised for framing estimates of capital formation. The stock variations on government account are taken from the data given in the budgets of the central and state governments and the value of stock held by the Food Corporation of India (FCI). The data from budgets are available in value terms for foodgrains as a whole. The total value thus obtained is disaggregated into rice, wheat and other grains assuming the same pattern of stock as held by the FCI.

18.10. Estimates of quantity of total available supplies on domestic account for final utilisation have been obtained after deducting intermediate consumption. In the absence of reliable data on retail prices, the quantities of cereals available for consumption on domestic account, are first evaluated at producers' prices. The total value other than own account consumption is then marked up by the addition of trade and transport margins to obtain the corresponding estimates at market prices. The producers' prices utilised are the same as those used for obtaining value of output for estimation of domestic product/value added. These prices are the primary producers' (ex-farm) prices inclusive of initial marketing costs to the producers. The total so obtained is netted for exports and government consumption and adjusted for imports and own account consumption to obtain estimates of final consumption.

18.11. In the absence of any other information, the DGCIS data on *c.i.f.* value of imports have been marked up by the same distributive margins as are utilised in the case of domestic product. Adjustment is made for net imports (in quantity and value terms) to obtain the estimates of total disposable supplies for consumption.

18.12. The consumption of cereals on government account is estimated on the basis of government expenditure on 'net purchases of commodities and services' further disaggregated into 25 groups. The group estimates relating

to 'food, beverages and tobacco' are disaggregated into individual items on the basis of DGS&D data on 'orders placed'.

18.13. To the total net supplies in quantity and value terms available for private consumption, the quantity and value respectively of cereals retained for own account consumption are added, the evaluation of the latter being done on the basis of producers' prices.

18.14. *Pulses.*—The pulses (whole as well as split), for which the estimates have been prepared are arhar, moong, urd, masoor, gram (split only) and the residual. The basic data, as in the case of cereals, are from the details available for measurement of value added. The data on quantities utilised for 'dal' and other products are based on the *Marketing Report on Pulses in India*, (DMI, 1958). The information on yield rates of finished products to the raw materials are based on ASI reports. The values for whole pulses are evaluated at producers' prices and marked up by the trade and transport margins 'split pulses' are evaluated at ASI output (ex-factory) prices and marked up by the distributive margins and milling charges suggested in the marketing reports.

18.15. *Milk and milk products.*—The items of milk & milk products for which estimates of private consumption expenditure have been prepared are milk (liquid), butter, 'lassi', ghee and 'other milk products'. The basic data on output and prices are the same as those utilised for preparation of domestic product estimates. While the quantities of milk and butter utilised for inter-industry consumption are based on ASI reports, such estimates in the case of 'ghee' are based on the DMI Report. Intermediate consumption in the case of 'lassi', is assumed to be 'nil'. The value of producers' prices are marked up by addition of trade and transport margins. A further processing margin is added to evaluate the various 'other milk products' from milk (liquid), 'ghee' and butter.

18.16. *Meat, fish and eggs.*—For meat and poultry, the estimates are prepared in respect of beef, pork, mutton, goat meat, buffalo meat, other meat of fowl, chicken and duck. The estimates are also prepared for fish and fish products, and eggs. The basic data on output and prices are the same as those utilised for the preparation of domestic product estimates. Trade and transport margins are added to obtain the output at market prices. While inter-industry consumption of poultry and eggs for further processing without losing their forms is assumed to be 'nil', such estimates for meat are based on ASI data. Similar estimates relating to fish are based on *Marketing of Fish in India—Third Edition* (DMI, 1961).

18.17. *Oilseeds and oil.*—Oilseeds for which the estimates have been prepared are sesamum, linseed, rape and mustard and the residual. The oil items are vanaspati (hydrogenated oil), mustard, coconut, gingelly, groundnut, linseed,

castor and the rest. The basic data on production, village retention and marketable surplus relating to oilseeds are the same as those utilised for the estimation of domestic product. The proportion of oilseeds for use as such and in the form of oils and oil cakes are based on the information contained in the *Marketing Reports* as also in the *Bulletin of Commercial Crops Statistics* (DESAg 1973, 1977). The producers' values of oilseeds consumed as such have been marked up by addition of trade and transport margins. The production data on edible oils have been directly obtained from the Ministry of Agriculture and Irrigation. The evaluation is on the basis of ASI output prices which have been moved for the recent years on the basis of the index numbers of wholesale prices. The trade and transport margins obtained from the ASI data, have been utilised for marking up the value of the portion processed through power mills. The margins for evaluation of the value at market prices for the portion processed through village ghanis are determined on the basis of the *Report No. 207, Tables with Notes on Household Non-registered Trade, 24th Round: 1969-70* (NSSO, 1973) and *Report No. 221, Tables with Notes on some Features of Household Non-Registered Trade, 24th Round: 1969-70* (NSSO, 1975). The data on output and stock variation of vanaspati are based on the *Monthly Statistics of Production of Selected Industries (MSPSI)* issued by the CSO. The data on production and utilisation of the two main minor oils viz., niger and safflower oils are based on the information contained in *Oilseeds in India, 1959-60* (DESAg, 1961) evaluation being made on the basis of ASI output prices.

18.18. *Beverages.*—The beverages for which the estimates have been prepared are tea, coffee, cocoa and the residual items. The data on production, utilisation, stock variations, etc. in respect of tea and coffee are from the MSPSI and the commodity reports. The output of tea in cured leaf form is evaluated at the ASI producers' prices and marked up on the basis of information contained in the annual reports, *Tea Statistics of India (Tea Board)*. The output of coffee seeds is evaluated for cured and powdered form by the addition of the differential of ASI input prices and the output prices to the product prices. The estimates for the residual beverages are on the basis of data from ASI.

18.19. *Other foods.*—The items constituting 'other foods' are biscuits, sugar confectionery, sugar cane juice, bread, other food items, and fruits and vegetable products. The estimates of production and stock variations for food preparations like biscuits, sugar confectionery, etc. are on the basis of information from MSPSI or ASI. For evaluation purposes, ASI output prices have been utilised. The value of fruits and vegetable products are worked out at the aggregate level only, by marking up the producers value of the commodities by

trade and transport margins, to obtain the value of final products. The items of fruits and vegetables for which the estimates are prepared are groundnut, coconut, copra, cashew kernels, banana, mango, grapes, citrus fruits, potato and others. The basic data on output, seed, food, etc., are the same as those utilised for the domestic product estimates excepting for 'copra' in which case the output is based on the *Report on the Marketing of Coconut and Coconut products in India 1962* (DMI, 1965). The data on wastage and inter-industry use in respect of mango, grapes, citrus fruits and potato are based on the Marketing Reports. In the case of groundnut, coconut and 'copra' etc., inter-industry consumption is already taken account of under oil and oilseeds. The data on production and stock variation of salt have been obtained from MSPSI and those relating to inter-industry consumption have been obtained from the *Draft Fourth Plan—Material and Financial Balances, 1964-65, 1970-71 and 1975-76* (Planning Commission, 1966). *Programme of Industrial Development (1956-61)* (Planning Commission, 1956). The average price of salt as estimated for 1969, has been moved to other years with the help of the index number of wholesale prices. The items of spices for which estimates have been prepared are black pepper, cardamom, dry chillies, dry ginger, turmeric and the 'residual'. While the basic data on output and producers' prices etc. are the same as those utilised for the preparation of domestic product estimates, the norms for wastage and inter-industry consumption are based on various Marketing Reports.

18.20. *Sugar*.—The estimates have been prepared for sugar under the categories of sugarcane, gur, refined sugar and palmgur. The basic data on sugarcane and gur are the same as those utilised for domestic product estimates. The utilisation pattern for sugarcane is taken from the details given in the *Bulletin on Commercial Crops Statistics* (DESAg 1973, 1977). The production and stock variation estimates of refined sugar have been obtained from MSPSI. The ASI ex-factory price of refined sugar has been marked up on the basis of a price differential worked out from the ASI input and output prices. The information given in the *Draft Fourth Plan—Material and Financial Balances, 1964-65, 1970-71 & 1975-76* (Planning Commission, 1966) has been utilised for working out inter-industry uses of sugar and gur. The data on production and prices in respect of palmgur have been obtained from the *Annual Report of Khadi and Village Industries Commission*.

18.21. The estimates of private consumption expenditure on all food items is the total of such expenditures on individual food groups. While in the case of cereals, pulses, biscuits, sugar, confectionery, refined sugar, salt, vanaspati, tea and coffee, the stock variations have been taken into account at the commodity/group level, for the rest of the groups, the

adjustment is made at the aggregate level, on the basis of corresponding data utilised for capital formation estimates.

18.22. *Non-food items*.—The procedure adopted for food items is largely followed to prepare the estimates for non-food items. However, the basic data are generally in terms of value only and no quantity data are available as in the case of food group. The estimates have been prepared by the groups, pan, tobacco and intoxicants, fuel and power, clothing, and durable and semi-durable manufactured goods (including miscellaneous articles and footwear).

18.23. *Pan, tobacco, intoxicants*.—The estimates have been prepared separately for pan, arecanut, tobacco, cigarettes, 'bidi', cigar, snuff, opium, alcoholic beverages and the residual items under each of the categories of 'pan', 'tobacco' and 'intoxicants'. In the case of 'pan', NSS estimates of household consumer expenditure have been utilised. The estimates for arecanut are domestic product based. For the residual items under the 'pan' and arecanut sub-group, 5 p.c. of the expenditure on these two items are added on an *ad-hoc* basis. The production in the case of tobacco is domestic product based, the information on utilisation is based on the *Marketing Report on Tobacco and Tobacco Product, 1954* (DMI, 1957). The total marketable surplus has been assigned to intermediate consumption and tobacco used for home consumption is assumed to form a part of the final consumption. The data on cigarette production and stock variation are based on 'MSPSI', and for evaluation, ASI output prices have been utilised, the trade and transport margins being estimated from data on wholesale and retail price differentials. The output of 'bidi' is based on the *Marketing Report of Bidi Tobacco, Tendu Leaf and Bidi in India, 1970* (DMI, 1973) and that of residual tobacco products like cigar, snuff, etc. are based on the *Marketing Report of Tobacco and Tobacco Products, 1954* (DMI, 1957). Estimates of opium and the other intoxicants are domestic product based. For alcoholic beverages, the information on per capita consumption expenditure obtained from the consumer expenditure surveys of the National Sample Survey is utilised and the estimates moved to other years with the help of changes in population and indices of wholesale prices.

18.24. *Fuel and power*.—The estimates have been prepared separately for coal, soft coke, firewood, vegetable waste, dung cake, kerosene oil, charcoal, lignite, gas coke, electricity, bagasse, liquid petroleum gas and safety matches. The data on production and prices in the case of firewood, vegetable waste, dung cake and bagasse are the same as those used for estimation of the value of output. Stock variation is assumed to be 'nil' for these items. Adjustments for net imports and trade margins have been made in the case of firewood only. The share of household consumption for these

items is based on the information given in the 'Demand for Energy in India, 1967 (NCAER). The data on output of coal, soft coke, charcoal and gas coke have been obtained from the *Monthly Review of Coal Production and Distribution* (Coal Controller and Chairman, Coal Board, Ministry of Steel, Mines and Metals). The evaluation has been at the retail prices at selected centres published in the *Monthly Abstract of Statistics* (MAS). For the years for which relevant data are not available, the available prices have been adjusted by the wholesale price index number. The share of private consumption has been estimated on the basis of the details in the *Demand for Energy in India, 1967* (NCAER). Data on production of lignites are from the annual publication, *Petroleum and Chemicals Statistics* (Ministry of Petroleum and Chemicals). The price data as given in the annual publication, *Basic Statistics Relating to the Indian Economy* (CSO) have been marked up by the trade and transport margins worked out for domestic product estimation; and the utilisation pattern is from the NCAER publication. For electricity, the required information is directly available from the 'Public Electric Supply, All-India Statistics', an annual publication of the Ministry of Energy. For years for which these details are not available, the estimates are moved with the help of composite index of availability and wholesale price. The output data for kerosene oil have been obtained from the quarterly publication *Central Excise Statistics*, Directorate of Statistics & Intelligence, Central Excise & Customs, Ministry of Finance. The evaluation is on the basis of rural retail prices collected by the NSS and government consumption data are taken from DGS&D. The production data on LPG are obtained from the annual publication *Indian Petroleum and Chemical Statistics* (Ministry of Petroleum and Chemicals). The unit prices have been worked out on the basis of retail prices collected directly from dealers. Basic sources for data on production and prices of safety matches are the ASI and the Khadi and Village Industries Commission.

18.25. *Manufactured goods*.—The data base for the preparation of the estimates for a majority of the manufactured items in the same as those utilised for domestic product estimation. As the commodity-wise details of value of products are not available in the ASI sample sector, it has been assumed that the pattern of production in the census sector holds good for the sample sector also. On this assumption, the values of products and by-products given from the sample sector at the three digit level are further broken up into products and by-products at commodity level on the pattern of the data available for the census sector. Detailed ASI results of production available for the latest year, are utilised for working out norms for estimation of output at commodity level. Applying these norms to the summary results (3-digit level) of ASI, available from year to year, the relevant commodity outputs are estimated.

18.26. For the unregistered manufacturing sector, the basic data on output are the same as those utilised for the preparation of domestic product estimates. The estimates by sixteen groups are further split up, to the extent possible, on the basis of working force for minor occupational groups in the 1971 census as adjusted for relevant factory employment to arrive at the value of output.

18.27. The estimates of distributive margins for the manufacturing sector are the same as those used for estimation of domestic product from trade and transport sector. These estimates of margins relating to 59 manufactured commodities have been arrived at from estimates for nineteen industry sub-groups in the organised sector and seven industry groups in the unregistered manufacturing sector. Distributive margins are also estimated for a few industry sub-groups on the basis of data on wholesale and retail prices of representative items. The retail prices are collected from various sources for comparable specifications in respect of corresponding items featuring in the Wholesale Price Index Series compiled by the Economic Adviser, Ministry of Industry. These sources are: (1) DESAg's Weekly Bulletins of Retail Prices of Essential Commodities (2) retail price data collected by NSSO from important urban and rural centres and (3) retail prices collected in connection with the International Comparison Project. The difference between retail price and corresponding wholesale price, expressed as a percentage of the latter, is taken as the distributive margin. Where fresh data on retail prices do not become available for any given year, the margins calculated for earlier years are moved with the help of index numbers of wholesale/retail prices. For some items of consumer durable like radios, air-conditioners, etc. the trade and transport margins have been estimated on the basis of price spreads obtained directly from leading dealers of the commodities concerned. The same distributive margins are applied to the imports also. In addition, import tariffs have been added and excise duties deducted.

18.28. The allocation of partly capital goods between current consumption and capital formation have been linked and final consumption estimates prepared as the counterparts of the corresponding estimates of capital formation. Data on stock variations are taken from 'MSPSI'. These are evaluated at the prices obtained from the Draft fourth plan—*Material and Financial Balances, 1964-65, 1970-71 and 1975-76* (Planning Commission, 1966) which have been moved to other years, with wholesale price index numbers.

18.29. The estimates for clothing have been prepared under the categories of cotton fabrics, silk fabrics, woollen fabrics, webbing and embroidery, thread and ball making, carpet weaving, hosiery and other knitted goods, clothing and tailoring, and khadi. The basic data on

the value of production in respect of mill-made cloth are obtained from the ASI (census and sample sectors). Estimates of government consumption are available from the DGS&D and stock variations for mill cloth are based on the *Indian Textile Bulletin* published quarterly by the Textile Commissioner, Ministry of Industry. Foreign trade statistics are obtained from the DGCIS. The value of cloth used for ready-made garments as available from ASI reports, is deducted from the total value of production. The mark ups for distributive margins are the same as those used in estimates of domestic product. For art silk, silk and woollen fabrics, clothing and tailoring, and residual industries, the estimates of output are based on ASI data and stock variation is taken in the same proportion as for the mill cloth. For government consumption and distributive margins, the source is the same as that for mill cloth. The estimates in respect of small scale production, which are domestic product based, have been estimated separately for the four sub-groups and added to the aggregate.

18.30. The estimates for durable and semi-durable goods including miscellaneous articles have been prepared in respect of a large number of items ranging from leather products and toilet articles to other consumer durables. In the case of some of these items like air-conditioners, refrigerators, etc., the contribution of the small sector is assumed to be nil. The basic data on the value of output are therefore taken from the ASI.

18.31. *Services*.—The services group, for the estimation of private consumption includes the principal heads of 'transport & communication' and 'other services'. The activities under 'transport and communication' are railways, road transport, air transport, water transport, services incidental to transport and communication. The items covered in category 'other services' are education and research, medical and health, religious, legal, business, recreational and entertainment services hotel & restaurants, domestic services, laundry services, barber and beauty shops, other personal services, sanitary services and services/occupations not elsewhere classified.

18.32. Transport services have been divided into road and rail transport services, repair services and services incidental to transport. Road transport is further sub-divided into 'mechanised' and 'non-mechanised' while water transport is sub-divided into organised shipping (i.e. ocean and coastal water transport operated by recognised shipping companies) and unorganised services consisting of ocean-going sailing vessels and boat services plying inland, i.e., in rivers and canals. Air transport consists wholly of services run by the two Corporations viz., Air India and Indian Airlines Corporation.

18.33. The estimates of private consumption in terms of purchase of services in respect of mechanised road transport (buses & tramways,

taxis and auto-rickshaws), rail transport, air transport and organised water transport are based on the total passenger earnings in these services. In the case of rail, air and organised shipping transport, the data on gross passenger earnings are directly obtained from, *Annual Report of the Railway Board*, *Annual Reports of Air India* and *Indian Airlines* and *Ports and Shipping Statistics*, (Ministry of Shipping & Transport). While 80 p.c., of the gross passenger earnings is treated as private consumption expenditure in the case of railways, only 5 p.c. of the earnings is taken to the private consumption expenditure in the case of air transport and 75 p.c. in the case of organised shipping.

18.34. As regards other models of mechanised road transport, namely, bus, taxi and auto-rickshaw, the gross passenger earnings are estimated as the product of average 'per vehicle earnings' and the total number of vehicles on road. The estimates of number of vehicles on road for different types of vehicles are available annually in the *Motor Transport Statistics* (Transport Research Division, Ministry of Shipping and Transport). The data on 'passenger earnings' for State road transport buses (including trams) are obtained from the annual publication, *Statistical Bulletin of State Road Transport Undertakings in India* (Ministry of Shipping and Transport). As regards taxis and auto-rickshaws, the estimates of average earnings per vehicle have been taken from the *Report of the Taxi Trade Enquiry Committee, 1972-73* (Government of Maharashtra, 1973). These estimates are assumed to hold good for the country as a whole and are moved over different years in proportion to the wholesale price index for diesel/petrol. The percentages of gross earnings treated as private consumption expenditure is taken as 90 in all these cases, viz., buses, taxis, and auto-rickshaws.

18.35. Non-mechanised road transport comprises animal drawn transport, three-wheeler cycle rickshaws, 'palkis', etc. For these services, as also for unorganised inland water transport, the estimates of private consumption are based on the value of output using the data given in the NSS Report No. 105, *Tables with Notes on Household Non-mechanised Transport and Utilisation of Working Animals*, 15th Round: 1959-60 (NSSO, 1966). The output to value added ratios are applied to estimates of gross value added available otherwise separately for rural and urban areas to obtain the estimates of these and then 95 p.c. is taken as the private consumption expenditure.

18.36. In the case of coastal and ocean-going shipping services, the estimates of gross domestic product from passenger services are converted to output using the proportion of domestic product to gross passenger earnings in organised shipping. Five per cent of this is treated as private consumption expenditure. For transport by boats in rivers and canals, gross value added is converted to gross output

with the help of ratios derived from the *NSS Report No. 105, Tables with Notes on Household Non-mechanized transport and utilization of Working Animals, 15th Round: 1959-60* (NSSO, 1966) already referred to. Ninetyfive p.c. of the output thus derived is assumed to constitute private consumption expenditure.

18.37. Repair services and maintenance costs connected with owned transport, falling in the ambit of private consumption expenditure, would include repairs and maintenance of motor cars, motor cycles/scooters and bicycles. The estimates of total costs of such maintenance and repairs are worked out as the product of per vehicle average cost per year and the number of vehicles. The per vehicle average cost is estimated on the basis of allowance prescribed for computing the rebate on income-tax in respect of repairs and maintenance of different vehicles. Annual data in respect of number of cars and two-wheelers other than bicycles are available from the '*Motor Transport Statistics*' (Ministry of Shipping and Transport). The number of bicycles on road is estimated from production data on the assumption of average road life of 10 years. The estimated per vehicle cost of repairs and maintenance is progressed by appropriate price index. The above costs are, however, exclusive of the cost of consumption of tyres and tubes for which separate estimates are prepared by commodity flow method. These estimates cover the consumption in respect of privately owned transport vehicles as well as vehicles plying for hire. Due allowance is made to estimate the part of consumption relating to privately owned vehicles only.

18.38. The estimates of private consumption expenditure for services incidental to transport are based on gross agency earnings which are also available from the same sources from where gross earnings of the various transport services are obtained. 5 p.c. of the agency earnings are ascribed to private consumption expenditure.

18.39. In the case of communications, items to be considered for consumption are those constituting the expenditure of households and private non-profit bodies on postal, telephone and telegraph services. The basic data are called out from the *Annual Report of the Posts and Telegraphs Department*. From the revenue data, the portion relating to sale of service stamps, expenditure on press and government telegrams, and money orders charges attributable to government account are separated out. The entire expenditure on telephonic services is attributed to non-household sector. Of the total residual expenditure, 40 p.c. is assumed to be the share of private consumption on the basis of the analysis of communication data.

18.40. In the case of hotels and restaurants, the estimates of gross value added are converted into the value of output on the basis of the corresponding relationship observed for similar

public limited' companies. Of the total expenditure, 33 p.c. is taken as private consumption.

18.41. The estimates under educational services have been obtained both for such services purchased by the households as also for the material facilities incidental to education like books and stationery. The estimates of direct expenditure including compensation paid to teachers at different levels of education are available on a regular basis from the annual publication *Education in India*, (Ministry of Education). Government expenditure obtained through purpose classification of expenditure contained in general government budgets have been deducted. The expenditure on books and stationery has been estimated on the basis of data on cost of text-books and stationary per student given in the *Report of the Education Commission, 1964-66* (Ministry of Education, 1966) relating to education upto the secondary level; and on the basis of *Socio-economic Survey of College Studies in Poona City, 1955-56* (Gokhale Institute of Economics and Politics, 1958), for higher education. The required enrolment data are taken from the annual publication: *Education in India* (Ministry of Education and Social Welfare).

18.42. The total expenditure on items like medical and health services rendered, drugs and pharmaceuticals and incidental expenditure on items like medical appliances, have been prepared separately. The estimates for the first category are obtained from corresponding domestic product estimates, and the estimates for drugs, etc. have been prepared using the commodity flow method. The production data relate to ASI for all systems of medicine, supplemented by the data for small scale manufacture given in the '*All India Report on the Census of Small Scale Industries, 1976/77 Vols. I & II*', (Development Commissioner, Small Scale Industries, Ministry of Industry, 1977). Government expenditure on these items have been determined from purpose classification of expenditure data contained in the general government budgets. The data on receipts by central government on account of Central Government Health Scheme (CGHS) are compiled from the central government's budget and taken as an item of household consumption.

18.43. Estimates of gross value added in respect of 'other services' are converted into value of output on the basis of estimates of total earnings and gross value added per principal worker available in *NSS Report No. 130, Tables with Notes on Professions and Liberal Arts, 18th Round: 1963-1964* (NSSO, 1968) and other similar data from different sources. The value of output is worked out for all industries under 'other services' except domestic services. In case of domestic service, value added is taken to be equivalent to value of output as the inputs are negligible for such services.

18.44. The estimates for religious and other community services, recreation and entertainment services and other personal services like domestic services, laundry, barber and beauty shops and sanitary services are domestic product based. The total output in the case of religious and other community services, recreation and entertainment and domestic services is treated as household consumption while for laundry services and barber and beauty shops, 98 p.c. of the output is taken. In case of sanitary services, other services and services not elsewhere classified, 50 p.c. of the output is taken as consumption expenditure. Seventyfive per cent of the value of output of legal services is considered as private consumption expenditure. The corresponding percentage in the case of business services is assumed to be 10. The private consumption expenditure on banking and insurance charges is estimated as the sum of the actual charges and imputed charges estimated independently. The method adopted for measurement of imputed bank charges is the same as for the different industrial sectors. These expenditures are treated as part of consumption on 'miscellaneous goods and services'.

18.45. The expenditure on house rent is estimated to include rented dwellings as well as those which are owner occupied and covers not only the total domestic product on this account but are inclusive of expenditure on repairs and maintenance. Water charges are computed for urban areas only at 3 p.c. of the net value added.

18.46. The estimates of expenditure on consumer taxes, cesses, fees and licenses, relate to consumer expenditure on radio and television licenses, private vehicle tax etc. Relevant data on radio and television licenses are obtained from the Annual Reports of Posts and Telegraphs Department. The data on expenditure relating to vehicle tax are obtained from the annual publication *Statistical Abstract of India* (CSO). The evaluation of cycle tax is based on the number of bicycles on road and a nominal tax per cycle.

18.47. The estimates thus obtained under the different categories are aggregated to obtain the corresponding estimate of total private final consumption expenditure at current prices.

Estimates at constant prices

18.48. In the case of foodgrains, pulses and sugar, the quantity estimates of private consumption for each of the years have been evaluated at the prices in the base year i.e., 1970-

71, in order to obtain estimates at constant prices. In the case of items like oilseeds, edible oils, salt, beverages, other food, tobacco & tobacco products and intoxicants, the current price estimates have been adjusted using the ratios of wholesale prices in the current and base years to obtain the estimates at constant (1970-71) prices. In the case of fruits and vegetables, milk and milk products, meat and meat products, poultry, fish etc., the ratio of the estimates of value of total output at current and constant prices have been used to deflate the current price estimates. For almost all items under the manufacturing group the ratios of current to 1970-71 prices as derived from ASI results are utilised to obtain the constant price series. For private consumption expenditure relating to the services the estimates at constant prices have been built up utilising the deflators in the corresponding current and constant prices estimates of domestic product.

Reliability, Objectivity and Current Status of Data

18.49. The basic data on output and prices are mostly the same as those utilised for the preparation of domestic product estimates and as such any shortcomings in these estimates would be inherent in the measurement of private consumption as well. The weakness of the estimates also lies in the fact that the estimates of inputs of agricultural commodities in agriculture & livestock industry and marketable surplus in respect of agricultural produce are based on outdated Marketing Reports often referring to one point of time only. The disaggregation of group level expenditure on government account to individual items is based on DGS&D data on 'orders placed'. Besides the fact that the coverage of the DGS&D data (particularly for the State Government) is quite inadequate and incomplete, the basic information does not relate to actual transactions but to 'orders placed'. The data for allocation of partly capital goods to private consumption expenditure and capital formation also need improvement. Trade and transport margins used for making up estimates of value of output at factor cost are based on extensive price data in the case of agricultural items only. For manufactured articles, these margins are calculated for broad industry groups on the basis of wholesale and retail price data for a few representative items only. Data on change in stocks are also not always complete, thus limiting the reliability of the estimates of private final consumption expenditure.