

Lecture Notes

Estimation of Gross Domestic Product (GDP),
State Domestic Product (SDP)

Contributed by the
National Academy of Statistical Administration
Central Statistics Office, India

Estimation of Gross Domestic Product (GDP)

There are three approaches of estimating the important macro aggregate the Gross Domestic Product (GDP)

Production approach
Income approach
Expenditure approach

In theory the three approaches give same result of GDP of the economy. However, in practice the estimates have to be reconciled in the Supply and Use Tables as the data coming from different sources has issues relating to quality, coverage, accuracy, etc.

Production approach

In production approach the GDP is obtained as the sum of gross value added (GVA) of all resident producer units (institutional units/sectors, or industries) at basic prices plus taxes less subsidies on products. GVA at basic prices of a producer unit/industry is estimated as the difference between its output at basic price and intermediate consumption at purchaser's price.

GVA at basic prices

$$= \text{Output at basic price} - \text{Intermediate consumption at purchaser's price}$$

Output may be market output, produced for own final use, or non-market output. Total value of output produced for own final use includes:

- Total value of output produced by household enterprise and consumed by same household
- Total value of fixed assets produced by a unit that are retained by it for use in future production
- Total value of change in inventories of finished goods and work-in-progress

Non-market output is valued at cost basis. Thus the value of non-market output equals

$$\begin{aligned} & \text{Value of intermediate consumption at purchaser's price} \\ & + \text{Compensation of Employees (CE)} \\ & + \text{Consumption of Fixed Capital (no operating surplus)} \end{aligned}$$

Output of a trading enterprise/unit is the margin it gets, computed as:

$$\text{Sales value} - \text{Purchase value} + \text{Additions to stocks of the products it trades}$$

Output of financial intermediaries is the sum of actual sales (charges) it receives for its services and financial intermediation services indirectly measured (FISIM). FISIM is computed as total interest and dividends received minus total interest and dividends paid.

This Courseware has been received with thanks from the National Academy of Statistical Administration (NASA), CSO, India for use in the SAARSTAT Web portal. Necessary editing has been done, wherever needed, without distortion of facts and figures.

To avoid double counting FISIM is allocated to the industries as intermediate consumption (thus subtracted from the GVA of various industries) and final uses in proportion to the services used by them.

Income approach

While the industry produces goods and services, income gets generated to the owners of resources. In income approach of estimation of the GDP these primary incomes that get generated to the owners of resources are to be captured in the economy. Thus for each of the industry the following components of GVA are to be obtained

- (i) Compensation of employees (payments made to the owner of human resource for labour)
- (ii) Net Operating Surplus
- (iii) Consumption of fixed capital (CFC)

Gross Operating Surplus is Net Operating Surplus plus Consumption of Fixed Capital (CFC). Gross Operating Surplus includes payments made to the owners of all other resources: rent to the owner of natural resource, interest to the owner of financial resource, profit/loss to the entrepreneurship, capital services to the owner of produced resource. In short all primary incomes other than compensation for labour)

Taxes less subsidies on production (which are irrespective of sales or profitability) are inside the GVA and thus inside the operating surplus

Expenditure Approach

GDP at market price is estimated as the sum total of following final uses:

- Household Final Consumption Expenditure
- Non-profit Institutions serving households (NPISH) Final Consumption Expenditure
- Government Final Consumption Expenditure
- Gross Fixed Capital Formation
- Change in Stocks
- Acquisition less disposals of Valuables
- Net Exports (Exports less Imports both valued f.o.b.)

Classification of Final Consumption Expenditure: There are three international classification schemes of expenditure according to purposes that help to aggregate final consumption expenditure and actual final consumption for comparison purposes:

- a) Classification of Individual Consumption According to Purpose (COICOP)
- b) Classification of the Purposes of Non-Profit Institutions Serving Households (COPNI)
- c) Classification of the Functions of Government (COFOG)

Main classes of consumption by purposes (COICOP)

- a) Food and non-alcoholic beverages
- b) Alcoholic beverages, tobacco and narcotics
- c) Clothing and footwear

- d) Housing, water, electricity, gas and other fuels
- e) Furnishings, household equipment and routine maintenance
- f) Health
- g) Transport
- h) Communication
- i) Recreation and culture
- j) Education
- k) Restaurant and hotels
- l) Miscellaneous goods and services

Main classes of Individual consumption of NPISH (COPNI)

- i) Housing
- ii) Health
- iii) Recreation and culture
- iv) Education
- v) Social protection
- vi) Other services

Main classes of Individual consumption expenditure of general government

- i) Housing
- ii) Health
- iii) Recreation and culture
- iv) Education
- v) Social protection

Estimation of GDP- in Indian National Accounts

In Indian national accounts for estimating GDP a mixed (production and income) approach is followed in different sectors. The economy is divided broadly by economic activity following National Industrial Classification (NIC 1998) that is fully compatible with the International Standard on Industrial Classification (ISIC), Rev.4. Gross Value Added (GVA) is estimated by economic activity by following broad classes as well as at disaggregated level:

1. Agriculture, Forestry and Fishing
2. Mining and Quarrying
3. Manufacturing- Registered and Unregistered
4. Electricity, Gas and Water supply
5. Construction
6. Trade, Hotels and restaurants
7. Transport: Railways, Transport by other means, Storage and Communication
8. Financing: Banking, Insurance, Real Estate, Ownership of dwellings and Business services
9. Community, social and personal services: Public Administration and Defence, and Other services

GVA from Agriculture and allied activities

Economic activities included in the sector are:

1. Growing of cereals and other crops;
2. Growing of vegetables, fruits, nuts, beverage, spice crops
3. Farming of livestock, poultry, livestock products
4. Agriculture and animal husbandry services
5. Operation of Government Irrigation System (OGIS)

Sources of data for output and intermediate inputs are: Land Use Statistics, Area and Out turn of Principal Crops, CCE, Cost of Cultivation Studies by Directorate of Economics and Statistics, Ministry of Agriculture (DESAg); Integrated Sample Survey for livestock and products production, Indian Livestock census(ILC), inter-census growth for estimating increment in stock; Directorate of Marketing and Inspection (DMI), NSSO, Central Silk Board, Khadi and Village Industry Commission (KVIC), and Government budgets for GVA of OGIS.

Main Inputs for the agriculture and allied activities are: Seed, Chemical Fertilizers, Organic Manure, Livestock Feed, Irrigation charges, Market charges, Pesticides and Insecticides, Diesel oil, Repair and Maintenance of fixed assets, Operational costs, FISIM

GVA from Forestry

Economic activities included in the sector are: Planting and conservation of forests, Logging, cutting of trees, transportation of forest products to sale depots, Farmyard wood (industrial and fuel wood), Minor products: bamboo, fodder, lac, sandalwood, honey, resin, gum, tendu leaves, cork, etc

Sources of data for output are: State Forest Departments (SFDs), Fuel wood from Surveys on Consumer Expenditure by NSSO. For inputs sources of data are: State government budget documents. Ratio of purchase of goods and services and repair and maintenance of fixed assets to total output comes to around 10 per cent.

GVA from Fishing

Economic activities included in the sector are: Commercial fishing in ocean, coastal and off shore waters, inland waters, subsistence fishing, gathering of sea weeds, sea shells, pearls, sponges, fish curing, and sun drying of fish

Source of data for output are: State Fisheries Department (SFDs): Fish production is captured under (i) marine- (a) coastal marine, (b) deep sea; and (ii) Inland- (a) aquaculture, (b) capture fisheries. Estimation of production is made by sample surveys in all maritime states.

Inputs cost comprising operational cost and Repair and Maintenance is taken as a ratio of total output of the activity. Input ratios in case of marine fish, prawns, inland and subsistence fish are 22.5, 22.5, 10 and 1 per cent of output of the respective activity.

GVA from Mining and Quarrying

Economic activities included in the sector are: Mining and agglomeration of coal, lignite, peat (NIC 101-103), Extraction of crude petroleum, natural gas & incidental services, Mining of uranium, iron ores, non-ferrous ores (NIC120,131, 132), Quarrying of stone, sand and clay, Other mining(141) and Other quarrying (142)

Sources of data for output are: Coal Controller of India, Basic Statistics on Indian Petroleum and Natural Gas, Oil and Natural Gas Commission (ONGC), Oil India Limited

(OIL), Indian Bureau of Mines (IBM), Monthly Statistics of Mineral Production, Department of Atomic Energy, Indian Rare Earths Ltd, Kerala Minerals and Metals Ltd. Sources of data for Inputs are: Coal India Ltd. and its subsidiaries for coal; Neyveli Lignite Corporation for lignite; ONGC and OIL for petroleum and natural gas. Output of crude petroleum is valued at Central Tank Farm at basic price deducting cess and sales tax. Mining expenses (deductible rates), state wise for major minerals are provided by IBM, Salt Commissioner's Office provides all information for salt made by evaporation. State Geological Departments provide information about minor minerals

GVA from Manufacturing

Economic activities included in the sector are: As per NIC 1998 the manufacturing covered under codes 15 to 37. GVA from manufacturing is estimated in two complementary sectors, namely Registered and Unregistered Manufacturing.

Registered Manufacturing sector covers all factories registered under Indian Factories Act, 1948 employing more than ten workers and using power; and employing more than 20 workers but not using power; and Bidi and Cigar establishments registered under Bidi and Cigar Workers Act 1966.

Sources of data for registered manufacturing is the Annual Survey of Industries (ASI) conducted by CSO and it provides all information on outputs and inputs at three digit level of NIC 1998. The repair service of Motor Vehicles and personal goods is now covered under Trade sector as per NIC 1998. Contribution of defence production units, railway workshops, coinage, mints and security printing presses is duly taken into account in the GVA from manufacturing. The source of information is the concerned government department budget documents.

GVA from Unregistered Manufacturing

Unregistered Manufacturing sector covers the complementary part of registered manufacturing. GVA of Unregistered Manufacturing sector are obtained as a product of the work force and the corresponding GVA per worker (GVAPW). Estimates are prepared for the bench mark (base) year and then moved forward to subsequent years on the basis of indicators representing physical volume of activity. For obtaining current price estimates appropriate price indices (WPI) are superimposed.

Sources of data for unregistered manufacturing sector are:

- (i) Third All India Census of Small Scale Industrial Units, 2001- 02, conducted and published by DCSSI
- (ii) 56th Round of NSSO (2000-01) for other un-organised manufacturing units
- (iii) Workforce estimates for 1999-2000 from the Report of the Working Group on Workforce estimation for the national accounts statistics with base year 1999-2000

GVA of Unregistered Manufacturing sector is compiled separately for the units belonging to Small Scale Industries (SSI) group and others. The following steps are followed to get the workforce estimate for the two categories:

- a. Total workforce (for NIC codes 151-372) is taken from the Working Group report and workforce of the registered manufacturing part (ASI,1999-2000) is deducted to obtain the workforce of the unregistered manufacturing sector

b. Total number of employees working in SSI sector (net of workers in SSI units covered under ASI) is obtained from DCSSI

c. Workforce of step 'b' above is deducted from step 'a' to obtain the residual workforce in non-SSI Unregistered manufacturing units

The follow-up surveys of Economic Census covering unorganised part consider establishments in three categories, namely Directory Manufacturing Establishments (DME) employing more than 5 workers, Non-Directory Manufacturing Establishments (NDME) employing 1 to 5 workers, and Own Account Manufacturing Enterprises (OAME) employing no hired worker.

DCSSI part- Gross Value of Output (GVO) is available from census; GVA of this part is obtained by using GVA/GVO ratio of DME and NDME part of the follow-up survey of Economic Census. GVA from SSI part is obtained as product of its workforce and GVAPW.

For obtaining GVA from non-SSI unregistered part, GVAPW is obtained at 3 digit level of NIC separately for OAME, NDME and DME - rural, urban combined for the base year. Total GVA of this part is obtained as the product of workforce and GVAPW industry wise. GVA estimates for subsequent years are obtained by moving base year estimates with the help of Index of Industrial Production (IIP). Current price estimates are obtained by superimposing the price changes as revealed by the indices of wholesale prices. GVA estimates at industry level in respect of unregistered manufacturing sector are obtained by adding the industry wise estimates of DCSSI- part and survey part.

GVA from Construction

Construction broadly comprises of two components: (i) Accounted Construction (Pucca Construction), (ii) Un-accounted Construction (Kutchha Construction). Output of Pucca Construction is estimated by commodity flow method while of Kutchha Construction by expenditure method.

Commodity flow approach covers basic materials, other construction materials, and primary inputs –compensation and operating surplus. Basic construction materials include

- (i) Cement and Cement Products
- (ii) Iron and Steel
- (iii) Bricks and Tiles
- (iv) Timber and Round Wood
- (v) Fixtures and Fittings

Above five basic materials account for 72.5% of total construction materials, remaining 27.5% is other construction materials. Contribution of primary inputs to the construction activity is assumed to be 53.4 % of the total cost of all construction materials. For Pucca construction the GVA is thus taken to be 34.8% of the value of output.

The unaccounted construction is undertaken with the freely available traditional materials. The unaccounted construction includes land improvements, plantation crops under cultivated assets, wind mills, aero -turbines, wind turbines, etc. In case of labour intensive Kutchha construction, the GVA is taken to be 75% of the value of output on a uniform basis.

GVA from Electricity, Gas and Water Supply

GVA of Electricity and Water Supply are estimated by income approach, while that of Gas by production approach.

Sources of data for electricity are General Review of the Public Electric Supply-All India Statistics. Annual publication of Central Electricity Authority provides information for both public and private sector. Sources of data: for Water Supply are (i) Budget documents of Central and State Governments, (ii) Municipal data on CE, (iii) DGET data on public sector employment engaged in water supply activity.

Estimates of CE for the private sector part of water supply are prepared using estimated workforce and average CE of municipal workers engaged in water supply services. Estimates of CFC are prepared separately using the perpetual inventory method (PIM).

Sources of data for gas are (i) Annual accounts of Gas Authority of India (GAIL), (ii) Annual report of KVIC and (iii) Number of bio-gas plants from Ministry of Non-conventional Energy Sources. GVA for gas is estimated by production approach, value of output at basic prices minus total value of intermediate inputs at purchaser's prices.

GVA from Trade

Economic activities included in the sector are: Repair and Maintenance of Motor Vehicles, Sale of Motor vehicles, Repair of personal household goods, Wholesale trade except motor vehicles, Auctioning activities, Retail trade except motor vehicles.

GVA estimates of Trade sector are prepared separately for public sector units, Private organised sector consisting of corporate and cooperative units, and Private unorganised sector.

Annual reports (profit-loss account and balance sheet) of public sector units are analysed to get GVA and other aggregates. GVA of Private corporate sector are prepared using results of RBI study of finances of sample companies. GVA of sample companies is inflated by the ratio of PUC of all companies engaged in trade. GVA of cooperative societies (for trade only) are prepared using information from 'Statistical Statements relating to Cooperative Movement in India, Part II-Non-credit societies' NABARD.

GVA of Maintenance and Repair of Motor Vehicles and Repair of personal household goods are prepared as a product of workforce and GVAPW which is taken from corporate sector in absence of any other exact information.

GVA of private unorganised sector is estimated as a product of workforce (labour input) and GVA per worker. In absence of follow-up survey on trade after 53rd round of NSSO, estimate of GVAPW of all enterprise category available in the Informal sector survey 55th round (1999-00) of NSS is used.

For preparing GVA estimates for subsequent years for all components of private unorganised sector except Maintenance and Repair of motor vehicles, specially prepared Gross Trading Income (GTI) of commodity producing sectors is used. GTI constructed using output at current prices is used to obtain the current price estimates.

'Maintenance and Repair of Motor Vehicles' base year GVA are extrapolated with index number of registered vehicles. Constant price estimates are inflated with CPI-IW to obtain current price estimates of GVA of this activity

GVA from Hotels and Restaurants

Economic activities included in the sector are: Hotels, camping sites (NIC 551), Restaurants, bars, canteens (NIC 552). GVA estimates are prepared separately for Public Sector units, Private Organised Sector and Private Unorganised Sector units.

Annual reports (profit-loss account and balance sheet) of public sector units are analysed to get GVA and other aggregates. GVA of Private corporate sector are prepared using results of RBI study of finances of sample companies. GVA of sample companies is inflated by the ratio of PUC of all companies.

GVA of private unorganised sector are prepared using the GVAPW from Enterprise Survey 2001-02 and workforce estimate of the activity obtained by deducting the number of workers in public and private organised segment available from DGE&T from the total estimated workforce.

Current price estimates for subsequent years are obtained by moving the base year estimates with GTI constructed using output at current prices.

GVA from Transport, Storage and Communication

Economic activities included in the Transport, Storage and Communication sector are: Transport via Railways, Other Land transport, Air transport, Water transport, Supporting and auxiliary transport activities, Storage and Warehousing, Posts and Courier activities, Telecommunications.

For Railways Annual Report and Accounts and Annual Statistical Statements, Railway Board; and Budget documents of Central Government on Railways are the main sources of data. Analysis of the Budgets and report provides the estimates of GVA and other aggregates.

Other land transport includes Mechanised Road transport and Non- mechanised Road transport. Mechanised Road transport includes transport by buses, other vehicles, and trucks. Estimates of GVA are prepared separately for organised (public) and unorganised parts.

GVA estimates of organised part is prepared by analyzing the annual accounts of State Road Transport Corporations. Constant price GVA is estimated by moving base year estimate with quantum index of passenger kilometers.

GVA estimates of unorganised part is prepared as a product of GVAPW and workforce. For subsequent years the base year estimate is moved with index of registered vehicles. Current price estimate is obtained by superimposing CPI-IW.

Non- mechanised road transport is entirely unorganised, GVA of Non- mechanised road transport is prepared as a product of GVAPW and workforce. For subsequent years

the base year estimate is moved with inter survey workforce growth rate. Current price estimate is obtained by superimposing CPI-IW.

For Air transport estimates of GVA are prepared separately for public and private organised parts. Current price GVA estimates are prepared by analyzing the air transport part of the Budget documents and annual accounts of Airlines (both public and private). Constant price estimates by moving base year GVA with air transport volume index and combined index of passenger and cargo traffic handled in the airports

For Water transport estimates of GVA are prepared separately for organised public, organised private and unorganised parts. Current price GVA estimates are prepared by analyzing the water transport part of the Budget documents and annual accounts of public (and private) shipping companies and inland water shipping companies. Constant price estimates by moving base year GVA with index of cargo handled at major ports. Base year GVA estimates of unorganised water transport are prepared as a product of GVAPW of ES 2001-02 and workforce

Supporting and auxiliary transport activities include organised public and unorganised parts. Current price GVA estimates of organized public sector part are prepared by analyzing the light houses and light ships part of the Budget documents and annual accounts of companies engaged in services incidental to water and air transport like Port Trust, Inland Water Authority, Dredging Corporation, Airport Authority of India. GVA at constant prices is obtained by deflating the current price GVA with CPI (IW)

GVA of Supporting and auxiliary transport activities (unorganized) in the base year is compiled as a product of GVAPW of ES 2001-02 and labour input. For subsequent years the base year estimate is moved with inter survey workforce growth rate. Current price estimate is obtained by superimposing CPI-IW.

GVA from Storage and Communication

Storage and Warehousing include Warehousing corporations, Cold storage, storage.n.e.c. GVA of Warehousing corporations is obtained by analysing annual accounts of state and central warehousing corporations. GVA of Cold storage is based on the results of ASI. GVA of storage, n.e.c. is prepared as a product of GVAPW of ES 2001-02 and labour input.

Estimates of FVA for Communication Services are compiled separately for public organized, private organized and unorganized segments. For public sector part, Annual reports and accounts of Indian Posts & Communication Department are used.

Communication Services private sector part includes Courier activities, Cable operators, Other communications and GVA is obtained as a product of GVAPW and labour input. Courier services and Cable operators GVA are estimated as product of GVAPW of ES 2001-02 and labour input. For subsequent years labour input is estimated using inter-survey average compound growth rate of quinquennial employment in NSS surveys observed between 1993-94 and 1999-00. Other communication services GVA is estimated as product of GVAPW of ES 2001-02 and labour input. For subsequent years labour input is moved using growth in number of cellular subscribers and landlines connections. The GVAPW of rural and urban sectors is projected to subsequent years with the index of CPI (AL) and CPI (IW) respectively.

GVA from Banking and Insurance

Economic activities included in the banking and insurance sector are Banks, Banking department of RBI, Organised Non-banking financial enterprises, Unorganised Non-banking financial institutions, Post Office Saving Bank, Cooperative Credit Societies. Gross output of banks and other financial intermediaries is sum of actual service charges and imputed service charges (Financial intermediary services indirectly measured- FISIM). Estimates of GVA are obtained by income approach. FISIM is allocated to industries as intermediate use and to final users in proportion to their usage of service.

Sources of data for the banking sector are Statistical Tables relating to Banks in India, published by RBI, Annual report of RBI and profit and Loss account of Banking department, Annual reports of public sector NBFCs, Performance of NGNBFCs. GVA of organised part of banking is obtained by income method using above source materials. GVA of unorganised NBFIs is taken as one third of the GVA in organised activities. Statistical Statements relating to Cooperative Movement in India, Vol.1, Credit Societies, NABARD is the data source for cooperative credit societies.

The insurance sector includes Life Insurance and Non-life Insurance. Sources of data for the Life Insurance sector is Annual report of Life Insurance Corporation (LIC) which gives all details to compute GVA. Output is estimated as Premium receivable less Claims payable less increase in actuarial reserves. Reports of General Insurance Corporation and its Subsidiaries are used to estimate GVA of non-life insurance.

GVA from Business services

Benchmark estimates of GVA of Business services (except software development) are prepared separately for organised and unorganised segments using VAPW and labour input. VAPW estimates for unorganised sector are taken from ES 2001-02.

For software development activity National Association of Software and Service Companies (NASSCOM) data of output is used. GVA to GVO ratio is obtained from annual reports of various companies engaged in the activity.

For subsequent years estimate of workforce is prepared using inter survey average compound growth rate of employment. GVAPW for rural, urban; organised, unorganised segments are projected to subsequent years with the CPI(AL) and CPI(IW).

GVA from Real Estate, Ownership of dwellings

GVA estimates of Real Estate units are compiled as product of workforce and GVAPW for the respective rural, urban; organised, unorganised segments. Ownership of dwellings output is estimated as imputed gross rental of residential buildings (including owner occupied) and input is Repair and maintenance of dwellings, estimated using results of NSS Household Consumption Expenditure data. GVA is output minus input.

GVA from Public Administration and Defence and Other services

Economic activities included in Other services are those which fall under NIC 80,90,91,93,98,99.

GVA of Public Administration and Defence includes CE and CFC only. Constant price estimate is obtained by deflating with CPI (IW)

Activities of Other services are considered separately for public sector, private organised sector and private unorganised sector. GVA of activities in public sector are compiled by analysing budget documents and annual accounts of units. GVA of activities in private organised and unorganised sector are prepared by labour input method and benchmark indicator procedure

Estimation of Gross State Domestic Product (GSDP)

Estimates of income at State level are prepared following income originating rather than income accruing approach due to practical reasons.

Estimation of GVA of supra-regional sectors which cut across the boundary of states (Railways, Communication, Banking and Insurance and Central Government Administration) are done centrally by CSO by allocating the country level estimate to the states on the basis of appropriate indicators.

Methodology of estimation of GVA of all sectors (except supra-regional) is similar to the one at country level.

Estimation of GVA of supra-regional sectors:

Railways: All India GVA figure segregated into CE and operating surplus are extracted from budget documents. General Manager's annual report of nine zones and Indian Railways Annual Statistical Statements (IRASS) help in segregating GVA to nine zones. CE of Railway Board and its offices is allocated to the states where the offices are located. GVA on account of passenger and goods traffic for each zone is distributed to different states on the basis of average total daily number of vehicles run on the section and net tonne km per route km per day respectively among different states falling within a zone

Banking and Insurance: For banks all India estimate of CE are distributed among states on the basis of number of employees located in the state. For other categories of institutions appropriate indicators (W&S, loan outstanding, financial disbursement, loan released) are used to allocate GVA to states

For *Post Office Savings Bank* all India estimate of GVA is allocated in the ratio of state wise gross collections under small saving schemes

For *Life Insurance Corporation* all India CE is distributed in the ratio of state wise no. of employees and surplus and commission to agents in proportion of state wise net premium income.

For *Non-life Insurance* all India estimate of GVA is allocated in the ratio of state wise income from business

For *Posts and Communication* data for indicators is received from the Departments of Posts and Communication

For Central Government Administration CE of defence employees, offices abroad, para military forces, Issue Dept of RBI, atomic energy are netted and the balance is distributed in the ratio of state wise number of central government employees

Off shore activities of drilling oil are excluded. GVA of Air and water transport are distributed on the basis of suitable indicators by CSO

NSDP divided by the estimated mid year population of the state is the per capita state income

References

- *National Accounts Statistics: Sources and Methods, 2007, CSO, MOSPI*
- *Final Report of the Committee on Regional Accounts, CSO, Department of Statistics, Ministry of Planning, GOI, September, 1976*