

## **NOTES ON METHODOLOGY AND REVISIONS IN THE ESTIMATES**

The present series on National Accounts Statistics was introduced in 2006 through a brochure entitled “New series on National Accounts Statistics (base year 1999-2000)” after a comprehensive review of both the data base and the methodology employed in estimation of various aggregates. The estimates presented in this issue of National Accounts Statistics (NAS) are based on the methodology given in the above-mentioned brochure, as also in the CSO’s publication, National Accounts Statistics: Sources and Methods, 2007”.

Besides the usual statements on macro economic aggregates, domestic product, consumption, saving and capital formation, public sector transactions and disaggregated statements, this issue includes five special statements. The Statement S-1.1 and S-1.2 presents Macro Economic Aggregates & population at current and constant (1999-2000) prices. The Statement S-2, as in the past gives depreciation as provided in the books of accounts for various institutions. The Statement S-3 gives value of output and domestic product from livestock sector utilising the input-output ratios as specially worked out for the Input-Output Transactions Tables. The special statements S-4 and S-5 give advance and quarterly estimates of Gross Domestic Product and expenditure for the year 2006-07 at current and constant (1999-2000) prices.

The sources of revisions in the estimates made due to availability of fresh/revised data are given below:

### **REVISION OF ESTIMATES DUE TO FRESH/REVISED DATA**

The quick estimates and the estimates for the previous years of macro economic aggregates and their disaggregated components published in NAS 2007 have undergone revision due to fresh/revised data becoming available. Sources of data utilised for the revision of the estimates are given below:

#### **A: Domestic Product**

##### ***1. Agriculture***

- 1.1 All India Final Estimates of Crops, 2003-04 to 2005-06.
- 1.2 Fully Revised Estimates of Crop Production, 2003-04 to 2005-06.
- 1.3 Land Use Statistics - Area Under Crops, 2003-04, as well as data received from states.
- 1.4 Revised Estimates of Production of Milk, Eggs and Wool - 2003-04 to 2005-06 received from Department of Animal Husbandry & Dairying, Ministry of Agriculture.
- 1.5 Revised Estimates of Meat Production, received from State Governments for the years 2003-04 to 2005-06.
- 1.6 Revised Data on prices of agricultural commodities and livestock products from 2004-05 onwards received from State Governments.

## 2. ***Forestry & Logging***

Data on production and prices of industrial wood and minor forest products and data on prices of fuel wood for 2003-04 to 2005-06 received from Principal Chief Conservators of Forests/ State DESs.

## 3. ***Fisheries***

Data on production and prices of marine fish, inland fish and prawns for 2003-04 to 2005-06 received from the State Fisheries Departments, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and State DESs.

## 4. ***Mining & Quarrying***

- 4.1 Mineral Production, 2005-06 to 2006-07 from "Monthly Statistics of Mineral Production" March 2007, respectively issued by Indian Bureau of Mines (IBM).
- 4.2 Annual Reports of Coal India Ltd. and its subsidiaries.
- 4.3 Coal Directory of India.
- 4.4 Input-Output data from Oil and Natural Gas Corporation (ONGC) and Oil India Ltd. (OIL).
- 4.5 Input data from Neyveli Lignite Corporation.
- 4.6 Input data of Minerals for 2004-05 received from IBM.
- 4.7 Production of Minor Minerals, 2001-02 to 2005-06 from the State Geological Departments.
- 4.8 Annual Report of the Salt Department, 2006-07.

## 5. ***Manufacturing( Registered)***

- 5.1 Index of Industrial Production from the CSO
- 5.2 WPI from the Office of Economic Adviser, Ministry of Industry
- 5.3 Input-Output data on Defence (Manufacturing Units) from Ministry of Defence
- 5.4 Centre/State Budgets for Railway workshops, Mints and Security Printing Press

## 6. ***Manufacturing ( Un-registered)***

- 6.1 Index of Industrial Production from the CSO.
- 6.2 WPI from the Office of Economic Adviser, Ministry of Industry.

## 7. ***Construction***

- 7.1 Sources listed at Serial No.2 and 5.
- 7.2 Report on Un-organised manufacturing Sector in India by the NSSO, 2000-01, Report No.477 (56/2.2/1).
- 7.3 Finances of Joint Stock Companies, Reserve Bank of India.
- 7.4 Data on Rubber plantations crops from Rubber Board.
- 7.5 Data on area on plantation crops from State DESs.
- 7.6 Data on Cement Consumption from Cement Manufacturers' Association.
- 7.7 Data on Iron and Steel from Joint Plant Committee.

## 8. ***Electricity, Gas and Water Supply***

- 8.1 Annual Reports of State Electricity Boards.
- 8.2 Annual Reports of electricity generating companies in Private Sector

- 8.3 Annual Reports of Gas Authority of India Limited.
- 8.4 Annual Report of Indraprastha Gas Ltd.
- 8.5 Ministry of Non-Conventional Energy.
- 8.6 Khadi & Village Industries Commission (KVIC).
- 8.7 Budget documents of Centre and States.

**9. Trade, Hotels and Restaurants**

- 9.1 Sources mentioned at Serial Nos.1, 2,3,4,5 & 6.
- 9.2 Additional annual reports of public sector undertakings for the year 2003-04 onwards.
- 9.3 Index of Unit Value of Imports from Directorate General of Commercial Intelligence & Statistics (DGCIS), Ministry of Commerce for the year 2003-04 onwards.
- 9.4 Total Paid up Capital of Public and Private Limited Companies from Department of Company Affairs for the year 2003-04 onwards.

**10. Railways, Communication and Public Administration & Defence**

- 10.1 Budget documents for the year 2007-08 giving actual figures for the year 2005-06 and Revised Estimates for 2006-07.
- 10.2 Annual Accounts of Mahanagar Telephone Nigam Limited (MTNL), Millennium Telecommunications Limited (VSNL), Bharat Sanchar Nigam Limited (BSNL), Konkan Railway and DMRC for the year 2005-06 & 2006-07.

**11 Transport by Other Means and Storage**

- 11.1 Number of motor vehicles from State Directorates for the years 2003-04 onwards.
- 11.2 Additional Annual Reports of Public Sector Undertakings and Private companies engaged in road, water and air transport activities for the year 2003 -04 onwards.
- 11.3 Budget documents containing data on ports, pilotage and lighthouses and other departmental enterprises engaged in road transport activities listed at Serial No. 10.1.
- 11.4 Additional Annual Accounts of Central and State Warehousing Corporations.

**12. Banking and insurance**

The value added in the Banking and Insurance sector has been revised for the year 2005-06 due to availability of additional annual reports/accounts in respect of non-departmental financial enterprises. Private companies engaged in the insurance activity have been analysed for estimation of GDP and included in this sector.

**13. Real Estate, Ownership of Dwellings, Business Services and Legal Services Sector**

- 13.1 NASSCOM's data on production of software for the year 2003-04 to 2006-07.
- 13.2 CPI (AL) and CPI (UNME).
- 13.3 Data on repairs & maintenance of ownership of dwellings based on AIDIS for the years 2002-03 to 2006-07.

**14. Other Services**

- 14.1 CPI (AL) and CPI(UNME).
- 14.2 Data on employment in public sector for Medical health & Veterinary services from DGE&T.
- 14.3 Revised data on employment and compensation paid to employees engaged in sanitary services in different municipalities obtained from state governments for the years 2003-04 onwards.

## **B: Private Final Consumption Expenditure, Saving and Capital Formation**

### **15. Private Final Consumption Expenditure.**

Estimates have been revised from 2000-01 onwards due to availability of fresh/revised data of output, change in stocks, export & import etc. The sources are Monthly Statistics of Foreign Trade of India and as listed at 1- 14, 17.8, 17.9.

### **16. Saving**

- 16.1 Revised data on net deposits, investments in shares and debentures, net claims on Government, etc. for household sector for earlier years received from RBI.
- 16.2 For revision in estimates of saving in physical assets, please see item 17.
- 16.3 Revised data on saving of private corporate sector received from RBI.
- 16.4 Saving of public sector revised from 2000-01 and 2001-02 received from NABARD PUBLICATION "STATISTICAL STATEMENTS RELATING TO THE CO-OPERATIVE MOVEMENT IN INDIA 2001-02.
- 16.5 Saving of Public Sector revised from 2000-01 and onwards because of revision in CFC as mentioned in Item No. 18.
- 16.6 Revision in the Saving of Quasi Corporate and Quasi Govt. Bodies because of revision of CFC.

### **17. Capital Formation**

- 17.1 Sources mentioned at Serial Nos.5, 6, 7, 8.1, 10.1 and 10.2.
- 17.2 Monthly Statistics of Foreign Trade in India.
- 17.3 Annual Survey of Industries 2004-05 – Summary Results for the Factory Sector.
- 17.4 Revised data on Capital Formation, Private Corporate Sector received from RBI.
- 17.5 Revised data for Co-operatives Societies in India received from NABARD.
- 17.6 Capital Formation of Public Sector revised from 2003-04.
- 17.7 Whole Sale Price Index: Office of the Economic Adviser.
- 17.8 Index of Industrial Production (IIP) - Central Statistical Organisation.
- 17.9 Import and Excise Duties – Statistics of Customs & Revenue Collection of the Indian Union.

### **18. Consumption of Fixed Capital**

Estimates of consumption of fixed capital (CFC) have been revised because of some improvement in the methodology. The estimates of CFC are prepared by perpetual inventory

method (PIM) considering individual type of asset for each industry for each institution. The method used to estimate CFC by PIM takes into consideration the estimate of opening stock (OS) of the economy in the year 1950-51 with the assumption that the OS has already lived half of its life.

**C: Public Sector Transactions**

Statements on Public Sector Transactions have undergone revision from 1999-2000 due to revised estimates of CFC from 1999-2000 onwards and availability of additional/revised/fresh data in respect of Departmental Enterprises and Administrative Departments from budget documents, annual accounts of RBI, Employees Provident Fund Organisation (EPFO), research and scientific institutions covered in 'Public Services in Quasi-Govt. Bodies' and the annual accounts of Non-Departmental Enterprises.

**D: Factor Incomes by Organised and Un-organised sectors**

Detailed concepts of the estimation of factor incomes by organised and un-organised sectors are given in the publication 'National Accounts Statistics: Sources and Methods, 2007.

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