# 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 presents Estimation of Rural and Urban income. 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 statement S-4 gives advance estimates of national income 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 2006 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, 1999-00 to 2004-05.
- 1.2 Fully Revised Estimates of Crop Production, 1999-2000 to 2003-04.
- 1.3 Land Use Statistics Area Under Crops 1999-00 to 2003-04, as well as data received from states.
- 1.4 Revised Estimates of Production of Milk, Eggs and Wool -1999-00 to 2004-05 received from Department of Animal Husbandry & Dairying, Ministry of Agriculture.
- 1.5 Revised Estimates of Meat Production, received from State Governments for the years 1999-00 to 2004-05.
- 1.6 Revised Data on prices of agricultural commodities and livestock products from 1999-2000 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 1999-00 to 2004-05 received from Principal Chief Conservators of Forests/ State DESs.

#### 3. Fisheries

Data on production and prices of marine fish, inland fish, prawns & deep sea fishing, for 1999-00 to 2004-05 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, 2004-05 to 2005-06 from "Monthly Statistics of Mineral Production" March 2006, 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 2003-04 received from IBM.
- 4.7 Production of Minor Minerals, 2001-02 to 2004-05 from the State Geological Departments.
- 4.8 Annual Report of the Salt Department, 2005-06.

## 5. Manufacturing (Registered)

- 5.1 Annual Survey of Industries, 1999-2000, CSO, I.S. Wing, Kolkata.
- 5.2 Index of Industrial Production from the CSO
- 5.3 WPI from the Office of Economic Adviser, Ministry of Industry
- 5.4 Input-Output data on Defence (Manufacturing Units) from Ministry of Defence
- 5.5 Centre/State Budgets for Railway workshops, Mints and Security Printing Press

## 6. Manufacturing (Un-registered)

- 6.1 Third All India Census on Small Scale Industrial Units 2001-02 conducted by Office of the Development Commissioner, Small Scale Industries(DCSSI).
- Report on Un-organised manufacturing Sector in India by the NSSO, 2000-01. Report No.477 (56/2.2/1).
- 6.3 NSS/Population Census for Workforce (WF) Estimates.
- 6.4 Index of Industrial Production from the CSO.
- 6.5 WPI from the Office of Economic Adviser, Ministry of Industry.

## 7. Construction

- 7.1 Sources listed at Serial No.2, 5, and 6.2.
- 7.2 Finances of Joint Stock Companies, Reserve Bank of India.
- 7.3 Data on coffee plantations and rubber plantations, respectively from the Coffee and Rubber Boards.
- 7.4 Data on tea plantation from Tea Board.

## 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.

## 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 2000-01 onwards
- 9.3 Index of Unit Value of Imports from Directorate General of Commercial Intelligence & Statistics (DGCIS), Ministry of Commerce for the year 2001-02 onwards.
- 9.4 Total Paid up Capital of Public and Private Limited Companies from Department of Company Affairs for the year 2000-01 onwards.

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

- Budget documents for the year 2006-07 giving actual figures for the year 2004-05 and Revised Estimates for 2005-06.
- 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 2004-05 & 2005-06.

# 11 Transport by Other Means and Storage

- 11.1 Number of motor vehicles from State Directorates for the years 2000-01 onwards.
- 11.2 Additional Annual Reports of Public Sector Undertakings and Private companies engaged in road, water and air transport activities for the year 2001 -02 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.
- 11.5 "Motor Transport Statistics", 1999-2000 published by Ministry of Surface Transport.

## 12. Banking and insurance

The value added in the Banking and Insurance sector has been revised for the year 2003-04 and 2004-05 due to availability of additional annual reports/accounts in respect of non-departmental financial enterprises and revised study of RBI on NGNBFIs published in November,2006 RBI bulletin. For the year 2005-06 for NGNBFI's growth observed in the year 2004-05 has been applied over 2004-05. 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 2002-03 & 2003-04.
- 13.2 CPI (AL) and CPI (UNME).
- Data on repairs & maintenance of ownership of dwellings based on AIDIS 2002-03 for the years 1999-2000 to 2005-06.

#### 14. Other Services

- 14.1 CPI (AL) and CPI(UNME).
- Data on employment in public sector for Medical health & Veterinary services from DGE&T, Ministry of Labour for the year 2001-02.
- 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 1999-2000 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 1999-2000 and onwards because of sources fresh/additional data listed at Serial Nos.8.1, 10.1, 10.2 and 11.2 relating to government budget documents and additional Annual Reports of non-departmental public sector undertakings.
- 16.5 Revision in the Saving of Quasi Corporate and Quasi Govt. Bodies.

## 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 Provisional summary Results for the Factory Sector
- 17.4 Revised data on Capital Formation, Private Corporate Sector received from RBI
- 17.5 Capital Formation of Public Sector revised from 2002-03.
- 17.6 Whole Sale Price Index: Office of the Economic Adviser.
- 17.7 Index of Industrial Production (IIP) Central Statistical Organisation.
- 17.8 Excise Duties, 2004-05 Statistics of Customs & Revenue Collection of the Indian Union.
- 17.9 Import Duties, 2004-05 Statistics of Customs & Revenue Collection of the Indian Union.

## 18. Consumption of Fixed Capital

Estimates of consumption of fixed capital are prepared from the value of various types of assets included in fixed capital stock and the expected life thereof and these estimates differ from the provision of depreciation as per books of accounts (c.f. National Accounts Statistics, Sources and Methods, 2007). Depreciation as per books of accounts is given in special statement S-2. Alternative estimates of net Saving / Capital formation can be derived using

provision for depreciation. The CFC estimates have undergone revision since 2001-02 due to changes in the estimates of gross fixed capital formation.

## **C:** Public Sector Transactions

19.1 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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