

NOTES ON METHODOLOGY AND REVISIONS IN THE ESTIMATES

The present series on National Accounts Statistics was introduced through a brochure entitled “New series on National Accounts Statistics (base year 2004-05)” released on 5th March 2010 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.

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 Statements S-1.1 and S-1.2 presents Macro Economic Aggregates & population at current and constant (2004-05) 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, S-5 and S-6 give advance, quarterly estimates of Gross Domestic Product and quarterly estimates of Expenditures of GDP at market prices for the year 2013-14 at current and constant (2004-05) 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 first revised (earlier referred to as “quick”) estimates and the estimates for the previous years of macro economic aggregates and their disaggregated components published in NAS 2013 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, 2011-12 and 2012-13.
- 1.2 Land Use Statistics - Area under Crops, 2010-11, 2011-12 as well as data received from states.
- 1.3 Revised Estimates of Production of Milk, Eggs and Wool –2011-12 and 2012-13 received from Department of Animal Husbandry & Dairying, Ministry of Agriculture.
- 1.4 Revised Estimates of Meat Production, received from State Governments for the years 2010-11 and 2011-12.
- 1.5 Revised Data on prices of agricultural commodities and livestock products from 2011-12 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 2010-11 and 2011-12 received from Principal Chief Conservators of Forests/ State DESs.

3. ***Fisheries***

Data on production and prices of marine fish, inland fish and prawns for 2010-11 to 2012-13 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, 2011-12 and 2012-13 from “Monthly Statistics of Mineral Production” March 2013, 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 2010-11 received from IBM.
- 4.7 Production of Minor Minerals, 2004-05 to 2012-13 from the State Geological Departments.
- 4.8 Data on salt production and prices from office of the Salt Commissioner.

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

- 5.1 Annual Survey of Industries, 2004-05 to 2011-12, 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, Annual accounts of Security printing and Minting Corporation of India Ltd. for Mints and Security Printing Press

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

- 6.1 Fourth All India Census on Micro, Small and Medium Enterprises 2006-07 conducted by the office of the Development Commissioner, Micro, Small and Medium Enterprises (MSMEs).
- 6.2 Report on Un-organised Manufacturing Sector in India by the NSSO, 2005-06, Report No.526 (62/2.2/3).
- 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 and 5.
- 7.2 Finances of non- Government Companies, Reserve Bank of India.
- 7.3 Data on area on plantation crops from State DESs.

- 7.4 Data on production of cement (from information on 8 core industries) from office of Economic Adviser.
- 7.5 Data on Iron and Steel from Joint Plant Committee.
- 8. *Electricity, Gas and Water Supply***
- 8.1 Annual Reports of State Electricity Boards/Central and State Companies.
- 8.2 Annual Reports of electricity generating companies in Private Sector.
- 8.3 Data on Value Addition of Wind Power from Directorate of Economics & Statistics (DESS).
- 8.4 Annual Reports of Gas Authority of India Limited (GAIL).
- 8.5 Annual Report of Indraprastha Gas Ltd (IGL).
- 8.6 Ministry of New and Renewable Energy.
- 8.7 Khadi & Village Industries Commission (KVIC).
- 8.8 Budget documents of Centre and States.
- 8.9 Annual Report of Kerala Water Authority.
- 9. *Trade, Hotels and Restaurants***
- 9.1 Changes in value of output of commodity producing sectors from 2010-11 onwards mentioned at Serial Nos.1, 2,3,4,5 & 6.
- 9.2 Additional annual reports of public sector undertakings for the year 2010-11 onwards.
- 9.3 Index of Unit Value of Imports from Directorate General of Commercial Intelligence & Statistics (DGCIS), Ministry of Commerce for the year 2010-11 to 2012-13.
- 10. *Railways, Communication and Public Administration & Defence***
- 10.1 Budget documents for the year 2013-14 giving actual figures for the year 2011-12 and Revised Estimates for 2012-13.
- 10.2 Annual Accounts of Mahanagar Telephone Nigam Limited (MTNL), Millennium Telecommunications Limited (MTL), Bharat Sanchar Nigam Limited (BSNL), Konkan Railway and DMRC for the year 2010-11 onwards.
- 10.3 Use of 63rd round data in respect of private communication.
- 11. *Transport by Other Means and Storage***
- 11.1 Additional information on number of motor vehicles for the years 2011-12 onwards.
- 11.2 Additional Annual Reports of Public Sector Undertakings and Private companies engaged in road, water and air transport activities for the year 2010-11 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 Cargo handled at major & minor ports provided by Ministry of Shipping for 2011-12 onwards.
- 11.6 Use of 63rd round data.
- 11.7 RBI Study of Sample Companies 2010-11 onwards.

12. *Banking and insurance*

The value added in the Banking and Insurance sector has been revised from the year 2011-12 due to availability of RBI's sample study on Non Government Non Financial Institutions and also the availability of additional annual reports/accounts in respect of non-departmental financial enterprises. Private companies engaged in the insurance activity have been analysed and included in this sector. Revision in the estimates is also due to change in consumption of fixed capital.

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

- 13.1 NASSCOM's data on production of software for the years 2011-12 and 2012-13.
- 13.2 Data on repairs & maintenance of ownership of dwellings based on AIDIS for the years 2010-11 onwards.
- 13.3 Use of 63rd round data on services.

14. *Other Services*

- 14.1 CPI (AL) and CPI (IW).
- 14.2 Use of 63rd round data on service sector.

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

15. *Private Final Consumption Expenditure.*

Estimates have been revised from 2010-11 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 and 17.9.

16. *Saving*

- 16.1 Revised data on net deposits, investments in shares and debentures, net claims on Government, etc. for household sector 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 Co-operative Societies revised on account of revisions in GVA, trade and manufacturing.
- 16.5 Saving of Public Sector revised from 2010-11 due to availability of additional/revised/fresh data in respect of Departmental Enterprises and Administrative Departments from budget documents, annual accounts of RBI and subsequent revision of Consumption of Fixed Capital estimates.

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, 2010-11 and 2011-12, CSO, I.S. Wing, Kolkata.
- 17.4 Revised data on Capital Formation, Private Corporate Sector received from RBI.
- 17.5 Capital Formation of Public Sector revised data from 2010-11.
- 17.6 Whole Sale Price Index: Office of the Economic Adviser.
- 17.7 Index of Industrial Production (IIP) - Central Statistics Office.

- 17.8 Import and Excise Duties – Statistics of Customs & Revenue Collection of the Indian Union from Tax and Research Unit, M/O Finance.
- 17.9 Export Import Data Bank, DGCIS, Ministry of Commerce & Industry.

18. Consumption of Fixed Capital

Estimates of consumption of fixed capital (CFC) have been revised due to revision of estimates of gross fixed capital formation as mentioned at serial no. 17.

C: Public Sector Transactions

Statements on Public Sector Transactions have undergone revision from 2010-11 due to 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) 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, 2012.

REASONS FOR REVISION IN GROWTH RATE IN GDP, 2012-13 BETWEEN THE PROVISIONAL ESTIMATES RELEASED IN MAY 2013 AND FIRST REVISED ESTIMATES RELEASED IN JANUARY 2014

Sector	GDP growth 2012-13		Reasons for variation
	May 2013	Jan 2014	
1. agriculture, forestry & fishing	1.9	1.4	May 2013 estimates were indicator based. Actual data has been used for January, 2014 estimates.
2. mining & quarrying	-0.6	-2.2	Revision due to availability of fresh data on major and minor minerals and the revision in inputs of minor and major minerals. May, 2013 estimates were based on IIP-mining.
3. manufacturing	1.0	1.1	There is a marginal difference due to use of ASI 2011-12(provisional) results for obtaining 2012-13 estimates in January, 2014. However, May, 2013 estimates were based on IIP growth in Manufacturing sector. Estimates of FISIM have also undergone revision.
4. electricity, gas & water supply	4.2	2.3	Downward revision due to detailed analysis of reports of electricity boards/corporations and state budgets. In May, 2013 estimates, IIP electricity was used.
5. construction	4.3	1.1	Revised data from source agencies and also base effect (upward revision in GVA of 2011-12)
6. trade, hotels, transport, storage & communication	6.4	5.1	Revision in GVO of commodity producing sectors and revised Private Corporate Sector data.
7. financing, insurance, real estate & business services	8.6	10.9	May 2013 estimate was indicator based whereas January, 2014 estimate is based on exact analysis of annual reports of banks, central finance companies and insurance companies.
8. community, social & personal services	6.6	5.3	Revision on account of detailed data being undertaken using the revised budget estimates of Central and State Governments as compared to earlier estimates based on revenue expenditure from budget documents.
9. GDP at factor cost (1 to 9)	5.0	4.5	

REASONS FOR REVISIONS IN GROWTH RATE IN GDP, 2011-12 BETWEEN FIRST REVISED ESTIMATES RELEASED IN JANUARY 2013 AND ESTIMATES RELEASED IN JANUARY 2014

Sector	GDP growth 2011-12		Reasons for revisions in the estimates
	Jan 2013	Jan 2014	
1. agriculture	3.9	5.3	Earlier complete data was not available and growth rates were used wherever required. Good growth in fruits and vegetables, condiments and spices and fibers has been observed for 2011-12 on receipt of actual data.
2. forestry & logging	2.4	1.9	Earlier, estimation was based on indicators. On receipt of actual data, it is observed that the production of industrial wood has decreased, which is major contribution under forestry and logging sector
3. fishing	1.8	5.7	Actual data from the states has been received and earlier, the estimation was based on indicators. Further, there was high growth in prawns' production in actual data provided by state DESs.
4. mining & quarrying	-0.6	0.1	The revision in estimate is due to the availability of actual data of major and minor minerals as well as their input rates.
5. registered manufacturing	2.6	9.4	Due to availability of 2011-12(provisional) results for obtaining 2012-13 estimates in January,2014. However, January, 2013 estimates were based on IIP growth in Manufacturing sector.
6. unregistered manufacturing	3.0	2.7	Due to revision in F.I.S.I.M.
7. electricity, gas & water supply	6.5	8.4	The upward revision is due to revision in the estimates of Gas(GAIL).
8. construction	5.6	10.8	Mainly due to revisions in value of output of construction material on account of use of provisional ASI results.
9. trade	6.5	1.0	Due to revised corporate growth rate received from RBI and change in Volume Index.
10. hotels & restaurants	2.8	3.8	Due to change in GTI index.
11. railways	7.5	7.5	No change.
12. transport by other means	8.6	8.6	No change.
13. storage	9.4	2.9	Due to change in Storage Index.
14. communication	8.3	11.2	Due to revised corporate growth rate received from RBI and growth in minutes of usage used.
15. banking & insurance	13.2	12.9	Minor change due to incorporation of fresh data in respect of State Financial Corporations, RBI study on Non Government Non Banking Financial Institutes, cooperative banks, etc.
16. real estate, ownership of dwellings, business & legal services	10.3	9.9	Due to revised corporate growth rate received from RBI and change in estimates of ownership of dwellings (rural).
17. public administration & defense	5.4	4.2	Revision in 2010-11 numbers (actual) and use of 2011-12 actual numbers in January, 2014 estimates in place of 2011-12 revised estimates used in January, 2013.
18. other services	6.5	5.4	Due to change in public sector estimates of education, health, sanitation and recreation (Prasar Bharti).
19. GDP at factor cost	6.2	6.7	

REASONS FOR REVISIONS IN GROWTH RATE IN GDP, 2010 -11 BETWEEN
ESTIMATES RELEASED IN JANUARY 2013 AND ESTIMATES RELEASED IN
JANUARY 2014

Sector	GDP growth 2010-11		Reasons for revisions in the estimates
	Jan 2013	Jan 2014	
1. agriculture	8.8	9.5	The variation observed is primarily due to finalization of production during discussions on comparable state income estimates for 2010-11 data. Further, data on some of the minor crops were provided by states during comparable discussions only.
2. forestry & logging	2.2	2.4	Actual data received from states.
3. fishing	5.4	5.8	Actual data received from states.
4. mining & quarrying	4.9	6.5	The upward revision is due to availability of data on minor minerals and revision in the input rates of major minerals.
5. registered manufacturing	10.9	9.6	Downward revision due to the use of ASI 2010-11(final) results.
6. unregistered manufacturing	7.2	7.2	No change.
7. electricity, gas & water supply	5.2	5.3	Marginal change is due to change in estimate of water supply-public part.
8. construction	10.2	5.7	Mainly due to revision in value of output from construction material on account of use of final results of ASI-2010-11
9. trade	11.5	12.0	Due to change in GTI index.
10. hotels & restaurants	10.8	11.6	Due to change in GTI index.
11. railways	5.9	5.9	No change.
12. transport by other means	8.2	8.2	No change.
13. storage	2.2	3.7	Due to change in the public sector estimates of State Warehousing Corporations.
14. communication	25.4	21.8	Due to use of minutes of usage growth.
15. banking & insurance	14.9	14.9	No change
16. real estate, ownership of dwellings, business & legal services	6.0	5.9	Due to change in estimates of ownership of dwellings (rural).
17. public administration & defense	0.0	-0.4	Revision in 2010-11 numbers (actual) after SDP discussions
18. other services	8.0	8.2	Due to change in public sector estimates of education, health and sanitation.
19. GDP at factor cost	9.3	8.9	

REASONS FOR REVISIONS IN GROWTH RATE IN GDP, 2009-10 BETWEEN ESTIMATES RELEASED IN
JANUARY 2013 AND ESTIMATES RELEASED IN
JANUARY 2014

Sector	GDP growth 2009-10		Reasons for revisions in the estimates
	Jan 2013	Jan 2014	
1. agriculture	0.4	0.4	No change
2. forestry & logging	2.9	2.9	No change
3. fishing	3.2	3.2	No change
4. mining & quarrying	5.9	5.9	No change
5. registered manufacturing	14.1	14.6	Due to revision in the estimates of F.I.S.I.M, because of change in banking data.
6. unregistered manufacturing	5.4	4.4	Due to revision in the estimates of F.I.S.I.M, because of change in banking data.
7. electricity, gas & water supply	6.2	6.2	No change.
8. construction	6.7	6.7	No change
9. trade	8.5	8.5	No change
10. hotels & restaurants	1.9	1.9	No change
11. railways	8.8	8.8	No change
12. transport by other means	7.3	7.3	No change
13. storage	19.3	19.3	No change
14. communication	31.5	31.5	No change
15. banking & insurance	11.4	11.4	No change
16. real estate, ownership of dwellings, business & legal services	8.3	8.3	No change
17. public administration & defense	17.6	17.6	No change
18. other services	7.2	7.2	No change
19. GDP at factor cost	8.6	8.6	No change

संकेताक्षर

ABBREVIATIONS

कर्मचारियों का पारिश्रमिक	CE	Compensation of Employees
स्थायी पूंजी अवक्षय	CFC	Consumption of Fixed Capital
लागत, बीमा और भाड़ा	c.i.f.	cost, insurance and freight
केन्द्रीय सांख्यिकी कार्यालय	CSO	Central Statistics Office
अर्थ एवं सांख्यिकी निदेशालय, कृषि मंत्रालय	DESAg	Directorate of Economics and Statistics, Ministry of Agriculture
वाणिज्यिक आसूचना और सांख्यिकी महानिदेशालय	DGCI&S	Directorate General of Commercial Intelligence and Statistics
रोजगार एवं प्रशिक्षण महानिदेशालय	DGET	Directorate General of Employment and Training
पूर्ति तथा निपटान महानिदेशालय	DGS&D	Directorate General of Supplies and Disposal
राज्यों के आर्थिक व सांख्यिकी निदेशालय	DESs	Directorate of Economics & Statistics of State Governments
कर्मचारी भविष्य निधि संगठन	EPFO	Employees Provident Fund Organisation
अप्रत्यक्ष अनुमानित वित्तीय अंतर्निहित सेवाएं	FISIM	Financial Intermediary Services Indirectly Measured
जहाज तक निःशुल्क	f.o.b.	free on board
सकल पूंजी निर्माण	GCF	Gross Capital Formation
सकल देशीय उत्पाद	GDP	Gross Domestic Product
सकल देशीय बचत	GDS	Gross Domestic Saving
सरकारी अंतिम उपभोग व्यय	GFCE	Government Final Consumption Expenditure
सकल स्थायी पूंजी निर्माण	GFCF	Gross Fixed Capital Formation
सकल राष्ट्रीय उत्पाद	GNP	Gross National Product
सकल मूल्य वर्धन	GVA	Gross Value Added
भारतीय खान ब्यूरो	IBM	Indian Bureau of Mines
लक्षित मूल्य अपस्फीति	IPD	Implicit Price Deflators
मिश्रित आय	MI	Mixed Income
महानगर टेलिफोन निगम लिमिटेड	MTNL	Mahanagar Telephone Nigam Limited

राष्ट्रीय लेखा सांख्यिकी	NAS	National Accounts Statistics
राष्ट्रीय लेखा सांख्यिकी-स्रोत एवं विधि	NAS-SM	National Accounts Statistics Sources and Methods
नेस्कॉम	NASSCOM	National Association of Software & Service Companies
निवल पूंजी निर्माण	NCF	Net Capital Formation
निवल पूंजी स्टॉक	NCS	Net Capital Stock
निवल देशीय उत्पाद	NDP	Net Domestic Product
निवल देशीय बचत	NDS	Net Domestic Saving
अन्यत्र वर्गीकृत नहीं	n.e.c.	not elsewhere classified
निवल स्थायी पूंजी निर्माण	NFCF	Net Fixed Capital Formation
निवल स्थायी पूंजी स्टॉक	NFCS	Net Fixed Capital Stock
राष्ट्रीय बागवानी बोर्ड	NHB	National Horticulture Board
राष्ट्रीय औद्योगिक वर्गीकरण	NIC	National Industrial Classification
निवल राष्ट्रीय उत्पाद	NNP	Net National Product
राष्ट्रीय प्रतिदर्श सर्वेक्षण	NSS	National Sample Survey
राष्ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय	NSSO	National Sample Survey Office
तेल व प्राकृतिक गैस आयोग	ONGC	Oil and Natural Gas Commission
भारत तेल लिमिटेड	OIL	Oil India Limited
परिचालन अधिशेष	OS	Operating Surplus
निजी अंतिम उपभोग व्यय	PFCE	Private Final Consumption Expenditure
भारतीय रिजर्व बैंक	RBI	Reserve Bank of India
विशेष आंकड़ा प्रसार मानक	SDDS	Special Data Dissemination Standards
दूरदर्शन	TV	Television
भारतीय यूनिट ट्रस्ट	UTI	Unit Trust of India
थोक मूल्य सूचकांक	WPI	Wholesale Price Index