

**Gross Domestic Product**  
**STATE INCOME**  
**(BASE YEAR, 2004-05)**

Economics & Statistics Department

# BASE YEARS OF NAS

1. 1948-49 base year (introduced in 1956)
2. 1960-61 base year (in Aug 67) after 11 years
3. 1970-71 base year (in Jan 78) after 11 years
4. 1980-81 base year (in Feb 88) after 10 years
5. 1993-94 base year (in Feb 99) after 11 years
6. 1999-00 base year (in Jan 06) after 7 years
7. 2004-05 base year (in Jan 2011) after 5 years

– Generally revised along with Quick Estimates

# WHY WE CHANGE BASE YEAR

- To capture structural changes in economy
- To incorporate results of long-term surveys and censuses, as they are not included in between
- To incorporate latest international standards
- To make methodological improvements
- To realistically measure the real growth  
(relative prices of commodities in base year form weights for constant price growth rates)

# HOW WE CHANGE BASE YEAR

- estimates prepared at detailed item level (NIC)
- improvements needed in view the coverage and international guidelines are outlined
- Discussed in Regional workshops
- Trial estimates prepared and discussed in the Advisory Committee and IARNIW
- Consistency between various aggregates examined

# INTERNATIONAL GUIDELINES

- 1993 SNA recommends change of base year once in 5 years and also chain base.
- In general, constant price series should not be allowed to run for more than five, or at the most, ten years without rebasing. Base year prices become irrelevant over the years
- When the base year is changed it is customary to link the data on the old base to the data on the new base rather than to carry the rebasing backwards.

# GUIDING PRINCIPLES FOR NEW SERIES

- (i) revision of base year to a more recent year (for meaningful analysis of the structural changes in the economy)
- (ii) complete review of the existing data base and methodology employed in the estimation of various macro-economic aggregates including choice of the alternative databases on individual subjects
- (iii) to the extent feasible, implementing the recommendations of the System of National Accounts (1993 SNA)

# **GDP at factor cost, 2004-05 to 2012-13**

## **(at current prices)**

<b>Year</b>	<b>GSDP (Rs.in Crore)</b>	<b>Growth Rates at Constant Prices</b>
<b>2004-05</b>	<b>24076</b>	<b>-</b>
<b>2005-06</b>	<b>27127</b>	<b>8.4</b>
<b>2006-07</b>	<b>30280</b>	<b>9.1</b>
<b>2007-08</b>	<b>33962</b>	<b>8.5</b>
<b>2008-09</b>	<b>41483</b>	<b>7.4</b>
<b>2009-10</b>	<b>48188</b>	<b>8.1</b>
<b>2010-11</b>	<b>56355</b>	<b>8.7</b>
<b>2011-12</b>	<b>63811</b>	<b>7.4</b>
<b>2012-13</b>	<b>72076</b>	<b>6.2</b>

**Sector Wise  
GSDP  
Estimates  
of  
Himachal Pradesh**

# 1. Primary Sector (Commodity Producing Sectors)

- Agriculture
- Forestry and Logging
- Fishing
- Mining and Quarrying

# **AGRICULTURE**

- **The agricultural sector covers crop production, livestock and livestock products, and the Horticulture produce which includes vegetables.**
- **Data related to the sector are compiled from the agricultural, horticulture and animal husbandry departments which includes agricultural censuses, Livestock Census, Input-Output tables, and current surveys.**
- **The price data are collected through the DSOs of the State.**

- All principal and minor crops, miscellaneous and unspecified crops and various by-products have been considered
- For unspecified and miscellaneous crops, the value of output per hectare is arrived on the basis of weighted average value of output per hectare of related specified main crops in each category of the unspecified crops.
- The value of by-product, viz., straws & Sticks etc., are estimated by applying the value per hectare as available from the cost of cultivation studies.

- Evaluation of the output of agricultural crops has been done at the average whole sale price/farm harvest price prevailing in the primary market during the peak market period are taken. These prices are arrived at by averaging the whole sale price of a commodity in each district over the peak marketing season.
- The value of output of each crop is obtained as a product of area, yield and price or production and price as the case may be.

# LIVESTOCK

- **This sector includes farm animals such as cattle, sheep, goats, etc.; poultry, sericulture; apiculture; and the products of these animals. For livestock production, calculations utilized the current number of livestock and production coefficients which were obtained from the results of the 1984 Livestock Census.**
- **Livestock production is estimated in two steps.**
  - First, by applying butchering rates to the number of livestock, the unit number of butchered livestock is obtained. Second, the latter is multiplied by carcass weights.**

- **Estimates of gross output of livestock products (milk, eggs, wool, rawhide, natural fertilizer etc.) is based on data on the number of various kinds of livestock held and average yield of milk, eggs, wool clip.**
- **Evaluation of Livestock production is done by multiplying the quantities of production by the corresponding producers prices.**

# 1.1 Agriculture & Animal Husbandry

Years	(At current Prices)		(At Constant Prices)	
	GVA Agriculture & Animal Husbandry	Percentage Contribution	GVA Agriculture & Animal Husbandry	Growth
2004-05	4747	19.72	4747	-
2005-06	5149	18.98	4944	4.1
2006-07	5072	16.75	4692	-5.1
2007-08	5824	17.15	5251	11.9
2008-09	6078	14.65	5160	-1.7
2009-10	6542	13.58	4224	-18.1
2010-11	8194	14.26	5442	28.8
2011-12	8737	13.69	5167	-5.1
2012-13	10110	14.03	5826	12.8

# FORESTRY

- The economic activities considered in this sector include (i) forestry (e.g., planting and conservation of forests, gathering of forest products, charcoal burning carried out in the forests), (ii) logging (e.g., felling and rough cutting of trees, hewing or rough shaping of poles, blocks etc.) and transportation of forest products to the sale depots/assembly centers and, (iii) farmyard wood (industrial wood and fuel wood collected by the primary producers from trees outside regular forests).

- For the purpose of GVA estimation forest products are broadly classified into two broad groups viz.,
- (a) major products comprising industrial wood (timber, round wood, match and pulpwood) and fuel wood (firewood and charcoal wood) and
- (b) minor products comprising a large number of heterogeneous items such as bamboo, fodder, lac, sandalwood, honey, resin, gum, tendu leaves etc.

- Estimates of GSDP are prepared following the production method.
- Gross value of output is estimated separately for (a) Industrial wood, (b) Fuel wood and (c) minor forest products.
- Estimates of industrial wood are based on data received from the office of the Principal Chief Conservator of Forest (PCCF) in the state for recorded production. For evaluating the value of output of industrial wood, prices as available from forest sale depots and supplied by PCCF are used.

- The estimates of fuel wood consumption are based on large-scale quinquennial household consumer expenditure surveys conducted by the NSSO.
- Estimates of minor forest products are based on data directly available from the office of the PCCF. In the absence of information on inputs, 10 per cent of the value of output is taken as inputs. The estimates of value of output at constant prices are obtained by multiplying the current year production with the base year prices.

# Limitation

- Time lag in production data from the forest department
- Prices data variation and time lag
- No methodology for accounting tree outside the forest area

# Way forward

- To rope in environmental aspects in the forestry sector capacity building in the department of Economics and Statistics is required.
- to develop the institutional mechanism for forestry accounts a cell be created in Economics and Statistics department

# 1.2 Forestry & Logging

Years	(At current Prices)		(At Constant Prices)	
	GVA Forestry & Logging	Percentage Contribution	GVA Forestry & Logging	Growth
2004-05	1349	5.6	1349	
2005-06	1608	5.93	1529	13.3
2006-07	1823	6.02	1738	13.6
2007-08	1945	5.73	1757	1.1
2008-09	2123	5.12	1780	1.3
2009-10	2425	5.03	1935	8.7
2010-11	2472	4.3	1944	0.5
2011-12	3252	5.1	1837	-5.5
2012-13	3457	4.80	1808	-1.6

# Fishing

- The income from Fisheries sector has been estimated by value added approach. Under this sector, both commercial and subsistence fishing in inland water viz.: fish from rivers, lakes, tanks and artificial ponds etc. is considered.

# 1.3. Fishing

Years	(At current Prices)		(At Constant Prices)	
	GVA Fishing	Percentage Contribution	GVA Fishing	Growth
2004-05	36	0.15	36	
2005-06	36	0.13	38	5.6
2006-07	36	0.12	36	-4.7
2007-08	39	0.11	39	7.2
2008-09	43	0.1	42	6.2
2009-10	44	0.09	42	0.4
2010-11	42	0.07	39	-5.4
2011-12	58	0.09	43	8.8
2012-13	58	0.08	43	0.05

# Mining & Quarrying

- This sector covers the economic activities of production of all minerals, which are extracted from soil as solid, liquid or gas.
- Estimates of GVA in this sector are compiled following the production approach by calculating the value of output of each mineral at state level and deducting the value of corresponding inputs and consumption of fixed capital used in the process of extraction etc. there from.

# 1.4. Mining & Quarrying

Years	(At current Prices)		(At Constant Prices)	
	GVA Fishing	Percentage Contribution	GVA Fishing	Growth
2004-05	64	0.27	64	
2005-06	65	0.24	66	3
2006-07	79	0.26	72	8.1
2007-08	78	0.23	70	-2.2
2008-09	72	0.17	76	8.5
2009-10	154	0.32	138	82.2
2010-11	205	0.36	149	8.3
2011-12	173	0.27	132	-11.5
2012-13	177	0.25	135	2.3

# Primary sector

Years	(At current Prices)		(At Constant Prices)	
	GVA Primary Sector	Percentage Contribution	GVA Primary Sector	Growth
2004-05	6197	25.74	6197	-
2005-06	6858	25.28	6578	0.6
2006-07	7009	23.15	6538	-0.6
2007-08	7887	23.22	7117	8.9
2008-09	8316	20.05	7058	-0.8
2009-10	9165	19.02	6339	-10.2
2010-11	10508	18.65	7576	19.5
2011-12	12221	19.15	7179	-5.2
2012-13	13803	19.15	7813	8.8

## **2. Secondary Sector (Commodity Producing Sectors)**

- Manufacturing – Registered
- Manufacturing – Unregistered
- Construction
- Electricity, Gas and Water Supply

- Manufacturing activities are covered into two broad sectors registered and unregistered. The registered sector includes all factories covered under section 2m(i) and 2m(ii) of the Indian Factories act 1948 which respectively refers to the factories employing 10 or more workers using power and those employing 20 or more workers but not using power on any day of preceding 12 months . The manufacturing units not covered in registered sector, including household industries, form the ‘unregistered’ manufacturing sector.

- Unregistered manufacturing covers all manufacturing which are not registered under the Indian Factories Act, 1948, the estimate of value added from this sector are worked out by adopting production approach but the methodology differs under both the sectors.
- The state wise estimates of Gross Value Added are prepared by adding the value added under the industry group existing in Himachal Pradesh on the basis of data thrown up by A.S.I

- Estimates of GSDP for registered manufacturing are prepared by following the production method. The industry-wise estimates (these are compilation categories in the 1999-2000 series) are prepared on the basis of results of Annual Survey of Industries (ASI). Earlier, estimates of value added published in ASI Summary Results were not adjusted for non-responding factories, therefore, adjustments were made for this in the national accounts. for the non-responding units. From the year 1995-96 onwards, however, ASI results are published after adjusting for non-response.

- For the years for which ASI results are not available, the growth observed in the Index of Industrial Production (IIP) or the State IIP is used. These estimates undergo changes as soon as ASI results become available. For estimating the GVA at constant prices, the current price estimates are deflated using an appropriate wholesale price index, at each of the compilation category levels.

# Manufacturing Registered

Years	(At current Prices)		(At Constant Prices)	
	GVA Manufacturing Registered	Percentage Contribution	GVA Manufacturing Registered	Growth
2004-05	2220	9.22	2220	
2005-06	2485	9.16	2374	6.9
2006-07	2906	9.6	2680	12.9
2007-08	3311	9.75	2860	6.7
2008-09	5705	13.75	3877	35.5
2009-10	7841	16.27	5506	42
2010-11	9515	17.34	5526	0.4
2011-12	10181	15.96	6265	13.4
2012-13	11726	16.27	6696	6.9

# Manufacturing un-registered

Years	(At current Prices)		(At Constant Prices)	
	GVA Manufacturing Registered	Percentage Contribution	GVA Manufacturing Registered	Growth
2004-05	552	2.29	552	-
2005-06	614	2.26	587	6.3
2006-07	729	2.41	672	14.5
2007-08	849	2.5	733	9.1
2008-09	907	2.19	690	-6
2009-10	974	2.02	680	-1.4
2010-11	1014	1.92	678	-0.2
2011-12	1129	1.77	695	2.5
2012-13	1235	1.71	701	0.8

- The standard methodology adopted to work out value added from construction is based on the “ Expenditure Approach”. The estimates of gross value of output (expenditure on construction) are prepared for each type of construction viz; rural, urban public and private separately.

# Construction

Years	(At current Prices)		(At Constant Prices)	
	GVA Construction	Percentage Contribution	GVA Construction	Growth
2004-05	4601	19.11	4601	
2005-06	5346	19.71	5164	12.2
2006-07	6058	20.01	5826	12.8
2007-08	6836	20.13	6373	9.4
2008-09	7225	17.42	6362	-0.2
2009-10	7272	15.09	6413	0.8
2010-11	8069	14.32	6734	5.0
2011-12	8919	13.98	7076	5.1
2012-13	10010	13.89	7352	3.9

## Electricity, Gas & Water Supply

- The value added in this sector is prepared using the income approach. This implies the measurement of aggregate factor income in the form of compensation to employees and operating surplus (interests, rent, profits and dividends). The economic classification of budgets provides the estimates or enterprises run departmentally and the analysis of profit and loss accounts provides the estimates for non-departmental enterprises and private companies. Similar contribution to the state domestic product of the Pradesh from the projects under the control of National Hydel Power corporation is supplied by the Central Statistical Organization.. In the new series, the operating losses of departmental commercial undertakings (DCUs) have been treated as imputed subsidies. The consumption of fixed capital is then deducted from this G.V.A. to arrive at the net domestic product.

# Electricity, Gas & Water Supply

Years	(At current Prices)		(At Constant Prices)	
	GVA Electricity, Gas & Water Supply	Percentage Contribution	GVA Electricity, Gas & Water Supply	Growth
2004-05	1803	7.49	1803	
2005-06	1927	7.11	1836	1.8
2006-07	2408	7.95	2137	16.4
2007-08	2511	7.39	2405	12.5
2008-09	4009	9.67	2619	8.9
2009-10	4592	9.53	2792	6.6
2010-11	5666	9.86	2932	5
2011-12	5419	8.49	3110	6.1
2012-13	6049	8.39	3268	5.1

# Secondary

Years	(At current Prices)		(At Constant Prices)	
	GVA Secondary sector	Percentage Contribution	GVA Secondary sector	Growth
2004-05	9176	38.11	9176	
2005-06	10373	38.24	9960	8.5
2006-07	12100	39.96	11315	13.6
2007-08	13506	39.77	12371	9.3
2008-09	17847	43.02	13548	9.5
2009-10	20679	42.91	15390	13.6
2010-11	23485	41.67	15870	3.1
2011-12	25648	40.19	17146	8.0
2012-13	29020	40.26	18016	5.1

### **3. Tertiary Sector**

#### **(Non-Commodity Producing Sectors)**

- Transport, Storage and Communication
- Trade, Hotels and Restaurants
- Banking and Insurance
- Real Estate, Ownership of Dwellings and Business services
- Public Administration
- Other services

# Transport Storage & Communication

- **Public sector** GVA estimates have been compiled by analyzing the annual accounts of State Road Transport Corporations.
- **Private corporate and Un-organised sector** the estimates of GVA in respect of mechanized and non-mechanized road transport have been compiled for the base year as a product of GVAPW of 63rd round of NSSO and workforce estimates based on Employment-Unemployment Survey of 61st round & Population Census 2001 of the respective NIC codes. In the case of private corporate, the GVAPW of “establishments” is used whereas for unorganized sector the GVAPW of “all enterprise” has been used.

## **Railways**

- State level estimates, both at current and constant prices are provided by CSO, on allocation basis after analyzing the railways budget .

## **Air Transport**

- The GVA estimates of air transport have been prepared in two parts i.e. public and private organized by analyzing the budget documents and annual accounts of Airlines both public and private and are supplied by C.S.O.

## **For water transport**

- The Public sector not relates to the state as there is no Public Shipping Companies , Inland Water Shipping Companies in the state whereas the GVA estimates for unorganized sector have been prepared as a product of GVAPW of 63rd round of NSSO and workforce estimates based on Employment-Unemployment Survey of 61st round & Population Census 2001 of the respective NIC codes.

## **Public Communication:**

- The Public part of communication services is supra regional sector consisting of post and telecommunication department and overseas communication services. The activities relating to post savings bank, postal life insurance and telecommunication workshops are excluded from communication and included in banking & insurance and manufacturing sectors respectively. CSO allocates the state part, the same has been used in the new and old series

# Private Communication Services

- The economic activities covered under this are
- Courier activities (NIC-98, code-64120).
- Activities of the cable operators (NIC-98, code-64204) and
- Other communication (NIC-1998, code- 642 (-) 64204).

# Transport Storage & Communication

Years	(At current Prices)		(At Constant Prices)	
	GVA Transport Storage & Communication	Percentage Contribution	GVA Transport Storage & Communication	Growth
2004-05	1158	4.81	1158	
2005-06	1302	4.8	1299	12.2
2006-07	1434	4.74	1479	13.9
2007-08	1550	4.56	1657	12
2008-09	1741	4.2	1811	9.3
2009-10	1983	4.11	2094	15.7
2010-11	2221	3.87	2172	3.7
2011-12	2300	3.76	2386	9.9
2012-13	2576	3.57	2591	8.6

# Trade

- **Public sector** having units engaged in retail and whole sale trade (except of motor vehicles) + Auctioning activities; the GVA estimates have been prepared by analysing the annual accounts of public trading enterprises and budget documents.
- **Private Organised** sector consisting of (a) Private Corporate units engaged in retail and wholesale trade + Auctioning activities, (b) Trading Co-operative units engaged in retail and wholesale trade (except of motor vehicles) + Auctioning activities, (c) Maintenance and repair of motor vehicles and (d) Repair of personal household goods, the GVA estimates have been prepared using the results of the RBI study on company finances, total paid-up capital of companies available from Ministry of Company Affairs and information available from the NABARD publication entitled "Statistical statements relating to the Co-operative movement in India 2003-04".

- **Private Unorganised sector** The contribution for this segment has been estimated as a product of workforce and value added per worker. As trade has not been covered in the 63<sup>rd</sup> round of NSSO on Service Sector, the GVA of each of the five categories of unorganised trade sector for the year 1999-2000 has been moved to 2004-05 using the growth in Gross Trading Income (GTI) of the sector which takes into account the growth in output as well as workforce.

# Hotels and restaurants

- This activity comprises categories 551 and 552 of NIC, 1998. The methodology followed for estimating GDP of public, private organized and private unorganized in the new series is the same as that of 1999-2000 series. The revision in GDP estimates of public, private and unorganized components is due to latest data made available by different source agencies. For public sector, the estimates are based on analysis of annual accounts of public enterprises and budget documents. Estimates for private organized part have been prepared for 2004-05 using the results for the RBI study on company finances, total paid-up capital of companies available from Ministry of Company Affairs. For the unorganized sector in new series, GVA per worker from Enterprise survey conducted during 63rd round (2006-07) of NSS and workforce estimates from Employment Unemployment Survey, 2004-05 along with Population Census 2001 have been considered but could not be used due to certain inconsistencies in the data.

# Trade Hotel & Restaurant

Years	(At current Prices)		(At Constant Prices)	
	GVA Trade Hotel & Restaurant	Percentage Contribution	GVA Trade Hotel & Restaurant	Growth
2004-05	2309	9.59	2309	
2005-06	2705	9.97	2521	9.2
2006-07	2801	9.25	2598	3.1
2007-08	3477	10.24	2831	9.0
2008-09	4400	10.60	3368	19
2009-10	5487	11.39	3663	8.7
2010-11	6118	10.85	3813	4.1
2011-12	7113	11.15	4130	8.3
2012-13	7623	10.58	4205	1.8

# Banking & Insurance

- The estimates of Non-Government non banking financial companies (NBFC) are compiled using sample study of Non-Government NBFCs conducted by RBI. In the 1999-00 series the estimates of Non-Government NBFCs for the year 2004-05 were compiled as average of estimates for the years 2002-03, 2003-04 & 2004-05. Then GDP of NBFCs is arrived at by blowing up the GDP of sample companies with the up scaling factor (which is the ratio of paid up capital of NBFCs in the population to paid up capital of sample companies). In the new series, estimates of this segment for the year 2004-05 are based on the estimates for the year 2004-05 provided in three studies published by RBI in November 2006, October 2007 & August 2008. Due to supra regional sector the estimates are prepared by CSO and supplied to state both at current and constant prices.

# Banking & Insurance

Years	(At current Prices)		(At Constant Prices)	
	GVA Banking & Insurance	Percentage Contribution	GVA Banking & Insurance	Growth
2004-05	728	3.02	728	
2005-06	810	2.99	873	19.9
2006-07	962	3.18	1133	29.8
2007-08	1089	3.21	1317	16.2
2008-09	1293	3.12	1375	4.4
2009-10	1612	3.35	1720	25.1
2010-11	2203	3.83	2182	26.9
2011-12	2472	3.87	2371	8.6
2012-13	2821	3.91	2465	4.0

# Real Estate, Ownership of Dwelling & Business Services

- The estimates of these services have been prepared for the base year by using NSSO's workforce and value added per worker of Enterprise Survey, separately for rural and urban areas. For subsequent years, the estimates of workforce have been worked out by using the inter survey exponential growth rate of quinquennial employment and unemployment surveys as observed between 50th round 1993-94 and 55th round 1999-2000 of NSSO and value added per worker have been moved to subsequent years using the Index of CPI (AL) for rural and CPI (IW) for urban areas.

# Real Estate, Ownership of Dwelling & Business Services

Years	(At current Prices)		(At Constant Prices)	
	GVA Real Estate, Ownership of Dwelling & Business Services	Percentage Contribution	GVA Real Estate, Ownership of Dwelling & Business Services	Growth
2004-05	1039	4.32	1039	
2005-06	1108	4.08	1086	4.5
2006-07	1215	4.01	1137	4.7
2007-08	1315	3.87	1196	5.2
2008-09	1485	3.58	1249	4.5
2009-10	1656	3.44	1319	5.6
2010-11	1941	3.38	1395	5.7
2011-12	2379	3.73	1496	7.2
2012-13	2824	3.92	1593	6.5

# Other Services

Years	(At current Prices)		(At Constant Prices)	
	GVA Other Services	Percentage Contribution	GVA Other Services	Growth
2004-05	2145	8.91	2145	
2005-06	2527	9.32	2404	12.1
2006-07	2977	9.83	2668	11
2007-08	3247	9.56	2785	4.4
2008-09	3978	9.59	3040	9.2
2009-10	4884	10.13	3461	13.8
2010-11	6668	11.6	3692	6.7
2011-12	7531	11.8	4669	26.5
2012-13	9011	12.50	5235	12.1

# Public Administration

- Gross Value Added (GVA) is estimated by the “Income Approach”. The compensation of employees is the only factor income, as operating surplus of administrative departments is treated as nil, being the provider of non-market services. The economic analysis of the budgets of State and local authorities provides the estimates for administrative departments from which the public administration estimates are derived by making use of Government expenditure under various purpose categories.

# Public Administration

Years	(At current Prices)		(At Constant Prices)	
	GVA Public Administration	Percentage Contribution	GVA Public Administration	Growth
2004-05	1324	5.5	1324	
2005-06	1443	5.32	1387	4.8
2006-07	1781	5.88	1614	16.3
2007-08	1890	5.57	1642	1.8
2008-09	2422	5.84	1760	7.2
2009-10	2721	5.65	1909	8.4
2010-11	3339	5.81	2336	22.4
2011-12	4047	6.34	2562	9.7
2012-13	4397	6.10	2635	2.9

# Tertiary sector

Years	(At current Prices)		(At Constant Prices)	
	GVA Public Administration	Percentage Contribution	GVA Public Administration	Growth
2004-05	8703	36.15	8703	
2005-06	9895	36.48	9570	12.3
2006-07	11170	36.89	10629	8.8
2007-08	12568	37.01	11428	7.5
2008-09	15319	36.93	12603	10.3
2009-10	18343	38.07	14166	12.4
2010-11	22490	39.91	15590	10.1
2011-12	25842	40.50	17614	13.0
2012-13	29252	40.58	18724	6.3

Thanks