

GOVERNMENT OF GOA

**REPORT ON
INDEX OF INDUSTRIAL PRODUCTION IN GOA
DURING
2010 - 2011
(Base Year 2004-05)**

**DIRECTORATE OF PLANNING,
STATISTICS AND EVALUATION
PANAJI-GOA**

PREFACE

The Index of Industrial Production measures the trend in the behaviour of Industrial Production. It helps in analyzing structural changes that are taking place in the sector over a period of time with reference to the base year.

Since, mining and electricity are both important activities along with manufacturing sector in the State, separate indices have been compiled for these sectors.

The Base year for the construction of the series of Index Numbers in Goa has been changed from time to time. The present change in the base year to 2004-05 is in accordance with the guidance of Central Statistical Organization, Government of India. This is the twenty-ninth report on Index numbers since inception, and the first in the revised series with the base year 2004-05.

It is hoped that this publication would be useful to those who are involved in the developmental planning of industrial sector. The co-operation extended by the industrial units in Goa, by supplying data is gratefully acknowledged. We are thankful to the staff of Industrial Statistics wing, Central Statistical Organization, Government of India, for providing valuable guidance from time to time. Our thanks are also to Indian Bureau of Mines, Nagpur, for supplying data on minerals and Central Electricity Authority for supplying data on generation of electricity.

Constructive suggestions in bringing about improvement in the publication are always welcome.

Place: Panaji

Date: 05-02-2013

(Anand Sherkhane)

DIRECTOR

INDEX NUMBERS OF INDUSTRIAL PRODUCTION IN GOA

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CHAPTER - I

INTRODUCTION

BACKGROUND

Industrial sector plays a vital role in the economic development of a region. The development in the industrial sector is measured by means of a tool called "Index of industrial Production" (IIP). This statistical device is one of the most important macro economic indicators, indicating the magnitude of industrial output over a given period compared to the reference period. The growth in production is measured with reference to the base period to assess the performance of the industrial sector. The index is used extensively in policy planning by the Government in public sector as also by other Organizations and Researchers, Industrialists, Economists, Administrators, etc.

The Directorate of Planning, Statistics and Evaluation took up the task of constructing the Index of Industrial Production (mining and manufacturing sector) on a quarterly basis from the year 1971 onwards with base year 1970 = 100. The index series was based on the information collected from factories registered under the Factories Act, 1948 and functioning within the jurisdiction of Goa. Subsequently, the base year was changed from 1970 to 1975 as a result of big strides taken by the industrial sector in Goa.

Further, as per the guidelines received from the Central Statistical Organisation, New Delhi, the base year was revised to 1980-81=100 by covering more items in the basket to reflect the industrial growth more adequately. The change of base year from 1980-81=100 to 1993-94=100 for providing a comparable state level Index of Industrial Production was initiated by Central Statistical Organisation, New Delhi, as per the assurance given by the Prime Minister to the Parliament in April 1993. Under "Comparable state level Index of Industrial Productions", all the states in India adopt a common base year with common methodology for a uniform compilation of Indices.

In order to maintain synchronization with the base year of all India IIP and capture structural changes in the industrial sector in the State/UTs it has been decided to shift the base year of Comparable State level IIPs also from 1993-94=100 to 2004-05=100.

This is the 29th report in the series since its inception in the state and the First in the present revised series of 2004-05. This issue covers the indices for the year 2010-11 for Electricity, Mining as well as Manufacturing sectors, along with combined indices for all the three sectors.

SCOPE AND COVERAGE

The scope of Index of Industrial Production has been confined to Electricity sector, Mining sector and Manufacturing sector. The manufacturing sector is restricted to the industries registered under section 2(m) (i) and 2 (m) (ii) of the factories Act, 1948 and are functioning within the jurisdiction of the state.

COLLECTION OF DATA

- 1) The monthly Electricity Generation figures (power plant wise) for computation of Electricity Index is provided by Central Electricity Authority (CEA).
- 2) The mineral data for computation of mining index is obtained from the Indian Bureau of Mines (IBM), Nagpur.
- 3) The manufacturing index computed is based on the month-wise production data collected from the selected factories by issuing letters from this Directorate. Delayed cases are contacted over telephone or by personal visits of the staff of this Directorate.

BASE YEAR

The base year for calculation of the Index Numbers of Industrial Production in respect of Electricity, Mining and Manufacturing sector is 2004-05. It was revised from the earlier base of 1993-94 as per the guidelines of the Central Statistical Organisation, New Delhi.

CHAPTER - II

ITEM BASKET

The three sectors viz. Electricity, Mining and Manufacturing together comprise 247 items in the item basket. The Electricity Sector has been introduced for the first time in the calculation of Index of Industrial Production from 2010-11 with new base year 2004-05. The item covered in this sector is 'Generation of Electricity'. The monthly Electricity Generation figures for computation of Electricity Index are provided by Central Electricity Authority. The Mining Sector comprises of three mineral items viz. Iron ore, Manganese ore and Bauxite. The production figures for the constituents of the item basket in the mining sector are received from Indian Bureau of Mines, Nagpur. These figures are considered on cent percent basis for computation of the index. The items under the Manufacturing Sector are selected on the basis of the detailed list of the products manufactured during 2004-05 which was supplied by Central Statistical Organisation, New Delhi, along with the Guidelines. The manufacturing sector is represented by 243 items, spread over 20 industrial groups considered at 2-digit level of NIC-2004.

The new series of IIP with base year 2004-05 includes registered 'manufacturing', 'mining & quarrying' and 'electricity and gas' sectors in its scope. The total weight of 1000 in the new series of State level IIP has been distributed to 'mining & quarrying', registered 'manufacturing' and 'electricity and gas' sectors on the basis of Gross Value Added (GVA). The weight of registered 'manufacturing' sector has been further distributed to various 2-digit industry groups (15-36) of NIC-2004 in proportion to their GVA figures. The two digit level weights have been further distributed to represent 3-digit groups which, in turn, is distributed to 4-digit classes within the respective 3-digit groups represented in the item basket. Finally, the 4-digit level weights have been distributed to selected items in the respective 4-digit classes in proportion to item-wise GVA figures.

For 'mining & quarrying' sector, the total weight of the sector has been apportioned to the items included in the item basket in proportion to their value of output furnished by IBM, Nagpur. Since 'electricity' sector is a single item sector, no apportioning of weight is done.

Table 1, below, provides information on items in the new item basket with base year 2004-05 under the three sectors viz. Electricity, Mining and Manufacturing and these are compared with the previous base year i.e. 1993-94.

TABLE 1
REVISION OF ITEM BASKET FROM BASE 1993-94 TO 2004-05

Sector	Item basket (base 1993-94)	New items included	Items deleted	Common items	Item basket (base 2004-05)
1	2	3	4	5	6
Electricity	-	1	0	0	1
Mining	3	0	0	3	3
Manufacturing	77	211	45	32	243
Total	80	212	45	35	247

CHAPTER III

WEIGHTING DIAGRAM

The weighting diagram has been prepared on the basis of Gross Value of Output (GVO) for different items covered. It assigns weights to each item proportionate to their contribution to the total value of output. The sector or division level weights are also assigned to each sector/division. Table 2, shows the sector level allotment of weights in respect to the Gross Value Added.

TABLE 2
DISTRIBUTION OF WEIGHTS AT SECTOR LEVEL
BASE 2004-05=100

Sl. No.	Sector	Weight
1	2	3
1	Electricity	57.43
2	Mining	136.82
3	Manufacturing	805.75
Total		1000.00

Table 3, compares the weights allotted to both the sectors during the base year 1993-94 and the revised base 2004-05 at sector level as detailed below.

TABLE 3
COMPARISON OF WEIGHTS DURING THE BASE YEAR
1993-94 & 2004-05

Sl. No.	Sector	Allotment of Weights during	
		Base 1993-94	Base 2004-05
1	2	3	4
1	Electricity	-	57.43
2	Mining	90.4	136.82
3	Manufacturing	909.6	805.75
Total		1000.0	1000.00

Table 4, depicts the distribution of weights at 2-digit level groups of mining sector and distribution of weights among items within 2-digit level of the same sector.

TABLE 4
DISTRIBUTION OF WEIGHTS AMONG ITEMS WITHIN
2-DIGIT LEVEL OF MINING SECTOR

Sl. No.	NIC 2-Digit group	Description of Mining Group	Description of Item	Weight
1	2	3	4	5
1	13	Mining of Metal Ores	a) Iron Ore	136.66
			b) Manganese Ore	0.03
			c) Bauxite	0.13
Total				136.82

Table 5, exhibits the distribution of weight to various 2-digit industry groups (15-36) of NIC-2004 in proportion to their GVA figures.

TABLE 5
DISTRIBUTION OF WEIGHTS AT 2 DIGIT LEVEL UNDER
MAJOR MANUFACTURING SECTOR

Sl. No.	NIC 2-Digit group	Description	Weight
1	15	Manufacture of Food products and beverages	51.84
2	17	Manufacture of Textiles	21.46
3	18	Manufacture of Wearing apparel, dressing and dyeing of fur	0.03
4	20	Manufacture of Wood and of products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials.	0.26
5	21	Manufacture of Paper and Paper Products.	3.43
6	22	Publishing, Printing and reproduction of recorded media	5.56
7	23	Manufacture of Coke, refined petroleum products and nuclear fuel	59.10
8	24	Manufacture of Chemicals and Chemical products	420.65
9	25	Manufacture of Rubber and Plastic products	52.36
10	26	Manufacture of other Non-metallic mineral products	12.05
11	27	Manufacture of Basic Metals	72.61
12	28	Manufacture of Fabricated metal products, except machinery and equipments	9.67
13	29	Manufacture of Machinery & equipment n.e.c.	14.66
14	30	Manufacture of Office, accounting and computing machinery	23.06
15	31	Manufacture of Electrical machinery and apparatus n.e.c.	18.86
16	32	Manufacture of Radio, television, and communication equipment and apparatus	4.00
17	33	Manufacture of Medical, precision and optical instruments, watches and clocks	20.47
18	34	Manufacture of Motor vehicles, trailers and semi trailers	7.98
19	35	Manufacture of other Transport equipment	3.65
20	36	Manufacture of Furniture, manufacturing n.e.c.	4.07
			805.75

The weights are allotted to different groups of industries under manufacturing sector at NIC (2004) level, of manufacturing as per the guidelines made available by Central Statistical Organization, Kolkata.

Table 6, gives the detailed picture of distribution of weights to items represented at different industrial groups of electricity, mining and manufacturing sector at 2-digit level of National Industrial Classification (NIC).

TABLE 6
DISTRIBUTION OF WEIGHT, PERCENTAGE AND NUMBER OF ITEMS
SELECTED AT 2-DIGIT LEVEL GROUPS OF NIC MAJOR SECTORS

Sl. No.	NIC 2-Digit group	Description of NIC group	Weight & its percentage to total	Number of items selected
1	2	3	4	5
ELECTRICITY SECTOR				
1	40	Electricity, Gas, Steam and Hot Water Supply	57.43(6%)	1
A) Sub-Total (Electricity)			57.43(6%)	1
MINING SECTOR				
1	13	Mining of Metal Ores	136.82(14%)	3
B) Sub-Total (Mining)			136.82(14%)	3
MANUFACTURING SECTOR				
1	15	Manufacture of Food products and beverages	51.84(5%)	28
2	17	Manufacture of Textiles	21.46(2%)	10
3	18	Manufacture of Wearing apparel, dressing and dyeing of fur	0.03(0%)	4
4	20	Manufacture of Wood and of products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials	0.26(0%)	4
5	21	Manufacture of Paper and Paper Products	3.43(0%)	5
6	22	Publishing, Printing and reproduction of recorded media	5.56(1%)	9
7	23	Manufacture of Coke, refined petroleum products and nuclear fuel	59.10(6%)	3
8	24	Manufacture of Chemicals and Chemical products	420.65(42%)	25
9	25	Manufacture of Rubber and Plastic products	52.36(5%)	10
10	26	Manufacture of other non-metallic mineral products	12.05(1%)	8
11	27	Manufacture of Basic Metals	72.61(7%)	17
12	28	Manufacture of fabricated metal products, except machinery and equipment	9.67(1%)	20

13	29	Manufacture of machinery & equipment n.e.c.	14.66(1%)	19
14	30	Manufacture of office, accounting and computing machinery	23.06(2%)	8
15	31	Manufacture of electrical machinery and apparatus n.e.c.	18.86(2%)	16
16	32	Manufacture of radio, television, and communication equipment and apparatus	4.00(1%)	14
17	33	Manufacture of medical, precision and optical instruments, watches and clocks	20.47(2%)	20
18	34	Manufacture of motor vehicles, trailers and semi trailers	7.98(1%)	6
19	35	Manufacture of other transport equipment	3.65(0%)	4
20	36	Manufacture of furniture, manufacturing n.e.c.	4.07(1%)	13
C) Sub-Total (Manufacturing)			805.75(80%)	243
(A+B+C) Grand Total (Electricity+Mining + Manufacturing)			1000.00	247

Table 7, gives the allotment of weights among items within 2-digit level of NIC under electricity, mining and manufacturing sector.

TABLE 7

DISTRIBUTION OF WEIGHTS AMONG ITEMS WITHIN 2-DIGIT LEVEL OF INDUSTRIES UNDER ELECTRICITY, MINING AND MANUFACTURING SECTOR

Sl. No.	NIC - 2004	Description of Item	Weight
1	2	3	4
ELECTRICITY SECTOR			
40 Electricity, Gas, Steam and Hot Water Supply			
1	4010	Generation of Electricity	57.430
Total			57.430
A) Total (ELECTRICITY SECTOR)			57.430
MINING SECTOR			
13 Mining of Metal Ores			
1	1310	Iron Ore	136.6648
2	1320	Manganese Ore	0.0312
3	1320	Bauxite	0.1262
Total			136.8222
B) Total (MINING SECTOR)			136.8222
MANUFACTURING SECTOR			
15 Manufacture of Food Products and beverages			
1	1511	Meat (all types) canned	0.5630
2	1512	Fish (all types) canned	0.3900
3	1512	Shrimps processed	0.5420
4	1512	Fish frozen	0.2590
5	1514	Oil, copra	2.2300
6	1514	Oil-cake, Coconut	0.0820
7	1514	Oil, palm	0.0550
8	1520	Milk, skimmed or pasturised, non-flavoured	1.2550

9	1520	Ice candy	0.0790
10	1531	Maida	0.0360
11	1533	Gola (Cattle feed)	0.0930
12	1541	Croison	0.2990
13	1541	Cakes, pastries & muffins	0.1990
14	1541	Bakery products, n. e. c.	0.1260
15	1542	Sugar, refined (incl. sugar cubes)	0.4930
16	1542	Molasses	0.1030
17	1543	Chocolate	7.8650
18	1544	Food products, n. e. c.	21.6160
19	1549	Cashew kernels	2.0310
20	1551	Alcohol/liquor, (IMFL) - blended	2.8660
21	1551	Rectified spirit	1.2340
22	1551	Liquor/alcohol/spirit, n. e. c.	0.2350
23	1551	Liquor, country, n. e. c.	0.0980
24	1552	Wines, still	0.2220
25	1553	Beer	5.0180
26	1553	Alcohol/liquor, (IMFL) - malted but not blended	0.5620
27	1554	Soft drinks, soda based	2.8650
28	1554	Water & water based items (non clinical) n. e. c.	0.4260
Total			51.842
17 Manufacture of Textiles			
29	1711	Yarn, polyester	0.0524
30	1721	Coated cotton fabrics	0.0862
31	1723	Net, monofilament of hdpe	0.1053
32	1723	Gauge cloth	0.0493
33	1723	Fishing twine, nylon	0.0312
34	1723	Fishing net	0.0966
35	1723	Rope, plastic	0.0394
36	1729	Sanitary towel and napkin	14.4643
37	1729	Leather cloth, pvc coated	5.7517
38	1729	Tape, elastic	0.7800
Total			21.4564
18 Manufacture of wearing apparel, dressing and dyeing of fur			
39	1810	Dress, Others - cotton	0.0233
40	1810	Tops of man-made fabrics excl. acrylic & nylon	0.0041
41	1810	Trousers / pants, cotton	0.0009
42	1810	Travel bag - cotton	0.0003
Total			0.0286
20 Manufacture of wood and of products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials			
43	2023	Wooden reel	0.0354
44	2023	Wooden parts & articles, n. e. c.	0.0194
45	2029	Almirah / cabinets / cupboard, wooden	0.2018
46	2029	Laminated sheet (wood)	0.0008
Total			0.2574
21 Manufacture of Paper and Paper Products			
47	2101	Computer stationery	0.1025
48	2102	Boxes, corrugated sheet	2.0296
49	2102	Cartons / boxes, paper	1.0332

50	2109	Paper, r. c.	0.2485
51	2109	Ink, others	0.0163
Total			3.4301
22 Publishing, Printing and reproduction of recorded media			
52	2212	Newspaper	3.7309
53	2221	Wrapper cloth, cotton	1.1045
54	2221	Stickers plastic	0.4660
55	2221	Paper, press	0.0824
56	2221	Greeting cards	0.0641
57	2221	Books	0.0447
58	2221	Printed materials, n. e. c.	0.0358
59	2221	Albums	0.0171
60	2221	Paper, pouches	0.0105
Total			5.5560
23 Manufacture of coke, refined petroleum products and nuclear fuel			
61	2310	Coke, n. e. c.	53.4733
62	2320	<i>Gas, liquified petroleum</i>	3.0888
63	2320	<i>Petroleum coke, calcined</i>	2.5415
Total			59.1036
24 Manufacture of Chemicals and Chemical products			
64	2412	Chemical fertilizer - all kind	34.7997
65	2413	Chemical & allied substances & products, n. e. c.	6.5872
66	2413	Dye stuff	4.5424
67	2413	Polymers - others	3.8054
68	2421	Weedicides, solid	1.3805
69	2421	Insectisides, others	0.9247
70	2422	Paints, enamels	4.8767
71	2422	Epoxy powder	2.2792
72	2422	Paints, plastic emulsion	2.1960
73	2423	Medicament & preparations, n. e. c.	163.3554
74	2423	Cefloxacin & preparation thereof	43.3518
75	2423	Antibiotics & preparation thereof, n. e. c.	23.4511
76	2423	Health care products	20.9116
77	2423	Vitamins in tablet or injectable form, n. e. c.	6.7597
78	2423	Syrup flavoured or not	6.1664
79	2423	Vitamin E (tocopherol)	2.9251
80	2423	Medicated tape (band aid etc.)	1.6604
81	2423	Pharmaceutical products, n. e. c.	1.5508
82	2424	Soap, toilet (excl. baby soap)	41.4995
83	2424	Tooth paste	13.9282
84	2429	Essence, sandal wood oil	2.2368
85	2429	Film (photo) - unexposed in roll - colour	20.4742
86	2429	Film, x-ray, unexposed in plate	4.9416
87	2429	Photography, cinematography supplies, n. e. c	4.6219
88	2429	Developer (photography)	1.4193
Total			420.6456
25 Manufacture of Rubber and Plastic products			
89	2511	Tyre / tube, others	24.974
90	2511	Flaps, rubber	0.5779
91	2520	Bag, hdpe	8.0424

92	2520	Plastic bag	0.2805
93	2520	Bag, polyethelene	0.2529
94	2520	Components, plastic	6.3230
95	2520	Pipe, plastic / pvc (non conduit)	5.4110
96	2520	Tube, laminated	3.3334
97	2520	Vessels / tanks for pharma. Industry	2.0613
98	2520	Tubes, glass	1.0989
Total			52.3553
26 Manufacture of other non-metallic mineral products			
99	2610	Fibre glass sheet / board	4.3587
100	2610	Pressure vessels & tanks	6.0599
101	2610	Fibre glass & articles thereof, n. e. c.	0.7721
102	2610	Chemical equipment & system - others	0.0663
103	2693	Mosaic tiles	0.0096
104	2694	Cement, portland	0.5420
105	2695	Closets	0.1283
106	2695	R c c spun pipes	0.1092
Total			12.0461
27 Manufacture of Basic Metals			
107	2711	Ores, iron	3.6705
108	2711	Magnetite	2.0773
109	2712	Ingot, iron /steel	25.7685
110	2713	Pig iron	11.4258
111	2713	Scrap, iron /steel	0.3245
112	2714	M s flats & sheets	8.0556
113	2714	Iron / steel filling	3.6748
114	2714	Manganese, silica	2.7726
115	2715	M S bars & rods angles / plates / square	1.8125
116	2715	Bar, rods & rounds, iron / steel	1.2536
117	2720	Copper alloy rolled products	6.8857
118	2720	Bronze ingot	0.1187
119	2720	Sheets / strips, rods, brass	2.1848
120	2720	Tubes, collapsible aluminium	0.0729
121	2720	Zinc oxide	0.2817
122	2720	Cobalt	0.4930
123	2731	Castings & forging, iron / steel	1.7352
Total			72.6077
28 Manufacture of fabricated metal products, except machinery and equipment			
124	2811	Aluminium & aluminium alloys worked, n. e. c.	0.1311
125	2891	Metal cutting tools & accessories	0.0950
126	2891	General purpose machinery / tools, components, n. e. c.	0.0432
127	2891	Electrical equipment & parts, n. e. c.	0.0334
128	2892	Anodized products - others	2.0931
129	2892	Metallurgical machinery	1.0992
130	2893	Lock clamp & brush	0.4189
131	2893	Keys, chains & rings	0.0967
132	2893	Ferrule	0.0462
133	2893	Diamond, industrial products	1.2508
134	2893	Tungsten wire	1.2048
135	2893	Diamond tools	1.0812

136	2893	Tools	0.9832
137	2893	Handles plated	0.4297
138	2893	Blades, saw excl. hacksaw	0.2089
139	2893	Nuts, bolts, screw & washers, iron / steel	0.1116
140	2893	Diamond rough	0.0969
141	2893	Diamond powder	0.0362
142	2893	Head clamps	0.0313
143	2899	Metal detectors	0.1717
Total			9.6631
29 Manufacture of machinery & equipment n.e.c			
144	2912	Vessels, vats, steel	0.6771
145	2912	Clamps, iron / steel	0.1701
146	2913	Bush, metal - others	0.2004
147	2915	Roller for conveyor	0.1192
148	2919	Refrigerators ex. Deep freezer	0.0769
149	2919	Weighing scales	1.9930
150	2919	Scrap, rubber	0.0811
151	2924	Hose pipe / pipe set	0.5530
152	2926	Washing machines / laundry mach.	4.0864
153	2926	Micro oven	0.6674
154	2926	Spares, agricultural machinery - others	0.3570
155	2926	Can washers	0.3123
156	2926	Machinery, others	0.1542
157	2929	Moulds & dies, metal	0.2336
158	2930	Fan, ceiling	4.0585
159	2930	Fan, pedestal	0.4286
160	2930	Iron, electric	0.1888
161	2930	Electric toasters	0.0366
162	2930	Water filters, plastic	0.2618
Total			14.6560
30 Manufacture of office, accounting and computing machinery			
163	3000	Automation system	3.7978
164	3000	Computers other than pc	1.3226
165	3000	Computer (p. c.)	12.2419
166	3000	Mother board	3.1343
167	3000	Computer peripherals	1.2238
168	3000	Computer / parts / peripherals n. e. c.	1.0754
169	3000	Electronic components & parts, n. e. c.	0.1327
170	3000	Ian card (e. g. ethernet card)	0.1317
Total			23.0602
31 Manufacture of electrical machinery and apparatus n.e.c.			
171	3110	A. c. motors	2.5016
172	3110	Electric motor starters	1.8720
173	3120	Control panel	0.0358
174	3130	Insulating & flexible wires	2.9217
175	3130	Cable, jelly filled	2.8892
176	3130	xlpe cable	2.2750
177	3130	Fibre optic cable	1.9731
178	3130	Telephone dials	0.9144
179	3130	Connectors / plugs /sockets holders - electric	0.8954

180	3130	Coil springs, copper	0.7117
181	3130	Telephony/transmission equipment & parts, n.e.c.	0.6650
182	3130	Lamps / fittings / etc. n. e. c.	0.6266
183	3130	Scrap / waste, metal - others	0.0888
184	3130	Cable jointing kits	0.0849
185	3140	Battery plate	0.2455
186	3190	Electrical steel & lamination	0.1621
Total			18.8628
32 Manufacture of radio, television, and communication equipment and apparatus			
187	3210	Rod, glass	0.1676
188	3210	Capacitors, mica	0.5447
189	3210	Power capacitors	0.1777
190	3210	Capacitor, metalised poly. Film	0.1285
191	3210	Resistance / resistor	0.0148
192	3210	Printed circuit plate / board (pcb)	1.2511
193	3220	Radio	0.3539
194	3220	Stereo head phone	0.1174
195	3220	Car cassette players	0.0105
196	3220	Telephones receiver	0.7297
197	3220	Trans receiver set, all types	0.4250
198	3230	T. V. set (b / w)	0.0462
199	3230	T. V. set (colour)	0.0297
200	3230	V, C. D.	0.0027
Total			3.9995
33 Manufacture of medical, precision and optical instruments, watches and clocks			
201	3311	X - ray equipment	3.9379
202	3311	Fabricated products, others	0.7855
203	3311	H I V testing kits	0.3599
204	3311	Medical / bio - medical / lab. Machines n.e.c.	0.1412
205	3312	Process combat instruments	0.4910
206	3313	control equipment	1.0864
207	3313	Transmitters (not for radio broadcast)	0.5361
208	3313	Thermometer, dry bulb	0.1052
209	3313	Test production	0.0978
210	3313	Pressure & vacuum gauges	0.0394
211	3313	Heating / cooling electric equipment, n. e. c. & parts	0.0275
212	3320	Lens, ophthalmic	3.9436
213	3320	Glass, blank, ophthalmic	1.7224
214	3320	Spectacle fitted with lens	0.5213
215	3320	Camera, still	0.1980
216	3320	Projectors, others	0.0978
217	3330	Watch, quartz	3.9356
218	3330	Cases, watch	1.9689
219	3330	Straps, stainless steel	0.4315
220	3330	Straps, leather	0.0446
Total			20.4716
34 Manufacture of motor vehicles, trailers and semi trailers			
221	3410	Mini bus body	4.6526
222	3410	Motor vehicle, others & parts, n. e. c.	2.4592
223	3410	Motor car, diesel drvn. Complete - imported, assembled	0.0362

224	3420	Body for other vehicles	0.1778
225	3420	Seat assembly, rubber	0.1535
226	3430	.Machine tool & accessories - others	0.5029
Total			7.9822
35 Manufacture of other transport equipment			
227	3511	Barges excl. hopper	3.4134
228	3511	Ships, boats & other vessels, n. e. c.	0.1750
229	3511	Boat, wooden with engine	0.0538
230	3511	trawlers - fishing - motorized	0.0117
Total			3.6539
36 Manufacture of furniture, manufacturing n.e.c.			
231	3610	Tables & desks, iron / steel	0.0646
232	3610	Chair, metal	0.0591
233	3610	Fabricated metal products	0.0189
234	3610	Furniture, aluminium	0.0138
235	3610	Chair, steel	0.0129
236	3691	Jewellery / ornament, gold - others	0.4409
237	3694	Toys, plastic moulded - others	0.7610
238	3694	Toys, electrical / electronic - others	0.4046
239	3699	Dot pen with refill	1.0436
240	3699	Refill, ball / dot pen	0.3132
241	3699	Pen, marker	0.3019
242	3699	Stationary / all purpose items - n. e. c.	0.0812
243	3699	Tooth brush	0.5530
Total			4.0687
C) Total (MANUFACTURING SECTOR)			805.7468
Grand Total (A+B+C) (Electricity+Mining + Manufacturing)			1000.00

CHAPTER IV

INDEX OF INDUSTRIAL PRODUCTION

1. ESTIMATION PROCEDURE

The index of Industrial production on new base 2004-05 has been computed by using laspeyre's formula. It is a simple weighted arithmetic mean as given below

$$I = \frac{\sum W_i R_i}{\sum W_i}$$

Where,

I - the Index of Industrial Production

R_i - the production relative for the i-th item and

W_i - the corresponding weight

2. COMBINED INDEX

a) Sector Level and Combined Annual Indices

The sector level and combined annual indices for the year 2010-11 covering 3 sectors namely Electricity, Mining and Manufacturing are given in Table 8. This table also gives the combined index of the three sectors. It may be observed that, the Manufacturing sector carries the highest weight of 805.75, followed by Mining sector with a weight of 136.82 and Electricity sector with 57.43. It may also be seen that, in comparison with the base year 2004-05, the index of Industrial production for the year 2010-11 in respect of Mining sector has increased to 265.96, while the index of Industrial production in respect of the other two sectors namely Manufacturing and Electricity has declined to 85.59 and 87.00 respectively. However, the combined Index of all the 3 sectors has increased to 110.35 during 2010-11 over the base year 2004-05.

TABLE 8
INDEX OF INDUSTRIAL PRODUCTION
SECTOR LEVEL AND COMBINED ANNUAL INDICES
(BASE 2004-05=100)

Sl. No.	Industrial Sector	Weight	Index
			2010-11
1	2	3	4
1	Electricity	57.43	87.00
2	Mining	136.82	265.96
3	Manufacturing	805.75	85.59
Combined Index		1000.00	110.35

b) Sector Level and Combined Monthly Indices for the year 2010-11

The sector level monthly indices for the three sectors and combined monthly indices for the year 2010-11 are given in Table 9. It may be observed that the Index of Industrial production, in the months of April, January, February and March was considerably higher in comparison to the rest of the months.

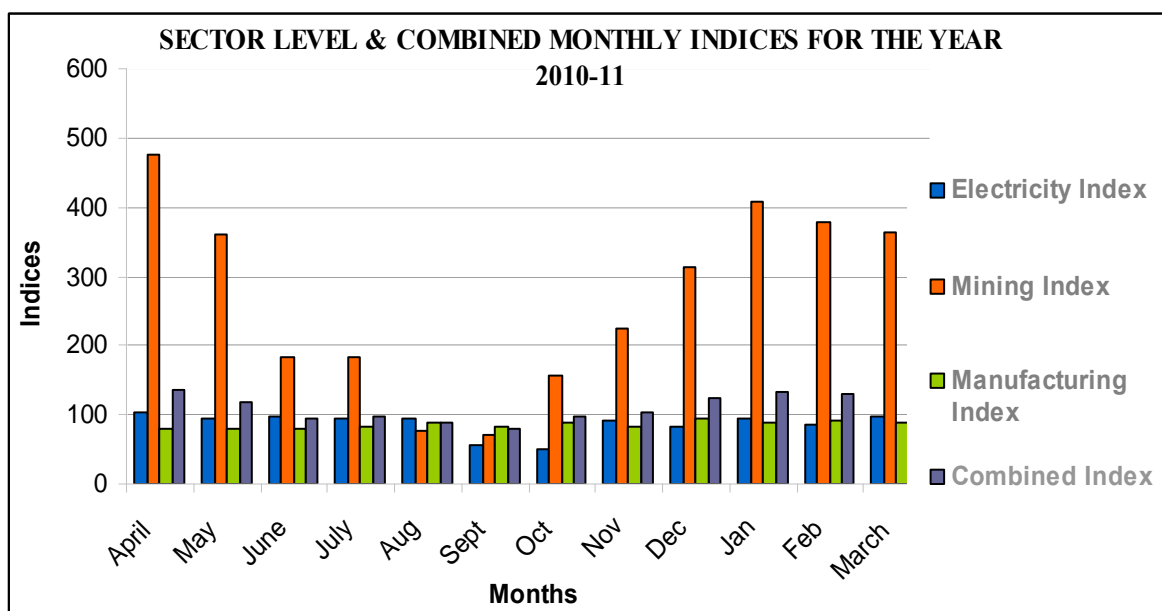


TABLE 9
INDEX OF INDUSTRIAL PRODUCTION
SECTOR LEVEL AND COMBINED MONTHLY INDICES FOR THE YEAR 2010-11
(BASE 2004-05=100)

Sl. No.	Industrial Sector	Weight	2010-11											
			April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Electricity Index	57.43	104.51	95.79	97.04	95.47	94.83	54.72	48.86	92.58	82.86	93.47	87.01	96.79
2	Mining Index	136.82	476.33	359.42	181.79	181.87	78.17	70.96	157.13	225.05	312.26	408.46	377.14	362.98
3	Manufacturing Index	805.75	79.20	79.99	80.70	82.74	89.18	82.40	89.79	83.04	93.93	87.28	90.19	88.58
Combined Index		1000.00	134.99	119.13	95.47	97.03	88.00	79.24	96.65	103.02	123.17	131.58	129.27	126.60

3. ELECTRICITY SECTOR

This sector is covered in the NIC 2004 under Division 40; Electricity, Gas, Steam and Water supply. There is only one item covered under this sector i.e. Generation of Electricity. The Index of Industrial Production at 2-digit level and 4-digit level of NIC for the year 2010-11 is given in Table 10 below.

TABLE 10
INDEX OF INDUSTRIAL PRODUCTION
ELECTRICITY SECTOR (GROUP / ITEM LEVEL ANNUAL INDICES)
(BASE 2004-05=100)

Sl. No.	Item Code	NIC Code & Electricity Group / Item Description	Weight	Index
				2010-11
1		2	3	4
1	4010	Generation of Electricity	57.43	87.00
40. Electricity, Gas, Steam and Water supply			57.43	87.00
ELECTRICITY SECTOR INDEX			57.43	87.00

4. MINING SECTOR

a) Mining Sector Group Level Annual Indices

The group level annual indices in the Mining Sector for the year 2010-11 are given in Table 11. It may be observed from the table that the index related to mining of metal ores has increased to 265.96 during 2010-11 over the base year 2004-05.

TABLE 11
INDEX OF INDUSTRIAL PRODUCTION
MINING SECTOR (GROUP LEVEL ANNUAL INDICES)
(BASE 2004-05=100)

Sl. No.	Item Code	NIC Code & Mining Group Description	Weight	Index
				2010-11
1	2	3	4	5
1	13.	Mining of Metal Ores	136.82	265.96
MINING SECTOR INDEX			136.82	265.96

b) Mining Sector Month-wise Group Level Indices

The month-wise group level indices in respect of Mining Sector for the year 2010-11 are given in Table 12. It may be observed that the index was reasonably high in the months of April, January, February and March in comparison with the other months.

TABLE 12
INDEX OF INDUSTRIAL PRODUCTION
MINING SECTOR MONTHWISE GROUP LEVEL INDICES FOR THE YEAR 2010-11
(BASE 2004-05=100)

Sl. No.	NIC Code & Mining Group Description	Weight	Year 2010-11												Average
			April	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	13. Mining of Metal Ore	136.82	476.33	359.42	181.79	181.87	78.17	70.96	157.13	225.05	312.26	408.46	377.14	362.98	265.96
MINING SECTOR INDEX		136.82	476.33	359.42	181.79	181.87	78.17	70.96	157.13	225.05	312.26	408.46	377.14	362.98	265.96

c) Mining Sector Product Level Annual Indices

The product level annual indices in respect of Mining Sector for the year 2010-11 is given in Table 13. It may be noted that the Group 13: Mining of Metal Ores has three items i.e. iron ore, Manganese ore and Bauxite.

TABLE 13
INDEX OF INDUSTRIAL PRODUCTION
MINING SECTOR (PRODUCT LEVEL ANNUAL INDICES)
(BASE 2004-05=100)

Sl. No.	Item Code	NIC Code & Mining Group Description	Weight	Index
				2010-11
1	2	3	4	5
		13. Mining of Metal Ores	136.82	265.96
1	1310	Mining of Iron Ore	136.6648	266.12
2	1320	Mining of Manganese ore	0.0312	0.96
3	1320	Mining of Bauxite	0.1262	133.73

5. MANUFACTURING SECTOR

a) Manufacturing Sector Group Level Annual Indices

The group level annual indices in respect of Manufacturing Sector for the year 2010-11 are given in Table 14. It may be observed that, within the manufacturing sector, Group 24: Manufacture of Chemicals and Chemical products carries a significant weight of 420.65, followed by Group 23: manufacture of coke, refined petroleum products and nuclear fuel (59.10) and Group 15: manufacture of food products and beverages (51.84). It may also be noted that Group 18: manufacture of wearing apparel, dressing and dyeing of fur carries the least weight of (0.03) followed by Group 20: manufacture of wood, and of products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials (0.26).

It may be seen from Table 14, that the Group 17: manufacture of textiles has registered a significant growth in the index being 644.18 during the year 2010-11 over the base year 2004-05. The other 2-Digit groups that have registered an increasing trend in the Index of Industrial Production during 2010-11 are Group 15: manufacture food products and beverages (166.82), Group 28: manufacture of fabricated metal products, except machinery and equipment (148.49), Group: 29 manufacture of machinery & equipment n.e.c. (118.51), Group: 32 manufacture of radio, television, and communication equipment and apparatus (115.83) and Group 34: manufacture of motor vehicles, trailers and semi trailers (110.80). The Index of Industrial Production in respect of the remaining 2-Digit groups in the manufacture sector has declined during 2010-11 over the base year 2004-05.

TABLE 14
INDEX OF INDUSTRIAL PRODUCTION
MANUFACTURING SECTOR (GROUP LEVEL ANNUAL INDICES)
BASE YEAR 2004-05=100

Sl. No.	NIC code	Manufacturing group description	weight	Index
				2010-11
1	15	Manufacture of Food Products and beverages	51.84	166.82
2	17	Manufacture of Textiles	21.46	644.18
3	18	Manufacture of wearing apparel, dressing and dyeing of fur	0.03	93.06
4	20	Manufacture of wood and of products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials	0.26	78.63
5	21	Manufacture of Paper and Paper Products	3.43	61.20
6	22	Publishing, Printing and reproduction of recorded media	5.56	92.53
7	23	Manufacture of coke, refined petroleum products and nuclear fuel	59.10	66.08
8	24	Manufacture of Chemicals and Chemical products	420.65	61.30
9	25	Manufacture of Rubber and Plastic products	52.36	36.83
10	26	Manufacture of other non-metallic mineral product	12.05	81.57
11	27	Manufacture of Basic Metals	72.61	57.13
12	28	Manufacture of fabricated metal products, except machinery and equipment	9.67	148.49
13	29	Manufacture of machinery & equipment n.e.c.	14.66	118.51
14	30	Manufacture of office, accounting and computing machinery	23.06	83.99
15	31	Manufacture of electrical machinery and apparatus n.e.c.	18.86	55.38
16	32	Manufacture of radio, television, and communication equipment and apparatus	4.00	115.83
17	33	Manufacture of medical, precision and optical instruments, watches and clocks	20.47	48.09
18	34	Manufacture of motor vehicles, trailers and semi trailers	7.98	110.80
19	35	Manufacture of other transport equipment	3.65	36.61
20	36	Manufacture of furniture, manufacturing n.e.c.	4.07	91.12
Manufacturing Sector Index			805.75	85.59

b) Manufacturing Sector Month-wise Group Level Indices

The month-wise group level indices in respect of Manufacturing Sector for the year 2010-11 are given in Table 15. It may be observed that the index was reasonably high during the months of April, January, February and March in comparison with the other months.

TABLE 15
INDEX OF INDUSTRIAL PRODUCTION
MANUFACTURING SECTOR (MONTH-WISE GROUP LEVEL INDICES FOR THE YEAR 2010-11)
(BASE 2004-05=100)

NIC code	Manufacturing group description	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Average
15	Manufacture of Food Products and beverages	138.27	128.59	148.28	168.93	171.96	151.66	175.16	171.14	179.57	192.40	178.69	197.13	166.82
17	Manufacture of Textiles	520.93	526.23	630.40	563.53	688.21	599.83	742.99	573.80	687.14	735.16	727.87	734.12	644.18
18	Manufacture of wearing apparel, dressing and dyeing of fur	118.18	102.97	54.18	92.18	161.15	100.98	133.65	38.84	226.03	24.47	27.96	36.12	93.06
20	Manufacture of wood and of products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials	89.99	92.64	15.74	87.95	87.52	97.04	88.92	81.55	87.29	77.31	71.14	66.41	78.63
21	Manufacture of Paper and Paper Products	60.99	57.66	61.83	60.54	64.51	58.04	65.80	65.82	61.47	58.62	57.02	62.13	61.20
22	Publishing, Printing and reproduction of recorded media	87.68	89.71	87.90	91.06	92.02	88.79	98.58	94.12	97.52	97.89	88.51	96.52	92.53
23	Manufacture of coke, refined petroleum products and nuclear fuel	67.54	66.55	61.65	64.76	65.63	64.14	68.41	64.13	70.45	70.30	64.67	64.73	66.08
24	Manufacture of Chemicals and Chemical products	62.29	62.17	60.96	62.53	65.75	60.82	60.52	56.66	69.26	58.16	58.87	57.57	61.30
25	Manufacture of Rubber and Plastic products	35.95	34.55	35.00	42.15	38.57	34.09	40.64	36.31	34.84	34.94	37.21	37.77	36.83
26	Manufacture of other non-metallic mineral products	79.93	86.83	0	83.92	85.89	85.21	73.94	78.94	96.20	77.58	77.29	153.13	81.57
27	Manufacture of Basic Metals	61.14	63.54	53.80	44.93	47.00	50.12	63.30	65.08	71.38	63.46	52.46	49.38	57.13
28	Manufacture of fabricated metal products, except machinery and equipment	148.79	145.01	161.44	140.78	155.16	145.85	146.00	146.43	196.00	109.20	130.93	156.82	148.49
29	Manufacture of machinery & equipment n.e.c.	90.73	150.50	90.71	88.59	102.26	97.70	147.96	158.14	138.23	147.59	78.86	130.88	118.51

NIC code	Manufacturing group description	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Average
30	Manufacture of office, accounting and computing machinery	40.15	37.44	62.95	88.35	96.56	92.75	59.77	102.25	68.50	50.31	257.17	51.73	83.99
31	Manufacture of electrical machinery and apparatus n.e.c.	54.14	58.79	66.00	56.12	60.75	67.74	59.65	44.48	54.86	43.97	46.12	51.96	55.38
32	Manufacture of radio, television, and communication equipment and apparatus	111.75	95.01	106.55	116.61	104.26	92.85	115.64	114.63	120.04	145.83	127.32	139.42	115.83
33	Manufacture of medical, precision and optical instruments, watches and clocks	48.57	52.49	49.01	53.26	51.14	51.16	43.14	37.28	48.57	40.34	45.14	56.04	48.09
34	Manufacture of motor vehicles, trailers and semi trailers	91.68	105.45	82.44	99.30	142.88	137.93	126.08	129.13	122.40	102.14	98.23	91.98	110.80
35	Manufacture of other transport equipment	0	0	0	0	0	0	168.33	56.11	0	0	0	214.85	36.61
36	Manufacture of furniture, manufacturing n.e.c.	93.20	82.61	98.23	88.25	101.40	82.12	88.15	89.83	97.94	94.82	90.07	86.84	91.12
MANUFACTURING SECTOR INDEX		79.20	79.99	80.70	82.74	89.18	82.40	89.79	83.04	93.93	87.28	90.19	88.58	85.59
INDUSTRIAL PRODUCTION		134.99	119.13	95.47	97.03	88.00	79.24	96.65	103.02	123.17	131.58	129.27	126.60	110.35

c) Manufacturing Sector Product Level Annual Indices

The product level annual indices in respect of Manufacturing Sector under different 2-Digit groups for the year 2010-11 are given in Table 16 below.

TABLE 16
INDEX OF INDUSTRIAL PRODUCTION
MANUFACTURING SECTOR (PRODUCT LEVEL ANNUAL INDICES)
(BASE 2004-05 = 100)

Sr. No.	Item Code	Item Description	Weight	2010-11
1	2	3	4	5
		15. Manufacture of Food Products & Beverages		
1	1511	i) Meat (all types) canned	0.5630	8.67
2	1512	ii) Fish (all types) canned	0.3900	0.70
3	1512	iii) Shrimps processed	0.5420	0.00
4	1512	iv) Fish frozen	0.2590	196.95
5	1514	v) Oil, copra	2.2300	33.86
6	1514	vi) Oil-cake, Coconut	0.0820	29.95
7	1514	vii) Oil, palm	0.0550	89.05
8	1520	viii) Milk, skimmed or pasturised, non-flavoured	1.2550	63.72
9	1520	ix) Ice candy	0.0790	5.75
10	1531	x) Maida	0.0360	640.33
11	1533	xi) Gola (Cattle feed)	0.0930	106.99
12	1541	xii) Croison	0.2990	0.01
13	1541	xiii) Cakes, pastries & muffins	0.1990	34.85
14	1541	xiv) Bakery products, n. e. c.	0.1260	174.58
15	1542	xv) Sugar, refined (incl. sugar cubes)	0.4930	140.03
16	1542	xvi) Molasses	0.1030	33.35
17	1543	xvii) Chocolate	7.8650	270.62
18	1544	xviii) Food products, n. e. c.	21.6160	194.96
19	1549	xix) Cashew kernels	2.0310	27.49
20	1551	xx) Alcohol/liquor, (IMFL) - blended	2.8660	326.47
21	1551	xxi) Rectified spirit	1.2340	0.00
22	1551	xxii) Liquor/alcohol/spirit, n. e. c.	0.2350	605.72
23	1551	xxiii) Liquor, country, n. e. c.	0.0980	0.00
24	1552	xiv) Wines, still	0.2220	177.16
25	1553	xxv) Beer	5.0180	98.87
26	1553	xxvi) Alcohol/liquor, (IMFL) - malted but not blended	0.5620	0.00
27	1554	xxvii) Soft drinks, soda based	2.8650	82.73
28	1554	xxviii) Water & water based items (non clinical) n.e.c.	0.4260	105.37

Contd

1	2	3	4	5
		17. Manufacture of Textiles		
29	1711	i) Yarn, polyester	0.0524	31.46
30	1721	ii) Coated cotton fabrics	0.0862	0.00
31	1723	iii) Net, monofilament of hdpe	0.1053	68.38
32	1723	iv) Gauge cloth	0.0493	0.00
33	1723	v) Fishing twine, nylon	0.0312	61.67
34	1723	vi) Fishing net	0.0966	261.42
35	1723	vii) Rope, plastic	0.0394	0.00
36	1729	viii) Sanitary towel and napkin	14.4643	876.68
37	1729	ix) Leather cloth, pvc coated	5.7517	154.31
38	1729	x) Tape, elastic	0.7800	282.20
		18. Manufacture of Wearing apparel, dressing & dyeing of fur		
39	1810	i) Dress, Others - cotton	0.0233	85.33
40	1810	ii) Tops of man-made fabrics excl. acrylic & nylon	0.0041	34.35
41	1810	iii) Trousers / pants, cotton	0.0009	736.36
42	1810	iv) Travel bag - cotton	0.0003	0.00
		20. Manufacture of wood & of products of wood & cork, except furniture, manufacture of articles of straw & plaiting materials		
43	2023	i) Wooden reel	0.0354	68.15
44	2023	ii) Wooden parts & articles, n. e. c.	0.0194	113.20
45	2029	iii) Almirah / cabinets / cupboard, wooden	0.2018	78.46
46	2029	iv) Laminated sheet (wood)	0.0008	0.00
		21. Manufacture of Paper & Paper Products		
47	2101	i) Computer stationery	0.1025	0.00
48	2102	ii) Boxes, corrugated sheet	2.0296	95.93
49	2102	iii) Cartons / boxes, paper	1.0332	12.27
50	2109	iv) Paper, r. c.	0.2485	0.00
51	2109	v) Ink, others	0.0163	0.00
		22. Publishing, printing & reproduction of recorded media		
52	2212	i) Newspaper	3.7309	137.86
53	2221	ii) Wrapper cloth, cotton	1.1045	0.00
54	2221	iii) Stickers plastic	0.4660	0.00
55	2221	iv) Paper, press	0.0824	0.00
56	2221	v) Greeting cards	0.0641	0.00
57	2221	vi) Books	0.0447	0.43
58	2221	vii) Printed materials, n. e. c.	0.0358	0.00
59	2221	viii) Albums	0.0171	4.57
60	2221	ix) Paper, pouches	0.0105	0.00
		23. Manufacture of coke, refined petroleum products & nuclear fuel		
61	2310	i) Coke, n. e. c.	53.4733	63.54
62	2320	ii) Gas, liquified petroleum	3.0888	119.73
63	2320	iii) Petroleum coke, calcined	2.5415	54.16

Contdí

1	2	3	4	5
		24. Manufacture of chemicals & chemical products		
64	2412	i) Chemical fertilizer - all kind	34.7997	82.82
65	2413	ii) Chemical & allied substances & products, n. e. c.	6.5872	0.00
66	2413	iii) Dye stuff	4.5424	0.00
67	2413	iv) Polymers - others	3.8054	0.00
68	2421	v) Weedicides, solid	1.3805	3.88
69	2421	vi) Insecticides, others	0.9247	35.79
70	2422	vii) Paints, enamels	4.8767	313.08
71	2422	viii) Epoxy powder	2.2792	624.47
72	2422	ix) Paints, plastic emulsion	2.1960	116.71
73	2423	x) Medicament & preparations, n. e. c.	163.3554	38.85
74	2423	xi) Cefloxacin & preparation thereof	43.3518	0.00
75	2423	xii) Antibiotics & preparation thereof, n. e. c.	23.4511	313.56
76	2423	xiii) Health care products	20.9116	0.00
77	2423	xiv) Vitamins in tablet or injectable form, n. e. c.	6.7597	0.00
78	2423	xv) Syrup flavoured or not	6.1664	0.19
79	2423	xvi) Vitamin E (tocopherol)	2.9251	305.42
80	2423	xvii) Medicated tape (band aid etc.)	1.6604	193.50
81	2423	xviii) Pharmaceutical products, n. e. c.	1.5508	131.27
82	2424	xix) Soap, toilet (excl. baby soap)	41.4995	36.23
83	2424	xx) Tooth paste	13.9282	177.81
84	2429	xxi) Essence, sandal wood oil	2.2368	0.12
85	2429	xxii) Film (photo) - unexposed in roll - colour	20.4742	0.00
86	2429	xxiii) Film, x-ray, unexposed in plate	4.9416	0.00
87	2429	xxiv) Photography, cinematography supplies, n.e.c	4.6219	120.80
88	2429	xxv) Developer (photography)	1.4193	0.00
		25. Manufacture of rubber & plastic products		
89	2511	i) Tyre / tube, others	24.974	36.22
90	2511	ii) Flaps, rubber	0.5779	88.82
91	2520	iii) Bag, hdpe	8.0424	0.00
92	2520	iv) Plastic bag	0.2805	0.00
93	2520	v) Bag, polyethelene	0.2529	17.61
94	2520	vi) Components, plastic	6.3230	40.27
95	2520	vii) Pipe, plastic / pvc (non conduit)	5.4110	80.24
96	2520	viii) Tube, laminated	3.3334	83.89
97	2520	ix) Vessels / tanks for pharma. Industry	2.0613	0.00
98	2520	x) Tubes, glass	1.0989	0.00
		26. Manufacture of other non-metallic mineral products		
99	2610	i) Fibre glass sheet / board	4.3587	0.00
100	2610	ii) Pressure vessels & tanks	6.0599	92.79
101	2610	iii) Fibre glass & articles thereof, n. e. c.	0.7721	269.33
102	2610	iv) Chemical equipment & system - others	0.0663	18.73
103	2693	v) Mosaic tiles	0.0096	10779.24
104	2694	vi) Cement, portland	0.5420	171.58
105	2695	vii) Closets	0.1283	0.00
106	2695	viii) R c c spun pipes	0.1092	137.45

1	2	3	4	5
		27. Manufacture of basic metals		
107	2711	i) Ores, iron	3.6705	302.97
108	2711	ii) Magnetite	2.0773	0.00
109	2712	iii) Ingot, iron /steel	25.7685	26.18
110	2713	iv) Pig iron	11.4258	85.25
111	2713	v) Scrap, iron /steel	0.3245	43.10
112	2714	vi) M s flats & sheets	8.0556	0.00
113	2714	vii) Iron / steel filling	3.6748	0.00
114	2714	viii) Manganese, silica	2.7726	51.73
115	2715	ix) M S bars & rods angles / plates / square	1.8125	35.23
116	2715	x) Bar, rods & rounds, iron / steel	1.2536	5.94
117	2720	xi) Copper alloy rolled products	6.8857	62.31
118	2720	xii) Bronze ingot	0.1187	0.00
119	2720	xiii) Sheets / strips, rods, brass	2.1848	43.26
120	2720	xiv) Tubes, collapsible aluminium	0.0729	0.00
121	2720	xv) Zinc oxide	0.2817	68.89
122	2720	xvi) Cobalt	0.4930	886.70
123	2731	xvii) Castings & forging, iron / steel	1.7352	102.93
		28. Manufacture of fabricated metal products products, except machinery and equipment		
124	2811	i) Aluminium & aluminium alloys worked, n.e.c.	0.1311	44.63
125	2891	ii) Metal cutting tools & accessories	0.0950	0.00
126	2891	iii) General purpose machinery / tools, components, n. e. c.	0.0432	584.77
127	2891	iv) Electrical equipment & parts, n. e. c.	0.0334	51.81
128	2892	v) Anodized products - others	2.0931	94.99
129	2892	vi) Metallurgical machinery	1.0992	0.00
130	2893	vii) Lock clamp & brush	0.4189	0.00
131	2893	viii) Keys, chains & rings	0.0967	0.00
132	2893	ix) Ferrule	0.0462	0.00
133	2893	x) Diamond, industrial products	1.2508	123.27
134	2893	xi) Tungsten wire	1.2048	0.00
135	2893	xii) Diamond tools	1.0812	90.25
136	2893	xiii) Tools	0.9832	90.48
137	2893	xiv) Handles plated	0.4297	25.69
138	2893	xv) Blades, saw excl. hacksaw	0.2089	89.17
139	2893	xvi) Nuts, bolts, screw & washers, iron / steel	0.1116	0.00
140	2893	xvii) Diamond rough	0.0969	8519.96
141	2893	xviii) Diamond powder	0.0362	0.00
142	2893	xix) Head clamps	0.0313	204.17
143	2899	xx) Metal detectors	0.1717	11.03

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1	2	3	4	5
		29. Manufacture of machinery & Equipment, n. e. c.		
144	2912	i) Vessels, vats, steel	0.6771	600.61
145	2912	ii) Clamps, iron / steel	0.1701	114.45
146	2913	iii) Bush, metal - others	0.2004	123.23
147	2915	iv) Roller for conveyor	0.1192	57.05
148	2919	v) Refrigerators ex. Deep freezer	0.0769	0.00
149	2919	vi) Weighing scales	1.9930	24.52
150	2919	vii) Scrap, rubber	0.0811	0.00
151	2924	viii) Hose pipe / pipe set	0.5530	0.00
152	2926	ix) Washing machines / laundry mach.	4.0864	87.86
153	2926	x) Micro oven	0.6674	348.82
154	2926	xi) Spares, agricultural machinery - others	0.3570	0.14
155	2926	xii) Can washers	0.3123	0.00
156	2926	xiii) Machinery, others	0.1542	313.03
157	2929	xiv) Moulds & dies, metal	0.2336	0.00
158	2930	xv) Fan, ceiling	4.0585	145.47
159	2930	xvi) Fan, pedestal	0.4286	0.00
160	2930	xvii) Iron, electric	0.1888	0.00
161	2930	xviii) Electric toasters	0.0366	0.00
162	2930	xix) Water filters, plastic	0.2618	1.22
		30. Manufacture of office, accounting & computing machinery		
163	3000	i) Automation system	3.7978	265.87
164	3000	ii) Computers other than pc	1.3226	0.00
165	3000	iii) Computer (p. c.)	12.2419	60.93
166	3000	iv) Mother board	3.1343	0.00
167	3000	v) Computer peripherals	1.2238	0.00
168	3000	vi) Computer / parts / peripherals n. e. c.	1.0754	168.63
169	3000	vii) Electronic components & parts, n. e. c.	0.1327	0.00
170	3000	viii) lan card (e. g. ethernet card)	0.1317	0.00
		31. Manufacture of electrical machinery & apparatus n. e. c.		
171	3110	i) A. c. motors	2.5016	156.48
172	3110	ii) Electric motor starters	1.8720	64.72
173	3120	iii) Control panel	0.0358	325.00
174	3130	iv) Insulating & flexible wires	2.9217	100.90
175	3130	v) Cable, jelly filled	2.8892	3.79
176	3130	vi) xlpe cable	2.2750	0.00
177	3130	vii) Fibre optic cable	1.9731	62.79
178	3130	viii) Telephone dials	0.9144	0.00
179	3130	ix) Connectors / plugs /sockets holders - electric	0.8954	0.00
180	3130	x) Coil springs, copper	0.7117	0.00
181	3130	xi) Telephony / transmission equipment & parts, n. e. c.	0.6650	0.00
182	3130	xii) Lamps / fittings / etc. n. e. c.	0.6266	0.00
183	3130	xiii) Scrap / waste, metal - others	0.0888	0.00
184	3130	xiv) Cable jointing kits	0.0849	0.00

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1	2	3	4	5
185	3140	xv) Battery plate	0.2455	182.96
186	3190	xvi) Electrical steel & lamination	0.1621	281.55
		32. Manufacture of radio, television & communication equipment and apparatus		
187	3210	i) Rod, glass	0.1676	0.00
188	3210	ii) Capacitors, mica	0.5447	0.00
189	3210	iii) Power capacitors	0.1777	227.96
190	3210	iv) Capacitor, metalised poly. Film	0.1285	257.70
191	3210	v) Resistance / resistor	0.0148	0.00
192	3210	vi) Printed circuit plate / board (pcb)	1.2511	311.47
193	3220	vii) Radio	0.3539	0.00
194	3220	viii) Stereo head phone	0.1174	0.00
195	3220	ix) Car cassette players	0.0105	0.00
196	3220	x) Telephones receiver	0.7297	0.00
197	3220	xi) Trans receiver set, all types	0.4250	0.00
198	3230	xii) T. V. set (b / w)	0.0462	0.00
199	3230	xiii) T. V. set (colour)	0.0297	0.00
200	3230	xiv) V, C. D.	0.0027	0.00
		33. Manufacture of medical, precision & optical instruments, watches & clocks		
201	3311	i) X - ray equipment	3.9379	66.93
202	3311	ii) Fabricated products, others	0.7855	200.44
203	3311	iii) H I V testing kits	0.3599	0.00
204	3311	iv) Medical / bio - medical / lab. Machines n. e. c.	0.1412	0.00
205	3312	v) Process combat instruments	0.4910	183.63
206	3313	vi) control equipment	1.0864	51.54
207	3313	vii) Transmitters (not for radio broadcast)	0.5361	42.47
208	3313	viii) Thermometer, dry bulb	0.1052	7.20
209	3313	ix) Test production	0.0978	0.00
210	3313	x) Pressure & vacuum gauges	0.0394	5.69
211	3313	xi) Heating / cooling electric equipment, n. e. c. & parts	0.0275	0.00
212	3320	xii) Lens, ophthalmic	3.9436	99.80
213	3320	xiii) Glass, blank, ophthalmic	1.7224	0.00
214	3320	xiv) Spectacle fitted with lens	0.5213	0.00
215	3320	xv) Camera, still	0.1980	0.00
216	3320	xvi) Projectors, others	0.0978	0.00
217	3330	xvii) Watch, quartz	3.9356	0.00
218	3330	xviii) Cases, watch	1.9689	0.00
219	3330	xix) Straps, stainless steel	0.4315	0.00
220	3330	xx) Straps, leather	0.0446	0.00

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1	2	3	4	5
		34. Manufacture of motor vehicles, trailers & semi trailers		
221	3410	i) Mini bus body	4.6526	144.04
222	3410	ii) Motor vehicle, others & parts, n. e. c.	2.4592	42.83
223	3410	iii) Motor car, diesel drvn. Complete - imported, assembled	0.0362	13.64
224	3420	iv) Body for other vehicles	0.1778	4.25
225	3420	v) Seat assembly, rubber	0.1535	0.00
226	3430	vi) Machine tool & accessories - others	0.5029	213.74
		35. Manufacture of other transport equipment		
227	3511	i) Barges excl. hopper	3.4134	30.00
228	3511	ii) Ships, boats & other vessels, n. e. c.	0.1750	178.38
229	3511	iii) Boat, wooden with engine	0.0538	0.00
230	3511	iv) trawlers - fishing - motorized	0.0117	0.00
		36. Manufacture of furniture, manufacturing n. e. c.		
231	3610	i) Tables & desks, iron / steel	0.0646	164.79
232	3610	ii) Chair, metal	0.0591	267.47
233	3610	iii) Fabricated metal products	0.0189	7312.14
234	3610	iv) Furniture, aluminium	0.0138	1958.20
235	3610	v) Chair, steel	0.0129	0.00
236	3691	vi) Jewellery / ornament, gold - others	0.4409	0.00
237	3694	vii) Toys, plastic moulded - others	0.7610	0.00
238	3694	viii) Toys, electrical / electronic - others	0.4046	1.85
239	3699	ix) Dot pen with refill	1.0436	0.00
240	3699	x) Refill, ball / dot pen	0.3132	0.00
241	3699	xi) Pen, marker	0.3019	0.00
242	3699	xii) Stationary / all purpose items - n. e. c.	0.0812	0.00
243	3699	xiii) Tooth brush	0.5530	322.68

**REPORT ON
INDEX OF INDUSTRIAL PRODUCTION IN GOA
DURING
2010 - 2011
(Base Year 2004-05)**

**DIRECTORATE OF PLANNING,
STATISTICS AND EVALUATION
PANAJI-GOA**

File No. DPSE/VI-NSS/IIP/10-11/2012-13/