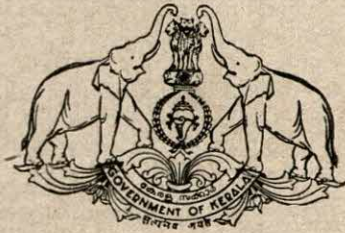


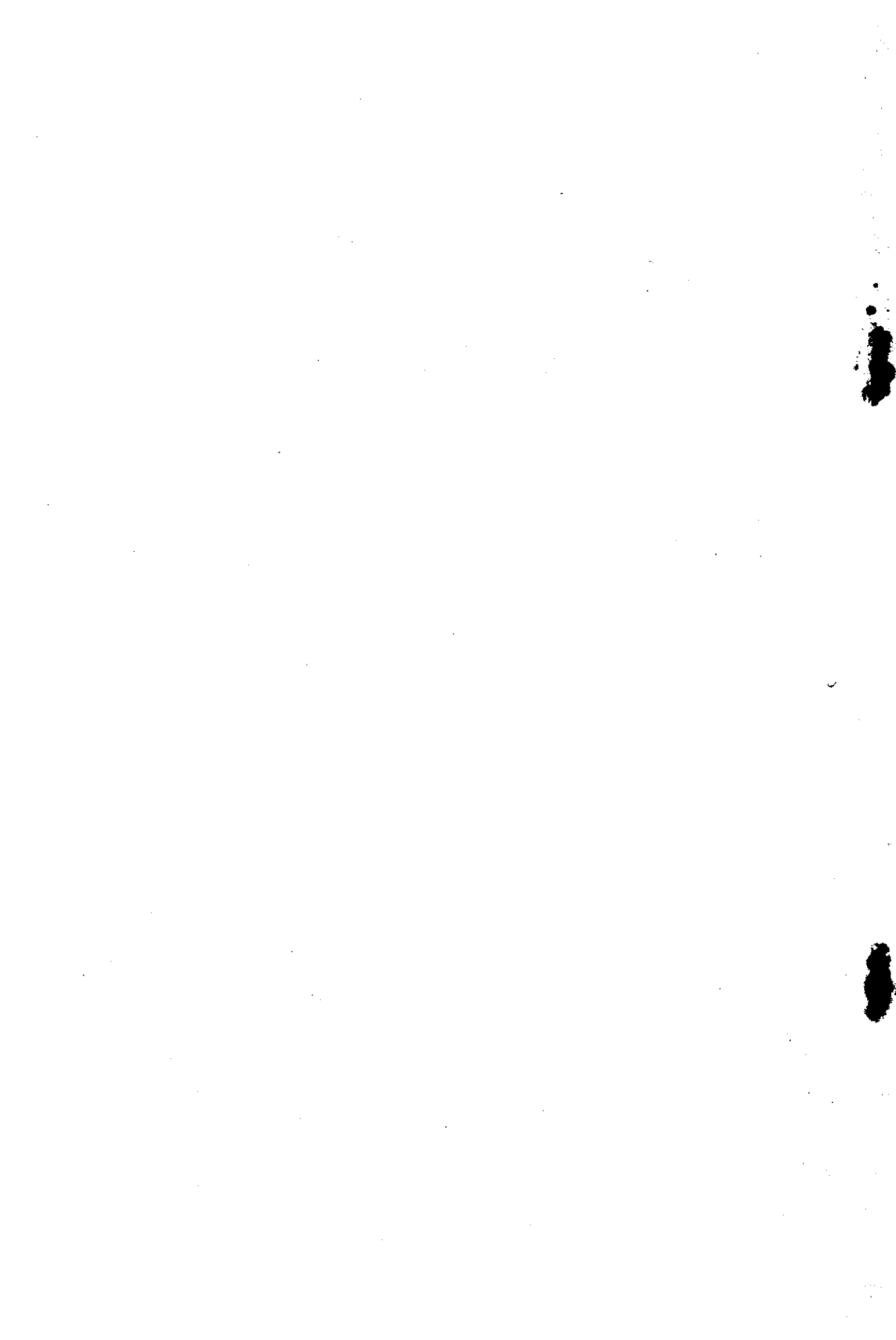
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GOVERNMENT OF KERALA

REPORT  
ON  
ANNUAL SURVEY  
OF  
INDUSTRIES  
1986-87

DEPARTMENT OF ECONOMICS & STATISTICS  
THIRUVANANTHAPURAM  
1993



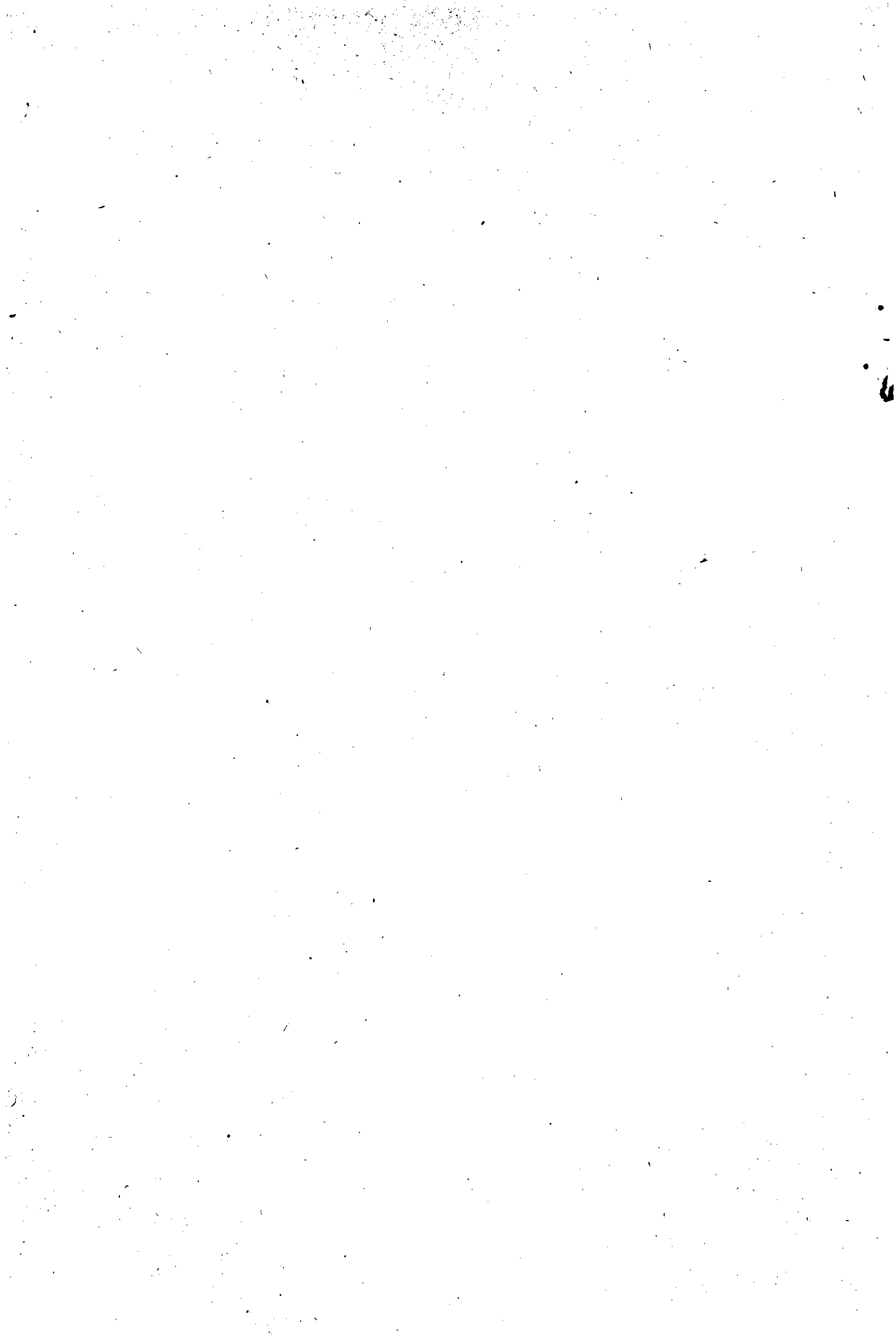
GOVERNMENT OF KERALA

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DEPARTMENT OF ECONOMICS AND STATISTICS  
THIRUVANANTHAPURAM  
1992





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Structural characteristics in respect of each industry  
group.

Appendix

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## P R E F A C E

The report relating to the Annual Survey of Industries 1986-'87 is the twenty first publication in the series. A broad picture of the pattern and growth of the registered factory sector of Kerala is presented here.

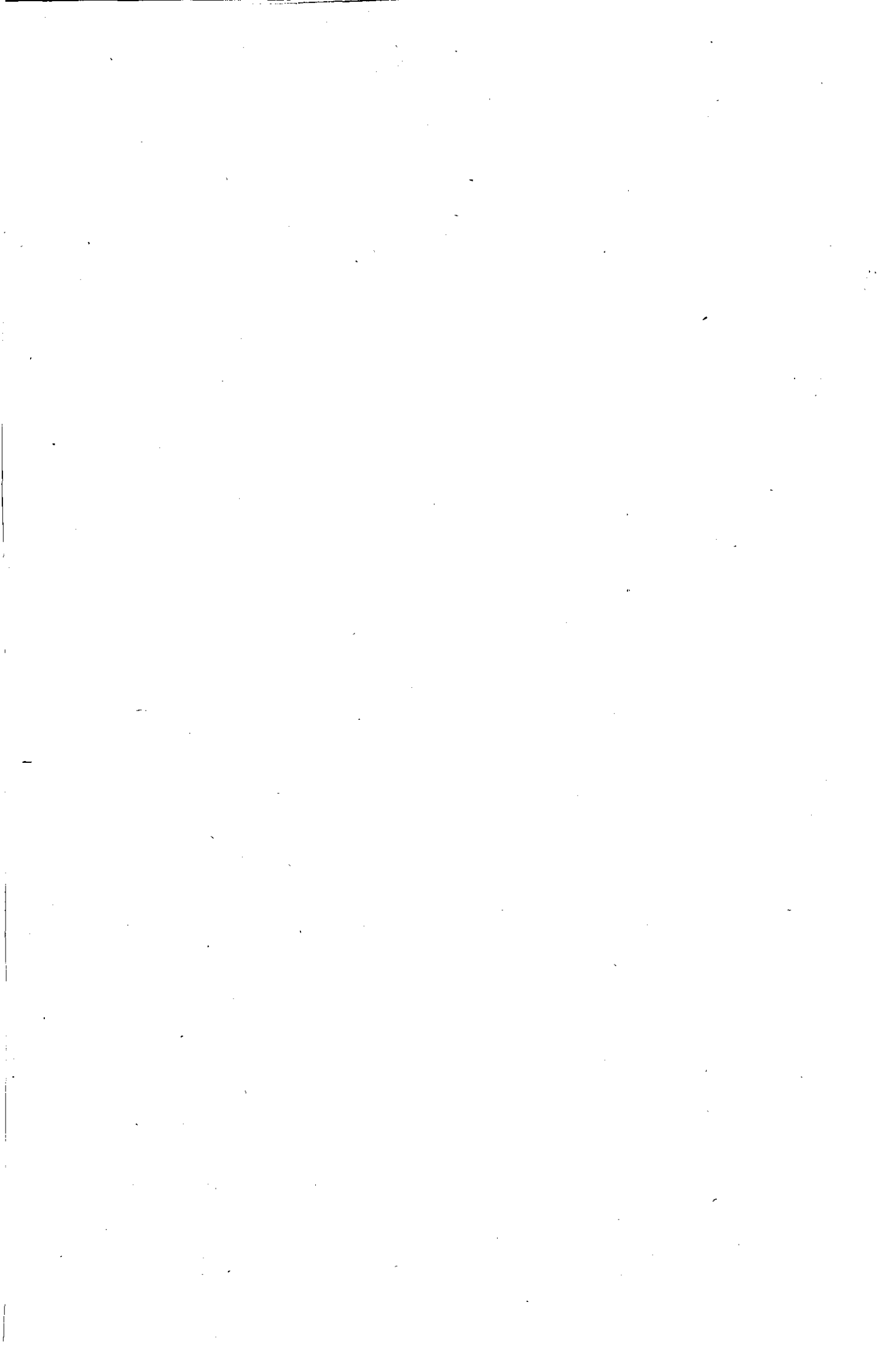
The important features and results of the survey are presented in four chapters. Chapter one deals with the coverage, concepts, definitions etc. The second chapter reveals the review of results. The third gives the analysis of major structural characteristics and the fourth deals with the relative importance of different industries.

The report was prepared by Shri. M.N. Padmanabhan Nair, Assistant Director with the assistance of the staff of the Industrial Statistical Unit of the Department of Economics and Statistics.

Suggestions for improvement of the report are welcome.

S. RETNABAI AMMAL,  
Director of Economics & Statistics.

Thiruvananthapuram,  
11.02.1992.





## CHAPTER I - GENERAL

### 1.1 Introduction

The Annual Survey of Industries is the primary source of data on registered industries in the state. It provides valuable data on the various aspects of the registered industrial sector covering economic activities relating to manufacturing, electricity, gas, water supply and repair services. The survey is conducted annually under the statutory provisions of the Collection of Statistics Act, 1953 and the rules framed thereunder in 1959. The field of work of the survey is entrusted to the Field Operations Division of the National Sample Survey Organisation, Government of India and the Director, Field Operation Division, National Sample Survey Organisation is the Statistics Authority appointed under the provisions of the above Act for the collection of industrial statistics.

### 1.2 Scope and coverage

Broadly three types of units are covered in the survey viz.

- i. The factories registered under 2m(i) and 2m(ii) of the Factories Act, 1948. Sections 2m(i) and 2m(ii) of the Factories Act refer to the establishments where 10 or more workers are working or were working on any day of the preceeding twelve months and in any part of which a manufacturing process was carried out with the aid of power or ordinarily so carried on and establishments wherein 20 or more workers are working or were working on any day of the preceeding twelve months and in any part of which a manufacturing process was carried out without the aid of power or ordinarily so carried on. This category also includes the repair service units incidental to manufacturing activities such as cold storages, repair of foot wear and other leather goods, electrical repair shops and repair of other consumer durable items.
- ii. all electricity undertakings registered with the Central Electricity Authority and various Water Supply undertakings and
- iii. those bidi and cigar establishments which are registered under Bidi and Cigar Workers (Condition of Employment) Act, 1966.

Oil storage and distribution units, restaurants and cafes, establishments coming under the control of the Department of Defence production which are not engaged in the production of any item for sale or exchange, technical training institutes are excluded from the purview of the survey though they may be registered as factories under the Factories Act 1948.

The primary unit of enumeration is a factory in the case of manufacturing industries, a workshop in the case of repair services, an undertaking in the case of electricity and water supply and an establishment in the case of bidi and cigar industries. Owners of two or more factories in the same industry group located in the same state are permitted to submit a single consolidated return.

The Annual Survey of Industries frame is revised and updated once in four years by the Regional Offices of the Field Operations Division of the National Sample Survey

Organisation. The factories included in the frame are grouped into two sectors viz. Census and non Census or sample sectors. While the factories employing 50 or more workers and using power and those employing 100 or more workers but not using power constitute the census sector, the remaining factories constitute the non census or sample sector. Once a factory is classified into census/non census sector, its status is not altered till the frame is revised, though change in employment might warrant it.

All the factories in the census sector, all electricity undertakings irrespective of the number of workers employed therein and units in specified categories of non-census sector have been enumerated on a complete enumeration basis. The factories in the non-census sector which were completely enumerated belonged to.

i. those industries where the total number of factories do not exceed 50 at the all India level.

ii. Factories located in relatively less industrialised states. The balance in the frame are enumerated on a sample basis. One half of the factories in the remaining non-census sector are enumerated each year in rotation so as to achieve complete coverage of non-census sector in a period of two consecutive years.

The reference period for the Annual Survey of Industries 1986-'87 was the accounting year of the factory ending on any day during the fiscal year 1986-'87. Thus the Annual Survey of Industries 1986-'87, data collected from the respective establishments relate to their accounting year ended on any day between 1st April 1986 to 31st March 1987.

#### **Limitations**

The data presented in this report relates to the factories responded to the survey only.

#### **1.3 Concepts and definitions**

Reference year for Annual Survey of Industries 1986-'87 is the accounting year of the factory ending on any day during the fiscal year 1986-'87 i.e. 1st April 1986 to 31st March 1987.

#### **Registered factory**

is one which is registered under sections 2m(i) and 2m(ii) of the Factories Act, 1948. The sections 2m(i) and 2m(ii) refer to any premises including the precincts thereof (a) where on ten or more workers are working, or were working on any day of the preceeding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on or (b) whereon twenty or more workers are working or were working on any day of the preceeding twelve months and in any part of which a manufacturing process is being carried on without the aid of power or is ordinarily so carried on.

#### **Gross value of plant and machinery**

represents the total original (undepreciated) value of installed plant and machinery as at the end of the accounting year. It includes the book value of own constructed plant

and machinery, if installed, and the approximate value of the rented-in-plants and machinery as at the time of renting in but excludes the value of rented-out plants and machinery. The total value of all the plants and machinery acquired on hire-purchase basis is also included.

**Fixed capital**

represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year. Fixed assets are those which have a normal productive life or more than one year. Fixed capital covers all types of assets, new or used or own constructed, deployed for production, transportation, living or recreational facilities, hospitals, schools etc. for factory personnel. It includes the fixed assets of the head office allocable to the factory and also the full value of assets taken on hire-purchase basis (whether fully paid or not) excluding interest element. It excludes intangible assets and assets solely used for post manufacturing activities such as sale, storage, distribution, etc.

**Physical working capital**

is defined to include all physical inventories owned, held or controlled by the factory as on the closing day of the accounting year such as the materials, fuels and lubricants, stores etc. that enter into products manufactured by the factory itself or supplied by the factory to others for processing. Physical working capital also includes the stock of materials, fuels and stores etc. purchased expressly for re-sale, semi-finished goods and work in progress on account of others and goods made by the factory which are ready for sale at the end of the accounting year. However it does not include the stock of materials, fuels, stores etc. supplied by others to the factory for processing. Finished goods processed by others from raw materials supplied by the factory and held by them are included and finished goods processed by the factory from raw materials supplied by others are excluded.

**Working capital**

is the sum total of the physical working capital as already defined above and the cash deposits in hand and at bank and the net balance of amounts receivable over amounts payable at the end of the accounting year. Working capital, however, excludes unused overdraft facility, fixed deposits irrespective of duration, advances for acquisition of fixed assets, long-term loans including interest thereon and investments.

**Productive capital**

is the total of fixed capital and working capital as defined above.

**Invested capital**

is the total of fixed capital and physical working capital as defined above.

**Depreciation**

is consumption of fixed capital due to wear and tear and obsolescence during the accounting year and is taken as provided by the factory owner or is estimated on the basis of cost of installation and working life of the fixed assets.

### **Outstanding loans**

represent all loans whether short term or loan term, whether interest bearing or not, outstanding according to the books of the factory as on the closing day of accounting year.

### **Workers**

are defined to include all persons employed directly or through any agency whether for wages or not and engaged in any manufacturing process or in cleaning any part of the machinery or premises used for manufacturing process or in any other kind of work incidental to or connected with the manufacturing process or the subject of manufacturing process. Labour engaged in the repair and maintenance or production of fixed assets for factory's own use on labour employed for generating electricity or producing coal, gas are included. However, persons holding positions of supervision or management, or employed in administrative office, store keeping section and welfare section, sales department as also those engaged in the purchase of raw materials etc. and watch and ward staff, are excluded.

### **Employees**

refer to all persons engaged by the factory whether for wages or not, in work connected directly or indirectly with the manufacturing process and include all administrative, technical and clerical staff as also labour engaged in the production of capital assets for factory's own use. This is inclusive of persons holding position of supervision or management or engaged in administrative office, store keeping section and welfare section, watch and ward staff, sales department as also those engaged in the purchase of raw materials, etc. and production of fixed assets for the factory. It also includes all working proprietors and their family members who are actively engaged in the work of the factory even without any pay and the unpaid members of the co-operative societies who worked in or for the factory in any direct and productive capacity.

The average number of workers or employees is obtained by dividing the mandays worked (defined below) by the number of days on which the manufacturing process was carried on during the reference year. In the case of factories where only repair, maintenance or construction activity was carried on the average is calculated by dividing the mandays worked by the number of days, repair and maintenance/construction work was carried on.

### **Mandays**

represent the total number of mandays worked and not mandays paid for by the factory during the accounting year. It is obtained by summing-up the number of persons of specified categories attending in each shift over all the shifts worked on all days (working and non-working).

### **Wages**

are defined to include all remuneration capable of being expressed in monetary terms and also payable more or less regularly in each pay period to workers as compensation for work done during the accounting year. It includes (a) direct wages and salary (i.e. basic



allowances). (b) remuneration for period not worked (ie. basic wages, salaries and allowances payable for leave period, paid holiday, lay off payments and compensation for unemployment, if not paid from sources other than employers) (c) bonuses and ex-gratia payment paid both at regular and less frequent intervals ie. incentive bonuses, good attendance bonuses, productive bonuses, profit sharing bonuses, festival or year end bonuses, etc.). It excludes lay off payment which are made from trust or other special funds set up expressly for this purpose ie. payments not made by the employer. It also excludes imputed value of benefits in kind, employers contribution to oldage benefits and other social security charges, direct expenditure on maternity benefits and creches and other group benefits. Travelling and other expenditure incurred for business purposes and reimbursed by the employer are excluded. The wages are expressed in terms of gross value ie. before deduction for fines, damages, taxes, provident fund, Employee's State Insurance Contribution, etc.

#### **Total emoluments**

are defined in the same way as wages defined above but paid to all employees plus imputed value of benefits in kind ie. the net cost to the employer on those goods and services provided to employees free of charge or at markedly reduced cost which are clearly and primarily of benefits to the employees as consumers.

#### **Fuels consumed**

represent the total purchase value of all items of fuels, lubricants, electricity, water etc. consumed by the factory during the accounting year excepting those which directly enter into products as materials consumed. It excludes that part of fuels which is produced and consumed by the factory in manufacture ie. all intermediate products and also fuels consumed by employees as part of amenities. It includes quantities acquired and consumed from allied concerns, their book value being taken as their purchase value and also the quantities consumed in production of machinery or other capital items for factory's own use.

#### **Materials consumed**

represent the total delivered value of all items of raw materials, components, chemicals, packing materials and stores which actually entered into the production process of the factory during the accounting year. Also include the cost of all materials used in the production of fixed assets including construction work for factory's own use. It, however, excludes all intermediate products consumed during the accounting year. (Intermediate products in the above context mean all those products which are produced by the factory but are subject to further manufacturing process).

#### **Total input**

comprises gross value of fuels, materials etc. consumed and also other inputs viz. (a) cost of non-industrial services received from others (b) cost of materials consumed for repair and maintenance of factory's fixed assets (c) cost of contract and commission-work done by others on materials supplied by the factory (d) cost of office supplies and products reported for sale during the accounting year and (e) purchase value of goods sold in the same condition as purchased.

**Products**

are defined to include the ex-factory value (ie. exclusive of taxes, duties, etc. on sale and inclusive of subsidies, etc. if any) of all products and by-products excluding intermediate products that have been completed during the accounting year for sale whether actually sold during the accounting year or not. Also include the fixed assets produced by the factory for its use. It also includes the net value of semi-finished goods representing the excess of semi-finished goods at the end of the accounting year over that at the beginning of the year.

**Semi-finished goods**

refer to the imputed value of all materials which have been partially processed by the factory but which are usually sold without further processing. It includes the work in progress on account of others, but excludes the value of semi-finished fixed assets produced for factory's own use.

**Gross output**

is defined to include the ex-factory value of products and by-products manufactured during the accounting year. It also includes the receipts for industrial and non-industrial services rendered to others, value of semi-finished goods of last year sold in current year and sale value of goods sold in the same condition as purchased. The terms gross output, value of output and total output have been used in the text inter-changeably to mean the same thing.

**Net value added**

is the increment to the value of goods and services that is contributed by the factory and is obtained by deducting the value of total inputs and depreciation from value of output.

**Rent paid**

represents the amount of royalty paid in the nature of rent for the use of the fixed assets in the factory.

**Interest paid**

includes all interest paid on factory account on loans, whether short term or long term, irrespective of the duration and the nature of agency from which the loan was taken.

**Factor payments**

represent the share in value added income from capital and is the sum total of rent and interest as defined above.

**Net income**

represent the factor shares of employees and entrepreneur in the value added and is obtained by deducting the factor payments from the value added.

**Operating surplus**

is the excess of value added over the cost of employees compensation ie. emoluments.

## CHAPTER - II REVIEW OF THE RESULTS OF THE SURVEY

## 2.1 Salient features

The important results of the survey are presented in this chapter for the factory sector as a whole as well as the three sectors of economic activity viz., Manufacturing, Electricity and Water Supply and Repair Services. The major structural ratios and technical co-efficients are also presented in this chapter.

The principal aggregates of the registered factory sector at the state level for the year 1986-'87 as compared to that of 1985-'86 are presented in Table I.

Table: 1 - Salient features

S1. No.	Aggregate	Units	1985-'86	1986-'87	Percentage increase in 1986-'87
1	2	3	4	5	6
1.	Factories covered	Nos.	3113	3001	(-)3.60
2.	Fixed capital	Rs.in Lakhs	157754.18	166799.36	5.73
3.	Working capital	"	64318.43	60380.03	(-)6.12
4.	Productive capital	"	222072.60	227179.39	2.30
5.	Invested capital	"	222078.61	239229.55	7.72
6.	Outstanding loan	"	176504.70	187366.15	6.15
7.	Workers.	Nos.	193032	189514	(-)1.82
8.	Employees	"	237540	240333	1.17
9.	Wages to workers	Rs.in lakhs	17851.28	19881.32	11.37
10.	Total emoluments	"	28901.69	32519.18	12.52
11.	Input	"	237431.88	265269.48	11.72
12.	Output	"	307195.10	360751.59	17.43
13.	Depreciation	"	10329.33	13575.52	31.43
14.	Value added	"	59433.89	81906.59	37.81
15.	Factor payments	"	14731.68	20704.09	40.54
16.	Net income	"	44702.21	61202.50	36.91

The number of factories responded to the survey has marked a decrease of 3.60% when compared to the previous year. It may be seen from the table that in spite of the fall in the number of responding factories, all the indicators except working capital, outstanding loans and number of workers have shown increasing trend when compared to 1985-'86. The fixed capital has gone upto Rs.166799.36 lakhs in 1986-'87, as against Rs.157754.18 lakhs in 1985-'86, recording an increase of 5.73%. The percentage increase in the case of productive capital and invested capital was 2.30 and 7.72 respectively. Outstanding loan has recorded an increase of 6.15% and the increase in monetary terms was Rs.10861.45 lakhs. A fall of 1.82% was noticed in the number of workers and the number of employees recorded an increase of 1.17%. Contrary to the fall in the number of workers, wages paid to the workers have recorded an increase of 11.37%. A 12.52% increase was recorded in the total emoluments paid when compared to that of the previous year.

A rise of 11.72% was observed in the case of total input and output has increased by 17.43%. When compared to 1985-'86 value added has recorded a rise of Rs.22472.70 lakhs

which works out to 37.81% and is a major achievement when compared to the 4.58% rise recorded in the previous year. The factor payment and net income also recorded increase to the tune of 40.54% and 36.91% respectively. During the year 1985-'86, factor payment has gone up by 38.14% and net income has marked a decrease of 3.17%.

## 2.2 Selected aggregates by principal economic activity

The relative shares of the selected aggregates by the three broad divisions of the economic activity viz.

- i. Manufacturing
- ii. Electricity and Water Supply and
- iii. Repair services are presented in table 2.

Table:2 - Selected aggregates by principal economic activity 1986-'87

Sl. No.	Items	Units	Manufactu- ring	Electricity & water supply	Repair services	All Industries
1	2	3	4	5	6	7
1.	No. of factories	Nos.	2860 (95.30)	21 (0.70)	120 (4.00)	3001 (100.00)
2.	Fixed capital	Rs. in lakhs	99353.78 (59.56)	67019.76 (40.18)	425.82 (0.26)	166799.36 (100.00)
3.	Working capital	"	43903.71 (72.71)	16159.83 (26.76)	316.49 (0.53)	60380.03 (100.00)
4.	Productive capital	"	143257.49 (63.06)	83179.59 (36.61)	742.31 (9.33)	227179.39 (100.00)
5.	Workers	Nos.	167733 (88.76)	16028 (10.35)	5753 (2.94)	189514 (100.00)
6.	Employees	"	208383 (86.71)	24882 (10.35)	7068 (2.94)	240333 (100.00)
7.	Total emoluments	Rs. in lakhs	24651.14 (75.80)	6520.38 (20.05)	1347.66 (4.15)	32519.18 (100.00)
8.	Total input	"	262516.12 (98.96)	2216.84 (0.84)	536.52 (0.20)	265269.48 (100.00)
9.	Total output	"	330090.10 (91.50)	28576.99 (7.92)	2084.50 (0.58)	360751.59 (100.00)
10.	Value added	"	55871.90 (68.21)	24525.64 (29.94)	1509.05 (1.85)	81906.59 (100.00)

(Contd.)



(Table 2 contd.)

1	2	3	4	5	6	7
11. Factor payments	Rs. in lakhs	15812.26 (76.37)	4867.59 (23.51)	24.24 (0.12)	20704.09 (100.00)	
12. Net income	"	40059.64 (65.45)	19658.05 (32.12)	1484.81 (2.43)	61202.50 (100.00)	

(The figures given in brackets are percentages)

It may be observed from the table that 95.30% of the factories responded in the survey belonged to the manufacturing sector 0.70% to electricity and water supply undertakings and 4.00% to repair services. There is no wide variation in the percentage composition of these three divisions from that of the previous year viz. 1985-'86. Electricity and water supply undertakings, though small in number, accounted for 40.18% of total fixed capital which shows the high degree of capital intensity of the sector. Though 86.71% of the total employees working the manufacturing sector, its share in the total emoluments paid was only 75.80% which indicates the low rate of emoluments per employee in this sector. It can be observed from the table that 20.05% of the total emoluments was disbursed to 10.35% of the employees working in Electricity and Water Supply undertakings which shows the comparatively high rate of emoluments in the sector. Similarly 4.15% of the total emoluments was disbursed to 2.94% of the total employees in the repair services.

The average emoluments per employee was highest in electricity and water supply undertakings, followed by repair services. Though 91.50% of the total output was from the manufacturing sector, its share in value added was only 68.21% of the total. But from a share of 7.92% in the total output, the electricity and water supply undertakings could raise 29.94% of the value added. This was due to the very low input-output ratio (0.07) associated with the production of hydel power. It may also be seen from the table that the percentage contribution towards net income was also comparatively higher in the above sector.

### 2.3 Structural ratios and technical co-efficients

Some of the selected structural ratios and technical co-efficients pertaining to the entire industrial sector for the year 1986-'87 are presented in table 3. Items 1 to 6 give per factory ratios and 7 to 11 give per employee ratios. Technical co-efficients are given against items 12 to 15.

Table: 3 - Structural ratios and technical co-efficients 1986-'87

Structural ratios		Electricity				
Sl. No.	Technical co-efficients	Units	Manufacturing	& water supply	Repair services	All industries
1	2	3	4	5	6	7
<b>Structural ratios</b>						
1.	Fixed capital per factory	Rs. in lakhs	34.74	3191.42	3.55	55.58
2.	Productive capital factory	"	50.09	3960.93	6.19	75.70
3.	Gross output per factory	"	115.42	1360.81	17.37	120.21
4.	Value added per factory	"	19.54	1167.89	12.58	27.29
5.	Workers per factory	Nos.	59	763	48	63
6.	Employees per factory	"	73	1185	59	80
7.	Fixed capital per employee	Rs.	47678	269350	6025	69403
8.	Productive capital per employee	"	68747	334296	10502	94527
9.	Gross output per employee	"	158405	114850	29492	150105
10.	Value added per employee	"	26812	98568	21350	34080
11.	Emoluments per employee	"	11830	26205	19067	13531
<b>Technical co-efficients</b>						
12.	Fixed capital to value added		1.78	2.73	0.28	2.04
13.	Fixed capital to gross output		0.30	2.35	0.20	0.46
14.	Value added to gross output		0.17	0.86	0.72	0.23
15.	Emoluments to value added		0.44	0.27	0.29	0.40

All the structural ratios presented have showed an increasing trend during the year under report when compared to the previous year. An average factory in the state had a fixed capital of Rs.55.58 lakhs and a productive capital of Rs.75.70 lakhs. On each working day it employed 80 persons and produced a gross output worth Rs.120.21 lakhs. The average value added by manufacture by a factory during 1986-'87 works out to be Rs.27.29 lakhs.

The average per factory value of fixed capital in the electricity and water supply industry was Rs.3191.42 lakhs and productive capital Rs.3960.93 lakhs. It employed 1185 persons on each working day and produced gross output worth Rs.1360.81 lakhs. The value added by manufacture per factory in this sector was Rs.1167.89 lakhs which was only Rs.278.94 lakhs during the previous year i.e. 1985-'86.

During the year 1986-'87, an employee in the registered industrial sector in the state on an average had been working with a fixed capital of Rs.0.69 lakhs and a productive capital of Rs.0.95 lakhs. The gross output per employee was Rs.1.50 lakhs and the value added per employee works out to be Rs.0.34 lakhs. On an average, an employee in the registered industrial sector had emoluments worth Rs.13531/- during the year. The fixed capital per employee was highest in electricity and water supply undertakings (Rs.2693050/-) followed by manufacturing sector (Rs.47678/-). The average fixed capital required to employ a person in the repair services was Rs.6025/-. The highest gross output per employee was in the manufacturing sector followed by electricity sector and repair services. As far as value added per employee is concerned, electricity sector stood in the first place followed by manufacturing sector. Repair services stood in the third place with Rs.21350/-.

The capital output co-efficient measured by the ratio of fixed capital to value added i.e. fixed capital required to produce unit value added had fallen from 2.65 to 2.04 in the year 1986-'87. Decreasing trend was observed in all the three sectors when compared to the previous year. The fixed capital to gross output ratio also marked a decrease of 0.05 from that of 1985-'86. The ratio of value added to gross output has shown an increasing trend when compared to that of the previous year. The ratio of emoluments to value added had fallen from 0.49 to 0.40 in the year under report.

### CHAPTER III - ANALYSIS OF MAJOR STRUCTURAL CHARACTERISTICS - ALL INDUSTRIES

The establishments surveyed under Annual Survey of Industries 1986-'87 are classified under major industrial groups at three digit level of National Industrial Classification Codes 1970 and their important structural characteristics are presented in this Chapter.

#### 3.1 Number of units

The details of industry groups having 25 units or more and the number of census units in each of the major industrial groups are presented in table No.4.

Table: 4 - Arrangement of industries according to number of units  
1986-'87.

Sl. No.	Code	Name of industry	No. of units	Census sector	% to total no. of units
1	2	3	4	5	6
1.	271	Sawing and planing of wood (other than plywood)	552	14	18.39
2.	320	Manufacture of structural clay products	326	42	10.86
3.	214	Cashewnut processing like drying, shelling etc.	245	179	8.16
4.	226	Manufacture of beedi	222	28	7.40
5.	302	Manufacture of rubber products not elsewhere classified.	111	13	3.70
6.	973	Repair of motor vehicles	108	42	3.60
7.	235	Weaving and finishing of cotton textiles in handlooms other than khadi	99	27	3.30
8.	270	Manufacture of veneer, plywood & their products	91	17	3.03
9.	212	Tea processing	82	46	2.73
10.	268	Manufacture of coir and coir products	75	13	2.50
11.	203	Canning and preserving of fish	57	9	1.90
12.	285	Printing and publishing of books	56	8	1.87

(Contd.)

(Table 4 contd.)

1	2	3	4	5	6
13.	340	Manufacture of fabricated metal products	46	4	1.53
14.	204	Grain mill products	45	5	1.50
15.	313	Manufacture of drugs and medicines	44	6	1.47
16.	289	Printing and publishing & allied activities not elsewhere classified.	37	5	1.23
17.	310	Manufacture of basic industrial organic & inorganic chemicals.	34	10	1.13
18.	343	Manufacture of hand tools and general hardware	34	8	1.13
19.	211	Manufacture of other edible oils	32	2	1.07
20.	357	Manufacture of machine tools & their parts	32	4	1.07
21.	341	Manufacture of structural metal products	30	4	1.00
22.	276	Manufacture of wooden furniture & fixtures	27	5	0.90
23.	231	Cotton spinning, weaving etc. in textile mills	25	25	0.83
		Other industries	591	168	19.70
		<b>All Industries</b>	<b>3001</b>	<b>684</b>	<b>100.00</b>

From the table it can be observed that as in the previous years, in terms of number of units, sawing and planing of wood (other than plywood) topped the list and was followed by the manufacture of structural clay products, cashewnut processing, manufacture of beedi, manufacture of rubber products not elsewhere classified and repair of motor vehicles. About 52% of the total establishments come under these six groups of industries shows their relative importance in the industrial structure of the state. There are 23 groups of industries having 25 or more units during the year 1986-'87.

### 3.2 Fixed capital

The total fixed capital investment during the year under report was estimated to be Rs.1667.99 crores as against Rs.1577.54 crores in the previous year. The break-up of fixed capital under different constituent items are furnished in Table no.5.

Table: 5 - Distribution of fixed capital - All industries 1986-'87

Sl. No.	Items	Amount Rs. in lakhs	Percentage to total
1	2	3	4
1.	Land	4354.83	2.61
2.	Improvement to land	7688.89	4.61
3.	Building	20310.28	12.18
4.	Plant & machinery	65050.56	39.00
5.	Transport equipment	1331.29	0.80
6.	Tools and other fixed assets	32420.02	19.44
7.	Assets under construction	35643.49	21.36
<b>Total fixed capital</b>		<b>166799.36</b>	<b>100.00</b>

The above table shows that 39% of the total investment is in plant and machinery, while 21.36% is in assets under construction. The fixed capital invested in tools and other fixed assets constitute 19.44%. The share of other components of fixed capital works out to be 20.20%.

There are 51 groups of industries with a fixed capital investment of Rs.2 crores and above. These industries arranged in descending order of fixed capital investment in table No.6.

Table: 6 - Arrangement of industries according to fixed capital 1986-'87

Sl. No.	Code	Name of industry	Fixed capital Rs. in lakhs	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	66724.39	40.00
2.	304	Petroleum refineries	17251.81	10.34
3.	310	Manufacture of organic and inorganic chemicals	11557.22	6.93
4.	280	Manufacture of pulp, paper & paper board	10677.14	6.40
5.	370	Ship building and repairing	7967.09	4.78
6.	311	Manufacture of fertilizers and pesticides	7812.46	4.68
7.	231	Cotton spinning and weaving	4529.56	2.71
8.	324	Manufacture of cement, lime and plaster	4500.77	2.70
9.	331	Foundries for casting and forging iron & steel	2619.56	1.57
10.	367	Manufacture of electronic components and accessories not elsewhere classified.	1945.97	1.17

(Contd.)

(Table 6 contd.)

1	2	3	4	5
11.	300	Tyre and tube industries	1825.54	1.09
12.	302	Manufacture of rubber products not elsewhere classified.	1750.03	1.05
13.	212	Tea processing	1574.65	0.94
14.	270	Manufacture of veneer, plywood and their products	1314.31	0.79
15.	357	Manufacture of machine tools, their parts and accessories.	1229.99	0.74
16.	364	Manufacture of radio and television	1149.62	0.69
17.	320	Manufacture of structural clay products	1136.82	0.68
18.	360	Manufacture of electrical industrial machinery	1130.51	0.68
19.	336	Zinc manufacturing	1094.09	0.66
20.	363	Manufacture of electrical apparatus	1084.82	0.65
21.	380	Manufacture of medical, surgical and scientific equipment.	1001.31	0.60
22.	313	Manufacture of drugs and medicines	898.53	0.54
23.	361	Manufacture of insulated wires and cables	845.76	0.51
24.	284	Printing and publishing of newspapers	844.55	0.51
25.	316	Manufacture of turpentine, synthetic resins etc.	843.48	0.51
26.	314	Manufacture of perfumes, cosmetics, lotions etc.	724.07	0.43
27.	335	Aluminium manufacturing	656.52	0.39
28.	366	Manufacture of electronic computers, control instruments and other equipments.	579.13	0.35
29.	203	Canning and preserving of fish	520.39	0.31
30.	328	Manufacture of asbestos cement and other cement products.	504.22	0.30
31.	330	Iron and steel industries	488.43	0.29

(Contd.)

(Table 6 contd.)

1	2	3	4	5
32.	303	Manufacture of petroleum and plastic products	481.65	0.29
33.	271	Sawing and planing of wood	432.42	0.26
34.	285	Printing and publishing of periodicals	393.38	0.24
35.	220	Distilling, rectifying and blending of spirits	385.17	0.23
36.	973	Repair of motor vehicles and motor cycles	384.00	0.23
37.	340	Manufacture of fabricated metal products	381.02	0.23
38.	319	Manufacture of chemical products not elsewhere Classified.	372.06	0.22
39.	268	Manufacture of coir and coir products	365.82	0.22
40.	261	Manufacture of all types of threads, ropes & twines	354.75	0.21
41.	362	Manufacture of electrical apparatus	354.39	0.21
42.	211	Manufacture of other edible oils	324.60	0.19
43.	216	Manufacture of prepared animal feeds	321.18	0.19
44.	329	Manufacture of miscellaneous non-metallic mineral products not elsewhere classified.	302.68	0.18
45.	341	Manufacture of structural metal products	297.24	0.18
46.	420	Water supply i.e. collection, purification and distribution of water.	295.37	0.18
47.	247	Spinning, weaving and finishing of other textiles	292.40	0.18
48.	214	Cashewnut processing	287.42	0.17
49.	224	Soft drinks and carbonated water industries	263.55	0.16
50.	323	Manufacture of Chinaware & porcelainware	259.64	0.16
51.	235	Weaving and finishing of cotton textiles	239.08	0.14
		Other industries	2228.80	1.94
		<b>All industries</b>	<b>166799.36</b>	<b>100.00</b>

As far as the investment of fixed capital in different groups of industries concerned, generation and transmission of electric energy stands first. An amount of Rs.667.24 crores is invested in this industry group which works out to be 40.00% of the total fixed capital investment. The second rank in this item goes to petroleum refineries with an investment of Rs.172.52 crores which comes to 10.34% of the total investment. The manufacture of organic and inorganic chemicals is ranked third with an investment of Rs.115.57 crores. The share of these three groups of industries in the total fixed capital investment works out to be 57.27%.

### 3.3 Working capital

The working capital in the factory sector during the year under report is estimated as Rs.603.80 crores as against Rs.643.18 crores during the previous year i.e. 1985-'86. First rank in the utilisation of working capital goes to the generation and transmission of electric energy which utilised 26.76% of total utilisation followed by petroleum refineries with 10.42%. There are 37 groups of industries having working capital utilisation of Rs.2 crores or more during the year under report out of which 16 groups have less than 1% share of the total working capital. During the previous year there were 43 groups of industries with working capital utilisation of Rs.2 crores or more. The groups of industries with working capital utilisation of Rs.2 crores or more is presented in table 7 in descending order of working capital utilisation.

Table: 7 - Arrangement of industries according to working capital  
1986-'87

Sl. No.	Code	Name of industry	Working capital Rs. in lakhs	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	16156.76	26.76
2.	304	Petroleum refineries	6289.67	10.42
3.	370	Ship building and repairing	5814.91	9.63
4.	311	Manufacture of fertilisers and pesticides	3480.70	5.77
5.	310	Manufacture of organic and inorganic chemicals	2288.05	3.79
6.	364	Manufacture of radio and television	2156.11	3.57
7.	214	Cashewnut processing	2095.88	3.47
8.	280	Manufacture of pulp, paper and paper board	1864.88	3.09
9.	357	Manufacture of machine tools	1677.89	2.78
10.	261	Manufacture of all types of threads, ropes etc.	1247.38	2.07
11.	302	Manufacture of rubber products not elsewhere Classified	1221.70	2.02

(Contd.)



(Table 7 contd.)

1	2	3	4	5
12.	284	Printing and publishing of newspapers	1193.92	1.98
13.	380	Manufacture of medical and surgical equipments	1154.51	1.91
14.	314	Manufacture of perfumes cosmetics and lotions	983.89	1.63
15.	319	Manufacture of chemical products not elsewhere classified.	809.28	1.34
16.	212	Tea processing	777.96	1.29
17.	231	Cotton spinning and weaving	710.58	1.18
18.	271	Sawing and planing of wood (other than plywood)	671.58	1.12
19.	336	Zinc manufacturing	640.15	1.06
20.	320	Manufacture of structural clay products	631.42	1.06
21.	268	Manufacture of coir and coir products	609.09	1.01
22.	285	Printing and publishing of periodicals	594.55	0.98
23.	367	Manufacture of electronic components	515.17	0.85
24.	270	Manufacture of veneer, plywood and their products	491.38	0.81
25.	313	Manufacture of drugs and medicines	445.99	0.74
26.	341	Manufacture of structural metal products	436.90	0.72
27.	220	Distilling, rectifying and blending of spirits	406.38	0.67
28.	211	Manufacture of other edible oils	377.26	0.63
29.	374	Manufacture of motor vehicles and parts	352.85	0.58
30.	235	Weaving and finishing of cotton textiles in handlooms, other than khadi.	334.84	0.55
31.	330	Iron and steel industries	328.33	0.54
32.	340	Manufacture of fabricated metal products	297.19	0.49
33.	206	Manufacture and refining of sugar	293.52	0.49
34.	973	Repair of motor vehicles and motor cycles	290.48	0.48
35.	324	Manufacture of cement, lime and plaster	269.23	0.45

(Contd.)

(Table 7 contd.)

1	2	3	4	5
36.	329	Manufacture of miscellaneous non-metallic mineral products not elsewhere classified.	229.69	0.58
37.	350	Manufacture of agricultural machinery and equipment	207.79	0.34
		Other industries	2033.17	3.36
		<b>All industries</b>	<b>60380.03</b>	<b>100.00</b>

### 3.4 Productive capital

During the year 1986-'87 a productive capital of Rs.2271.79 crores was utilised in the factory sector of the state. There are 52 groups of industries with a productive capital investment of Rs.3 crores or more. Generation and transmission of electric energy ranks first in the utilisation of productive capital followed by petroleum refineries. These two industries along with the manufacture of organic and inorganic chemicals, ship building and repairing and manufacture of pulp, paper and paper boards share 64.53% of the total productive capital utilisation. The 52 industries with productive capital utilisation of Rs.3 crores and above are arranged in descending order of magnitude in table 8.

Table: 8 - Arrangement of industries according to productive capital 1986-'87

Sl. No.	Code	Name of industry	Productive capital Rs. in lakhs	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	82880.15	36.48
2.	304	Petroleum refineries	23541.48	10.36
3.	310	Manufacture of organic and inorganic chemicals	13845.27	6.09
4.	370	Ship building and repairing	13782.00	6.07
5.	280	Manufacture of pulp, paper and paper boards	12542.02	5.52
6.	311	Manufacture of fertiliser and pesticides	11293.16	4.97
7.	231	Cotton spinning and weaving	5240.14	2.31
8.	324	Manufacture of cement, lime and plaster	4770.00	2.10
9.	364	Manufacture of radio & television	3305.73	1.46
10.	302	Manufacture of rubber products not elsewhere classified.	2971.73	1.31

(Contd.)

(Table 8 contd.)

1	2	3	4	5
11.	357	Manufacture of machine tools	2907.88	1.28
12.	331	Foundries for casting and forging iron and steel	2801.89	1.23
13.	367	Manufacture of electronic components and accessories	2461.14	1.08
14.	214	Cashewnut processing	2383.30	1.05
15.	212	Tea processing	2352.61	1.04
16.	380	Manufacture of medical and surgical equipments	2155.82	0.95
17.	284	Printing and publishing of newspapers	2038.47	0.90
18.	300	Tyre and tube industries	1869.45	0.82
19.	270	Manufacture of veneer, plywood and their products	1805.69	0.80
20.	320	Manufacture of structural clay products	1768.24	0.78
21.	336	Zinc manufacturing	1734.24	0.76
22.	314	Manufacture of perfumes, cosmetics and lotions	1707.96	0.76
23.	261	Manufacture of all types of threads and ropes	1602.13	0.71
24.	313	Manufacture of drugs and medicines	1344.52	0.59
25.	319	Manufacture of chemical products not elsewhere classified.	1181.34	0.52
26.	360	Manufacture of electrical industrial machinery	1120.04	0.49
27.	271	Sawing and planing of wood	1104.00	0.49
28.	285	Printing and publishing of periodicals	987.93	0.44
29.	361	Manufacture of insulated wires and cables	984.53	0.43
30.	268	Manufacture of coir and coir products	974.91	0.43
31.	363	Manufacture of electrical apparatus	930.87	0.41
32.	330	Iron and steel industries	816.76	0.26
33.	220	Distilling, rectifying & blending of spirits	791.55	0.35
34.	34	Manufacture of structural metal products	734.14	0.32

(Contd.)

(Table 8 contd.)

1	2	3	4	5
35.	211	Manufacture of other edible oils	701.86	0.31
36.	366	Manufacture of electronic computers etc.	691.51	0.31
37.	340	Manufacture of fabricated metal products	678.21	0.30
38.	973	Repair of motor vehicles and motor cycles	674.48	0.29
39.	303	Manufacture of petroleum products	663.40	0.29
40.	203	Canning, preserving and processing of fish	586.08	0.26
41.	235	Weaving and finishing of cotton textiles	573.92	0.25
42.	328	Manufacture of asbestos, cement and other cement products	558.27	0.25
43.	329	Manufacture of miscellaneous non-metal mineral products	532.37	0.23
44.	316	Manufacture of turpentine, synthetic fibres etc.	528.35	0.23
45.	216	Manufacture of prepared animal feeds	479.55	0.21
46.	335	Aluminium manufacturing	464.25	0.20
47.	362	Manufacture of electrical apparatus	400.49	0.18
48.	374	Manufacture of motor vehicles and parts	367.35	0.16
49.	206	Manufacture and refining of sugar	351.16	0.16
50.	247	Spinning, weaving and finishing of synthetic fibres etc.	347.66	0.15
51.	321	Manufacture of glass products	345.52	0.15
52.	222	Manufacture of malt liquors and malt	302.21	0.13
		Other industries	5201.61	2.29
		<b>All industries</b>	<b>227179.39</b>	<b>100.00</b>

### 3.5 Invested capital

The total invested capital in the factory sector during the year under report was estimated as Rs.2392.30 crores as against Rs.2236.76 crores during the previous year. The invested capital in generating and transmission of electric energy is the highest as in the previous year with 30.02% of the total invested capital. The second rank goes to

petroleum refineries with 11.78% of the total invested capital. The above two industries along with ship building and repairing, manufacture of organic and inorganic chemicals and manufacture of pulp, paper and paper boards share 60.25% of the total invested capital. There are 52 groups of industries with invested capital Rs.3 crores or more in the state and they are presented in the descending order of magnitude of invested capital in table 9. Out of the above 52 industry groups only 17 groups have invested capital of 1% or more of the total.

**Table: 9 - Arrangement of industries according to invested capital  
1986-1987**

S1. No.	Code	Name of industry	Invested capital Rs. in lakhs	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	71809.91	30.02
2.	304	Petroleum refineries	28172.76	11.78
3.	370	Ship building and repairing	15882.31	6.64
4.	310	Manufacture of organic and inorganic chemicals	14491.19	6.06
5.	280	Manufacture of pulp, paper and paper boards	13764.64	5.75
6.	311	Manufacture of fertilisers and pesticides	12749.12	5.33
7.	231	Cotton spinning and weaving	7110.49	2.97
8.	324	Manufacture of cement, lime and plaster	5079.20	2.12
9.	214	Cashewnut processing	3389.99	1.42
10.	300	Tyre and tube industries	3387.49	1.42
11.	357	Manufacture of machine tools	3308.14	1.38
12.	331	Foundries for casting and forging iron and steel	3190.87	1.33
13.	364	Manufacture of radio and television	3088.67	1.29
14.	302	Manufacture of rubber products not elsewhere classified	2990.05	1.25
15.	367	Manufacture of electronic components and accessories	2927.61	1.22
16.	212	Tea processing	2393.47	1.00
17.	360	Manufacture of electrical industrial machinery	2389.36	1.00
18.	270	Manufacture of veneer, plywood and their products	2359.87	0.98
19.	336	Zinc manufacturing	2156.22	0.90

(Contd.)

(Table 9 contd.)

1	2	3	4	5
20.	314	Manufacture of perfumes, cosmetics and lotions	2054.26	0.86
21.	380	Manufacture of medical and surgical equipments	2048.37	0.86
22.	320	Manufacture of structural clay products	1917.38	0.80
23.	313	Manufacture of drugs and medicines	1684.70	0.70
24.	261	Manufacture of all types of threads and ropes	1622.89	0.68
25.	361	Manufacture of insulated wires and cables	1534.46	0.64
26.	284	Printing and publishing of newspapers	1424.01	0.59
27.	319	Manufacture of chemical products not elsewhere classified.	1381.30	0.58
28.	363	Manufacture of electrical apparatus	1371.58	0.57
29.	330	Iron and steel industries	1321.96	0.55
30.	316	Manufacture of turpentine, synthetic fibres etc	1303.79	0.54
31.	203	Canning, preserving and processing of fish	1133.03	0.47
32.	271	Sawing and planing of wood	1109.76	0.46
33.	335	Aluminium manufacturing	1065.85	0.45
34.	366	Manufacture of electronic computers etc.	1031.59	0.43
35.	268	Manufacture of coir and coir products	998.91	0.42
36.	340	Manufacture of fabricated metal products	971.42	0.41
37.	220	Distilling, rectifying & blending of spirits	763.00	0.32
38.	235	Weaving and finishing of cotton textiles	737.92	0.31
39.	211	Manufacture of other edible oils	734.68	0.31
40.	285	Printing and publishing of periodicals	683.43	0.29
41.	362	Manufacture of electrical apparatus	662.03	0.28
42.	341	Manufacture of structural metal products	629.99	0.26
43.	303	Manufacture of plastic products	602.84	0.25

(Contd.)

(Table 9 contd.)

1	2	3	4	5
44.	328	Manufacture of asbestos cement and other cement products	595.54	0.25
45.	329	Manufacture of miscellaneous non-metallic mineral products	586.52	0.25
46.	247	Spinning, weaving and finishing of fibres	564.23	0.24
47.	973	Repair of motor vehicles and motor cycles	522.96	0.22
48.	216	Manufacture of prepared animal feeds	435.46	0.18
49.	343	Manufacture of hand tools and general hardware	412.56	0.17
50.	323	Manufacture of chinaware and porcelainware	353.04	0.15
51.	350	Manufacture of agricultural machinery & equipments	349.47	0.15
52.	222	Malt liquors and malt	307.63	0.13
		Other industries	5671.83	2.37
		<b>All Industries</b>	<b>239229.55</b>	<b>100.00</b>

### 3.6 Outstanding loans

The total amount of loans outstanding as on 31st March, 1987 against the factories covered in the survey was estimated at Rs.1873.66 crores as against Rs.1765.05 crores during the previous year. It is observed that outstanding loans are more than the fixed capital and it constitutes 112.33% of the fixed capital employed. Outstanding loans constitute 82.48% of the productive capital. About 60.86% of the loan amount is outstanding against 5 groups of industries viz. generation and transmission of electric energy, petroleum refineries, ship building and repairing, manufacture of pulp, paper and paper board and manufacture of organic and inorganic chemicals. The highest amount of loan outstanding, is against generation and transmission of electric energy. An amount of Rs.676.08 crores is outstanding against this industry group which is 36.08% of the total amount outstanding. There are 52 groups of industries with outstanding loan of Rs.2 crores and more in the year 1986-'87. These industries are arranged in descending order of magnitude of loan amount outstanding in table 10.

Table:10 - Arrangement of industries according to outstanding loan  
1986-'87

Sl. No.	Code	Name of industry	Outstanding loan Rs. in lakhs	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	67608.12	36.08
2.	304	Petroleum refineries	21573.39	11.51
3.	370	Ship building and repairing	11387.70	6.08
4.	280	Manufacture of pulp, paper and paper board	6827.27	3.64
5.	310	Manufacture of organic and inorganic chemicals	6644.88	3.55
6.	231	Cotton spinning and weaving	6507.56	3.47
7.	364	Manufacture of radio and television	6173.92	3.30
8.	324	Manufacture of cement, lime and plaster	4696.36	2.51
9.	360	Manufacture of electrical machinery and apparatus	4159.06	2.22
10.	214	Cashewnut processing	3546.86	1.89
11.	361	Manufacture of insulated wires and cables	3365.49	1.80
12.	367	Manufacture of electronic components	3257.09	1.74
13.	331	Foundries for casting and forging iron and steel	2858.19	1.52
14.	314	Manufacture of perfumes lotions and hair dressings	2854.55	1.52
15.	316	Manufacture of turpentine, synthetic fibres etc.	2700.92	1.44
16.	300	Tyre and tube industries	2666.43	1.42
17.	380	Manufacture of medical, surgical and scientific equipment	2413.79	1.29
18.	302	Manufacture of rubber products not elsewhere classified.	1979.01	1.06
19.	270	Manufacture of veneer and plywood	1935.36	1.03
20.	313	Manufacture of drugs and medicines	1727.78	0.92

(Contd.)



(Table 10 contd.)

1	2	3	4	5
21.	357	Manufacture of machine tools and accessories	1633.22	0.87
22.	284	Printing and publishing of newspapers	1241.16	0.66
23.	363	Manufacture of electrical apparatus	1189.99	0.64
24.	320	Manufacture of structural clay products	1065.44	0.57
25.	336	Zinc manufacturing	1044.02	0.56
26.	323	Manufacture of chinaware and porcelainware	956.56	0.51
27.	203	Canning, preserving and processing of fish	927.55	0.50
28.	268	Manufacture of coir and coir products	925.86	0.49
29.	217	Manufacture of starch	754.14	0.40
30.	366	Manufacture of electronic computers, control instruments and other equipments.	665.80	0.36
31.	341	Manufacture of structural metal products	623.99	0.33
32.	330	Iron and steel industries	607.10	0.32
33.	340	Manufacture of fabricated metal products	561.07	0.30
34.	211	Manufacture of other edible oils	554.92	0.30
35.	362	Manufacture of dry and wet batteries	546.34	0.29
36.	235	Weaving and finishing of cotton textiles	530.71	0.28
37.	303	Manufacture of plastic products not elsewhere classified.	521.00	0.28
38.	343	Manufacture of hand tools and general hardware	520.99	0.28
39.	319	Manufacture of chemical products not elsewhere classified.	473.43	0.25
40.	311	Manufacture of fertilisers and pesticides	464.83	0.25
41.	220	Distilling, rectifying and blending of spirits	432.92	0.23
42.	328	Manufacture of asbestos cement and other cement products.	404.84	0.22

(Contd.)

(Table 10 contd.)

1	2	3	4	5
43.	271	Sawing and planing of wood	387.81	0.21
44.	290	Manufacture of leather and fur products	378.60	0.20
45.	285	Printing and publishing of periodicals	335.77	0.18
46.	204	Grain mill products	335.69	0.18
47.	350	Manufacture of agricultural machinery and parts	262.05	0.14
48.	216	Manufacture of prepared animal feeds	248.16	0.13
49.	329	Manufacture of miscellaneous non-metal products	244.93	0.13
50.	212	Tea processing	226.53	0.12
51.	202	Canning and preservation of fruits and vegetables	218.66	0.12
52.	216	Manufacture of ice	202.95	0.11
		Other industries	2995.39	1.60
		<b>All Industries</b>	<b>187366.15</b>	<b>100.00</b>

### 3.7 Workers

There were 189514 workers working in the factory sector during the year 1986-'87, as against 193032 during the previous year. Cashewnut processing industry ranks first in the number of workers with 27.48%. The second place goes to the generation and transmission of electric energy followed by the manufacture of beedi. During the previous year the second rank was for beedi manufacturing industry. It may also be seen that more than half of the workers (51.70%) in the factory sector is engaged in the traditional industries of cashewnut processing, manufacture of beedi, manufacture of structural clay products, cotton spinning and weaving and sawing and planing of wood. There are thirty groups of industries having more than 1000 workers in each of them and these industries are arranged in descending order of magnitude in table 11.

Table:11 - Arrangement of industries according to no.of workers  
1986-'87

Sl. No.	Code	Name of industry	Total no. of workers	Percentage to total
1	2	3	4	5
1.	214	Cashewnut processing	52079	27.48
2.	400	Generation & transmission of electric energy	15820	8.35

(Contd.)

(Table 11 contd.)

1	2	3	4	5
3.	226	Manufacture of beads	15343	8.10
4.	320	Manufacture of structural clay products	11622	6.13
5.	231	Cotton spinning and weaving	10640	5.61
6.	271	Sawing and planing of wood	8308	4.38
7.	235	Weaving and finishing of cotton textiles	4654	2.46
8.	973	Repair of motor vehicles and motor cycles	4499	2.37
9.	212	Tea processing	4179	2.21
10.	311	Manufacture of fertilizers and pesticides	3989	2.11
11.	302	Manufacture of rubber products not elsewhere classified.	3609	1.90
12.	310	Manufacture of organic and inorganic chemicals	3137	1.66
13.	270	Manufacture of veneer and plywood	2756	1.46
14.	285	Printing and publishing of periodicals	2548	1.34
15.	360	Manufacture of electrical, industrial machinery and apparatus.	2240	1.18
16.	261	Manufacture of all types of threads, ropes and twines	2034	1.07
17.	357	Manufacture of machine tools	1877	0.99
18.	300	Tyre and tube industries	1711	0.90
19.	313	Manufacture of drugs and medicines	1678	0.89
20.	268	Manufacture of coal and coal products	1672	0.88
21.	314	Manufacture of perfumes, lotions and hair dressings	1579	0.83
22.	280	Manufacture of pulp, paper and paper board	1517	0.80
23.	370	Ship building and repairing	1468	0.78
24.	203	Canning and preserving of fish	1367	0.72
25.	374	Manufacture of motor vehicles	1226	0.65

(Contd.)

(Table 11 contd.)

1	2	3	4	5
26.	284	Printing and publishing of newspapers	1225	0.65
27.	979	Repair enterprises not elsewhere classified	1214	0.64
28.	380	Manufacture of medical and surgical equipments	1160	0.61
29.	364	Manufacture of radio and television	1066	0.56
30.	343	Manufacture of hand tools	1027	0.54
		Other industries	22270	11.75
		<b>All Industries</b>	<b>189514</b>	<b>100.00</b>

### 3.8 Employment

The total employment in the factory sector during the year under report is estimated as 2.40 lakhs as against 2.38 lakhs in the previous year. As in the case of workers, Cashewnut processing industry ranks first in the case of employment. Eventhough there is marginal increase in the total number of persons employed in the factory sector when compared to the previous year, a decreasing trend was noticed in the employment figures in cashewnut processing industry. Generation and transmission of electric energy and its distribution ranks second in the case of employment in the factory section and there is considerable increase in the number of persons employed in this sector. There are 39 groups of industries with 1000 or more employees during the year and they are arranged in descending order of magnitude in table 12.

The ratio of workers to non-workers in the factory sector is calculated as 3.73 in 1986-'87 as against 4.34 in the previous year. This was because of the decrease in the number of workers in the labour intensive industries like cashewnut processing.

Table:12 - Arrangement of industries according to number of employees 1986-'87

Sl. No.	Code	Name of industry	Total No. of employees	Percentage to total
1	2	3	4	5
1.	214	Cashewnut processing	56448	23.49
2.	400	Generation and transmission of electric energy	24638	10.25
3.	226	Manufacture of beed1	15694	6.53
4.	320	Manufacture of structural clay products	14893	6.20
5.	271	Sawing and planing of wood	13870	5.77

(Contd.)

(Table 12 contd.)

1	2	3	4	5
6.	231	Cotton spinning and weaving	11851	4.93
7.	311	Manufacture of fertilisers and pesticides	5659	2.35
8.	973	Repair of motor vehicles and motor cycles	5542	2.31
9.	235	Weaving and finishing of cotton textiles	5342	2.22
10.	212	Tea processing	4840	2.01
11.	310	Manufacture of organic and inorganic chemicals	4472	1.86
12.	302	Manufacture of rubber products not elsewhere classified.	4446	1.85
13.	270	Manufacture of veneer and plywood	3494	1.45
14.	360	Manufacture of electrical industrial machinery and apparatus.	3172	1.32
15.	285	Printing and publishing of periodicals	3141	1.31
16.	357	Manufacture of machine tools	3130	1.30
17.	300	Tyre and tube industries	2566	1.07
18.	313	Manufacture of drugs and medicines	2492	1.04
19.	370	Ship building and repairing	2487	1.04
20.	284	Printing and publishing of newspapers	2438	1.01
21.	261	Manufacture of all types of threads, ropes and twines	2392	1.00
22.	268	Manufacture of coir and coir products	2179	0.91
23.	314	Manufacture of perfumes, lotions and hair dressings	2044	0.85
24.	280	Manufacture of pulp, paper and paper board	2020	0.84
25.	203	Canning and preserving of fish	1999	0.83
26.	380	Manufacture of medical, surgical and scientific equipments.	1702	0.71
27.	364	Manufacture of radio and television	1644	0.68

(Contd.)

(Table 12 contd.)

1	2	3	4	5
28.	367	Manufacture of electrical components and accessories	1578	0.56
29.	979	Repair enterprises not elsewhere classified	1480	0.62
30.	374	Manufacture of motor vehicles	1397	0.58
31.	330	Iron and steel industries	1339	0.56
32.	343	Manufacture of hand tools	1314	0.55
33.	340	Manufacture of fabricated metal products	1218	0.51
34.	324	Manufacture of cement, lime and plaster	1171	0.49
35.	201	Manufacture of dairy products	1162	0.48
36.	323	Manufacture of glass and glass products	1097	0.45
37.	331	Foundries for casting and forging iron	1095	0.45
38.	289	Printing, publishing and allied activities not elsewhere classified.	1089	0.45
39.	335	Aluminium manufacturing	1034	0.43
		Other industries	20764	8.64
		<b>All Industries</b>	<b>240333</b>	<b>100.00</b>

### 3.9 Wages to workers

An amount of Rs.198.81 crores was paid to the workers during the year 1986-'87 as against Rs.178.51 crores during the previous year. Eventhough there is a fall of 1.82% in the number of workers, the wages paid to the workers have increased by 11.37% when compared to that of the previous year. Generation of electric energy and its distribution ranks first followed by cotton spinning and weaving in the case of amount spent for the payment of wages. It may be observed that though the workers employed in cashew processing industry formed 27.48% of the total workers, their share in the total wage bill of the sector was only 5.26%. At the same time 19.89% of the total wage bill was paid to the 8.35% workers working in the generation and transmission of electric energy. There are 37 groups of industries with an annual wage bill of Rs.1 crore or more during the year under report. These industries are arranged in descending order of magnitude and presented in table 13.

Table:13 - Arrangement of industries according to wages to workers

Sl. No.	Code	Name of industry	Wages to workers Rs. in lakhs	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	3954.83	19.89
2.	231	Cotton spinning and weaving	1618.54	8.14
3.	311	Manufacture of fertilisers and pesticides	1132.50	5.70
4.	214	Cashewnut processing	1046.48	5.26
5.	320	Manufacture of structural clay products	978.43	4.92
6.	226	Manufacture of beedi	812.17	4.09
7.	973	Repair of motor vehicles and motor cycles	798.02	4.01
8.	310	Manufacture of organic and inorganic chemicals	761.19	3.83
9.	303	Manufacture of rubber products	413.47	2.06
10.	357	Manufacture of machine tools, their parts and accessories.	409.16	2.06
11.	314	Manufacture of perfumes and lotions	377.72	1.90
12.	261	Manufacture of all types of threads, ropes and twines	354.04	1.78
13.	360	Manufacture of electrical industrial machinery	346.77	1.75
14.	285	Printing and publishing of periodicals	342.92	1.73
15.	370	Ship building and repairing	332.79	1.67
16.	300	Tyre and tube industries	308.60	1.55
17.	280	Manufacture of pulp, paper and paper boards	307.15	1.55
18.	235	Weaving and finishing of cotton textiles	264.54	1.33
19.	270	Manufacture of veneer and plywood	249.45	1.25
20.	284	Printing publishing of newspapers	248.62	1.25
21.	212	Tea processing	243.97	1.23

(Contd.)

(Table 13 contd.)

1	2	3	4	5
22.	271	Sawing and planing of wood	243.87	1.23
23.	335	Aluminium manufacturing	228.94	1.15
24.	313	Manufacture of drugs and medicines	221.21	1.11
25.	979	Repair enterprises not elsewhere classified	208.87	1.05
26.	364	Manufacture of radio and television	201.22	1.01
27.	374	Manufacture of motor vehicles	195.19	0.98
28.	380	Manufacture of medical, surgical and scientific equipments.	195.04	0.98
29.	324	Manufacture of cement, lime and plaster	180.10	0.91
30.	330	Iron and steel industries	160.42	0.81
31.	367	Manufacture of electronic components and accessories	142.05	0.71
32.	361	Manufacture of insulated wires and cables	139.22	0.70
33.	201	Manufacture of dairy products	122.76	0.62
34.	363	Manufacture of electrical apparatus	121.30	0.61
35.	268	Manufacture of coal and coal products	121.04	0.61
36.	331	Foundries for casting and forging of iron	116.11	0.58
37.	336	Zinc manufacturing	112.84	0.57
		Other industries	1869.78	9.40
		<b>All Industries</b>	<b>19881.32</b>	<b>100.00</b>

### 3.10 Emoluments

Wages, Salaries, Bonus and imputed value of benefits in kind paid to the employees constitute emoluments. The amount expended towards payment of emoluments during the year 1986-'87 is estimated as Rs.325.19 crores where as the amount expended during the corresponding period of previous year was Rs.289.02 crores. There was an increase of 12.52% in the emoluments paid while the increase in the number of employees was only 1.17% in comparison to the previous year. As in the case of wages, generation and transmission of electric energy ranks first in the expenditure towards payment of emoluments followed



by cotton spinning and weaving. Even though cashewnut processing ranks first in the number of employees, its rank in the payment of emoluments is fourth. There are 49 groups of industries with total emoluments by Rs.1 crore or more as against 45 in the previous year. They are arranged in descending order of expenditure towards payment of emoluments in table 14.

Table:14 - Arrangement of industries according to total emoluments  
1986-'87

Sl. No.	Code	Name of industry	Total emoluments Rs. in lakhs	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	6478.16	19.92
2.	231	Cotton spinning and weaving	2081.21	6.40
3.	311	Manufacture of fertilisers and pesticides	1957.80	6.02
4.	214	Cashewnut processing	1537.09	4.73
5.	320	Manufacture of structural clay products	1445.47	4.44
6.	310	Manufacture of organic and inorganic chemicals	1438.35	4.42
7.	973	Repair of motor vehicles and motor cycles	1063.52	3.27
8.	357	Manufacture of machine tools and accessories	982.04	3.02
9.	226	Manufacture of beedi	978.89	3.01
10.	370	Ship building and repairing	751.98	2.31
11.	302	Manufacture of rubber products	643.42	1.98
12.	284	Printing and publishing of newspapers	630.22	1.94
13.	360	Manufacture of electrical industrial machinery	621.98	1.91
14.	300	Tyre and tube industries	585.00	1.80
15.	314	Manufacture of perfumes and lotions	561.59	1.73
16.	285	Printing and publishing of periodicals	535.62	1.65
17.	280	Manufacture of pulp, paper and paper boards	526.83	1.62
18.	261	Manufacture of all types of threads, ropes and twines	483.92	1.49
19.	313	Manufacture of drugs and medicines	413.31	1.27

(Contd.)

(Table 14 contd.)

1	2	3	4	5
20.	212	Tea processing	403.07	1.24
21.	270	Manufacture of veneer and plywood	402.12	1.24
22.	364	Manufacture of radio and television	398.46	1.22
23.	235	Weaving and finishing of cotton textiles	377.81	1.16
24.	335	Aluminium manufacturing	377.17	1.16
25.	380	Manufacture of medical, surgical and scientific equipments.	356.67	1.10
26.	271	Sawing and planing of wood	339.03	1.04
27.	367	Manufacture of electronic components and accessories not elsewhere classified.	319.91	0.98
28.	324	Manufacture of cement, lime and plaster	297.37	0.91
29.	330	Iron and steel industries	288.70	0.89
30.	304	Petroleum refineries	286.92	0.88
31.	979	Repair enterprises not elsewhere classified	275.91	0.85
32.	361	Manufacture of insulated wires and cables	255.78	0.79
33.	374	Manufacture of motor vehicles	246.90	0.76
34.	336	Zinc manufacturing	232.82	0.72
35.	331	Foundries for casting and forging of iron	217.01	0.68
36.	268	Manufacture of coir and coir products	212.03	0.65
37.	201	Manufacture of dairy products	201.09	0.62
38.	203	Canning and preserving of fish	179.45	0.55
39.	220	Distilling and rectifying of spirits	177.35	0.55
40.	363	Manufacture of electrical apparatus	175.89	0.54
41.	341	Manufacture of structural metal products	174.02	0.53

(Contd.)

(Table 14 contd.)

1	2	3	4	5
42.	362	Manufacture of dry & wet batteries	157.55	0.48
43.	304	Manufacture of fabricated metal products	151.37	0.46
44.	343	Manufacture of hand tools	141.88	0.44
45.	329	Manufacture of miscellaneous non-metal mineral products.	125.91	0.39
46.	289	Printing, publishing and allied activities	123.86	0.38
47.	211	Manufacture of other edible oils	106.50	0.33
48.	316	Manufacture of turpentine	102.93	0.32
49.	206	Manufacture and refining of sugar	101.76	0.31
		Other industries	1595.54	4.90
		<b>All Industries</b>	<b>32519.18</b>	<b>100.00</b>

## 3.11 Input

The total input comprise of all the manufacturing costs of the factory. The factory sector of the state has consumed inputs amounting to ₹.2652.69 crores during the year 1986-'87 as against ₹.2374.32 crores during the previous year. Out of this, 85.99% was the cost of materials, 6.54% cost of fuels and the remaining 7.47% was cost of other items of input. When compared to the previous year, the percentage contribution of cost of materials and cost of fuels have gone up and that of other items of input marked a fall. Petroleum refineries rank first in the consumption of inputs followed by manufacture of fertilisers and pesticides. About 40% of the total consumption of various inputs was in these two groups of industries. There are 53 groups of industries in the state having consumption of inputs worth ₹.5 crores and above during the year under report and they are arranged in descending order of consumption of inputs in table 15.

Table:15 - Arrangement of industries according to total input 1986-'87

Sl. No.	Code	Name of industry	Total input (₹. in lakhs)	Percentage to total
1	2	3	4	5
1.	304	Petroleum refineries	79997.28	30.15
2.	311	Manufacture of fertilisers & pesticides	24280.26	9.15

(Contd.)

(Table 15 contd.)

1	2	3	4	5
3.	214	Cashewnut processing	13838.40	5.22
4.	302	Manufacture of rubber products not elsewhere classified.	10094.97	3.80
5.	212	Tea processing	9928.04	3.78
6.	203	Canning and preserving of fish	8961.65	3.37
7.	231	Cotton spinning and weaving, shrinking, sanforizing, mercerising & finishing of cotton textiles in mills.	6718.55	2.52
8.	310	Manufacture of organic and inorganic chemicals	6408.11	2.41
9.	300	Tyre and tube industries	6264.55	2.35
10.	211	Manufacture of other edible oils and fats	5884.84	2.22
11.	314	Manufacture of perfumes and lotions	5778.12	2.18
12.	280	Manufacture of pulp, paper and paper boards	4560.62	1.72
13.	284	Printing and publishing of newspapers	4192.20	1.58
14.	219	Manufacture of food products not elsewhere classified	3602.82	1.35
15.	364	Manufacture of radio and television	3508.46	1.32
16.	271	Sawing and planing of wood	3207.85	1.21
17.	201	Manufacture of dairy products	3013.54	1.14
18.	351	Manufacture of insulated wires and cables	2882.34	1.08
19.	268	Manufacture of coir and coir products	2807.07	1.05
20.	324	Manufacture of cement, lime and plaster	2576.58	0.97
21.	360	Manufacture of electrical industrial machinery	2547.82	0.95
22.	335	Aluminium manufacturing	2505.28	0.94
23.	319	Manufacture of chemical products not elsewhere classified.	2439.94	0.92
24.	330	Iron and steel industries	2380.65	0.90

(Contd.)

(Table 15 contd.)

1	2	3	4	5
25.	336	Zinc manufacturing	2350.94	0.89
26.	270	Manufacture of veneer and plywood	2098.84	0.79
27.	400	Generation and transmission of electric energy	2061.30	0.78
28.	313	Manufacture of drugs and medicines	2060.21	0.78
29.	366	Manufacture of electronic computers, control instruments and other equipments.	1921.22	0.73
30.	370	Ship building and repairing	1856.62	0.70
31.	261	Manufacture of all types of threads, cordage & ropes	1845.45	0.69
32.	357	Manufacture of machine tools	1805.22	0.68
33.	320	Manufacture of structural clay products	1713.68	0.65
34.	331	Foundries for casting and forging iron and steel	1691.76	0.64
35.	362	Manufacture of dry and wet batteries	1599.76	0.60
36.	204	Grain mill products	1531.45	0.58
37.	220	Distilling, rectifying and blending of spirits	1480.83	0.56
38.	340	Manufacture of fabricated metal products	1467.56	0.55
39.	216	Manufacture of prepared animal feeds	1462.95	0.56
40.	383	Manufacture of jewellery & related articles	1337.65	0.51
41.	235	Weaving and finishing of cotton textiles in handlooms other than khadi.	1246.97	0.47
42.	367	Manufacture of electronic components and accessories	1230.43	0.46
43.	226	Manufacture of beedi	1191.71	0.45
44.	236	Weaving and finishing of cotton textiles in powerlooms	1067.84	0.40
45.	217	Manufacture of starch	1017.20	0.38
46.	301	Manufacture of footwear	978.61	0.37
47.	341	Manufacture of structural metal products	951.56	0.35

(Contd.)

(Table 15 contd.)

1	2	3	4	5
48.	285	Printing and publishing of periodicals	780.01	0.29
49.	247	Spinning, weaving and finishing of other textiles	687.98	0.26
50.	343	Manufacture of hand tools and general hardware	649.92	0.24
51.	303	Manufacture of petroleum and plastic products	582.70	0.22
52.	329	Manufacture of miscellaneous non-metal mineral products	549.38	0.21
53.	205	Manufacture of bakery products	521.28	0.20
		Other industries	7158.49	2.70
		<b>All Industries</b>	<b>265269.48</b>	<b>100.00</b>

## 3.12 Output

The gross value of goods and services produced in the factory sector during the year 1986-'87 is estimated as Rs.3607.52 crores whereas Rs.3071.95 crores was the production during the previous year. The percentage increase in the value of output when compared to the previous year is 17.43. As in the case of input, petroleum refineries ranks first in the value of output produced followed by manufacture of fertilisers and pesticides. About 33% of the output in the industrial sector of the state was contributed by these two groups of industries. Eventhough the share in the consumption of inputs by the generation and transmission of electric energy was only 0.78%, its share in the value of output was 7.87%. There are 60 groups of industries with an output of Rs.5 crore or more during the year under report and they are arranged in descending order of output produced in table 16.

Table:16 - Arrangement of industries according to total output 1986-'87

Sl. No.	Code	Name of industry	Total output (Rs. in lakhs)	Percentage to total
1	2	3	4	5
1.	304	Petroleum refineries	86024.53	23.85
2.	311	Manufacture of fertilisers and pesticides	32146.46	9.91
3.	400	Generation and transmission of electric energy and distribution of electric energy.	28378.28	7.87
4.	214	Cashewnut processing	18111.44	5.02

(Contd.)

Table 16 contd.)

1	2	3	4	5
5.	212 Tea processing		13416.17	3.72
6.	302 Manufacture of rubber products not elsewhere classified.		12375.31	3.43
7.	231 Cotton spinning, weaving, shrinking and finishing of cotton textiles.		10600.37	2.94
8.	203 Canning and preserving of fish		9682.97	2.69
9.	310 Manufacture of organic and inorganic chemicals		9499.24	2.63
10.	300 Tyre and tube industries		8616.13	2.39
11.	314 Manufacture of perfumes, cosmetics and lotions		7196.39	1.99
12.	280 Manufacture of pulp, paper and paper board		7119.68	1.97
13.	211 Manufacture of other edible oils		6310.40	1.75
14.	284 Printing and publishing of news papers		5528.63	1.53
15.	364 Manufacture of radio and television		5082.20	1.41
16.	336 Zinc manufacturing		4333.57	1.20
17.	271 Sawing and planing of wood		3895.99	1.08
18.	219 Manufacture of food products not elsewhere classified		3688.93	1.02
19.	320 Manufacture of structural clay products		3671.05	1.02
20.	261 Manufacture of all types of threads, ropes, twines etc.		3592.55	1.00
21.	201 Manufacture of dairy products		3444.46	0.95
22.	357 Manufacture of machine tools		3442.93	0.95
23.	268 Manufacture of coir and coir products		3431.12	0.95
24.	360 Manufacture of electrical industrial machinery		3381.50	0.94
25.	313 Manufacture of drugs and medicines		3150.01	0.87
26.	361 Manufacture of insulated wires and cables		3140.88	0.87

(Contd.)

(Table 15 contd.)

1	2	3	4	5
27.	370	Ship building and repairing	3118.33	0.86
28.	324	Manufacture of cement, lime and plaster	3009.54	0.83
29.	330	Iron and steel industries	2999.04	0.82
30.	319	Manufacture of chemical products not elsewhere classified.	2878.63	0.80
31.	335	Aluminium manufacturing	2827.98	0.77
32.	270	Manufacture of veneer and plywood	2683.84	0.75
33.	366	Manufacture of electronic computers, control instruments and other equipments.	2575.64	0.72
34.	220	Distilling, rectifying and blending of spirits	2372.43	0.
35.	380	Manufacture of medical, surgical and scientific equipments.	2172.99	0.0
36.	226	Manufacture of beedi	2171.42	0.60
37.	367	Manufacture of electrical components and accessories	2169.30	0.60
38.	340	Manufacture of fabricated metal products	2144.76	0.60
39.	352	Manufacture of dry and wet batteries	1896.67	0.53
40.	235	Weaving and finishing of cotton textiles	1852.62	0.51
41.	331	Foundries for casting and forging of iron	1652.80	0.46
42.	216	Manufacture of prepared animal feeds	1625.98	0.45
43.	204	Grain mill products	1624.06	0.45
44.	973	Repair of motor vehicles and motor cycles	1538.52	0.43
45.	341	Manufacture of structural metal products	1440.43	0.40
46.	285	Printing and publishing of periodicals	1413.20	0.39
47.	217	Manufacture of starch	1221.30	0.34
48.	301	Manufacture of footwear	1147.70	0.32

(Contd.)



(Table 15 contd.)

1	2	3	4	5
49.	236	Weaving and finishing of cotton textiles in power looms.	1109.28	0.31
50.	329	Manufacture of miscellaneous non-metal mineral products.	998.62	0.28
51.	247	Spinning, weaving and finishing of other textiles	996.43	0.28
52.	343	Manufacture of hand tools and general hardware	871.98	0.24
53.	303	Manufacture of plastic products not elsewhere classified.	650.34	0.18
54.	205	Manufacture of bakery products	626.82	0.17
55.	289	Printing and publishing and allied activities	578.09	0.16
56.	350	Manufacture of agricultural machinery	562.90	0.16
57.	363	Manufacture of electrical apparatus	556.29	0.15
58.	223	Malt liquors and malt	550.54	0.15
59.	979	Repair enterprises not elsewhere classified	529.25	0.15
60.	374	Manufacture of motor vehicles	513.60	0.14
		Other industries	6309.08	1.75
		<b>All Industries</b>	<b>360751.59</b>	<b>100.00</b>

### 3.13 Value added by manufacture

Value added by manufacture or net output provides a measure of the contribution made by resources of labour and capital in producing the output of an activity and is obtained by deducting the total value of input as well as depreciation from the total value of output.

The value added by the factory sector during the year 1986-'87 is estimated as Rs.819.07 crores as against Rs.594.34 crores during the previous year, thereby recording a substantial increase of 37.8%. The highest contribution towards value added was from the generation and transmission of electric energy with 29.91% of the total value added as against 10.74% during the previous year. Manufacture of fertilisers and pesticides ranks second with 8.34% of the total value added. When compared to that of the previous year, its share in terms of percentage in the total value added has shown a fall of 1.16%. Cashew processing industry occupies the third place and in comparison to the previous

year, its share in terms of percentage in the total value added had increased by 2.41%. There are 45 groups of industries with value added by manufacture Rs.2 crores or more and they are arranged in descending order of magnitude in table 17.

Table:17 - Arrangement of industries according to value added 1986-'87

Sl. No.	Code	Name of industry	Value added (Rs. in lakhs)	Percentage to total
1	2	3	4	5
1.	400	Generation and transmission of electric energy	24496.17	29.91
2.	311	Manufacture of fertilisers and pesticides	6829.13	8.34
3.	214	Cashewnut processing	4238.09	5.17
4.	231	Cotton spinning and weaving	3384.23	4.13
5.	212	Tea processing	3293.11	4.02
6.	304	Petroleum refineries	3266.44	3.99
7.	310	Manufacture of basic industrial organic and inorganic chemicals and gases.	2151.06	2.63
8.	300	Tyre and tube industries	2088.18	2.55
9.	302	Manufacture of rubber products not elsewhere classified.	2050.67	2.50
10.	320	Manufacture of structural clay products	1847.04	2.26
11.	261	Manufacture of all types of threads, ropes & twines etc.	1698.83	2.07
12.	357	Manufacture of machine tools, their parts and accessories.	1490.82	1.82
13.	364	Manufacture of radio and television	1457.13	1.78
14.	314	Manufacture of perfumes, cosmetics and lotions	1354.25	1.65
15.	280	Manufacture of pulp, paper and paper board	1202.41	1.47
16.	973	Repair of motor vehicles and motor cycles	1171.36	1.43
17.	284	Printing and publishing of newspapers	1094.56	1.34
18.	226	Manufacture of beedi	978.11	1.19
19.	336	Zinc manufacturing	975.89	1.19

(Contd.)

(Table 17 contd.)

1	2	3	4	5
20.	313	Manufacture of drugs and medicines	968.62	1.18
21.	370	Ship building and repairing	924.60	1.13
22.	220	Distilling and rectifying of spirits	849.08	1.04
23.	367	Manufacture of electronic components and accessories not elsewhere classified.	770.97	0.94
24.	380	Manufacture of medical and surgical equipments	751.25	0.92
25.	366	Manufacture of electronic computers, control instruments and other equipment.	712.54	0.87
26.	360	Manufacture of electrical industrial machinery and apparatus.	682.21	0.83
27.	203	Canning and preserving of fish	651.90	0.80
28.	271	Sawing and planing of wood	646.79	0.79
29.	340	Manufacture of fabricated metal products	641.29	0.78
30.	268	Manufacture of coir and coir products	587.91	0.72
31.	285	Printing and publishing of periodicals	585.12	0.71
32.	235	Weaving & finishing of cotton textiles	583.55	0.71
33.	330	Iron and steel industries	570.13	0.70
34.	270	Manufacture of veneer, plywood and other products.	465.63	0.57
35.	341	Manufacture of structural metal products	461.54	0.56
36.	201	Manufacture of dairy products	424.81	0.52
37.	211	Manufacture of other edible oils	395.03	0.48
38.	319	Manufacture of chemical products	378.75	0.46
39.	329	Manufacture of miscellaneous non-metal mineral products.	377.08	0.46
40.	979	Repair enterprises not elsewhere classified.	329.34	0.40
41.	374	Manufacture of motor vehicles and parts	306.92	0.28

(Contd.)

(Table 17 contd.)

1	2	3	4	5
42.	247	Spinning, weaving and finishing of other textiles	286.00	0.35
43.	335	Aluminium manufacturing	274.74	0.34
44.	362	Manufacture of dry and wet batteries	272.32	0.33
45.	289	Printing, publishing and allied activities not elsewhere classified.	234.32	0.29
		Other industries	2706.57	3.30
		<b>All Industries</b>	<b>81906.59</b>	<b>100.00</b>

### 3.14 Structural ratios of selected industries

The structural ratios of 45 selected industries have been worked and presented in table 18. The basis of selection of these industries was their contribution towards value added by manufacture.

The fixed capital-employee ratio was highest in petroleum refineries with Rs.2645983/- and lowest in the manufacture of beedi with Rs.169/- against the state average of Rs.69409/- of the 45 groups of industries selected, the ratio of fixed capital to employee was below the state average in the case of 33 groups.

Productivity of labour measured by output per employee was maximum in petroleum refineries with Rs.13193948/- and minimum in the manufacture of beedi. The ratio was higher than the state average of Rs.150117/- in 24 selected industries.

The zinc manufacturing industry ranks first in the average annual earnings of employees with Rs.56374/- and the lowest was in sawing and planing of wood with Rs.2444/-. The average annual emoluments was less than the state average of Rs.13532/- in 12 of the 45 selected industries. The maximum value of input-output ratio (0.93) was observed in two of the selected industries viz. petroleum refineries and manufacture of other edible oils and minimum (0.07) in the generation and transmission of electric energy.

The amount of fixed capital required to produce an output worth Rs.1/- i.e. ratio of fixed capital to output was maximum (2.55) in ship building and repairing and minimum (0.01) in the manufacture of beedi. During the previous year, the highest and the lowest were electricity undertakings and manufacture of other edible oils respectively. The ratio was higher than the state average in the case of six groups of industries.

The capital-output co-efficient i.e. fixed capital required to generate value added worth Rs.1/- was maximum in the manufacture of pulp, paper and paper boards (8.88) and minimum in the manufacture of beedi (0.03).



Generation and transmission of electric energy ranks first in the ratio of value added to output (0.86) and the lowest value is for the manufacture of other edible oils (0.06). The ratio was above the state average of 0.23 in the case of 25 groups of industries.

The ratio of emoluments to value added was maximum in aluminium manufacturing (1.37) and lowest in the generation and transmission of electric energy (0.03). There are 24 groups of industries among the selected industries above the state average of 0.40.



Table 18 - Structural ratios in selected industries

1	2	3	4	5	6	7	8	9	10	11	12	13	14
St. Code No.	Description of industry	Fixed capital per employ- ee R.	Emolu- ments per employ- ee R.	Output per employ- ee R.	Value added per employ- ee R.	Input added output ratio	Ratio of fixed capital to output value added	Ratio of fixed capital to output value added	Ratio of value added to output value added	Ratio of value added to output value added	Ratio of operating surplus to productive plus capital	Ratio of operating surplus to productive plus capital	Ratio of operating surplus to productive plus capital
1.	400 Generation and transmission of electric energy.	270819	26293	115181	99424	0.07	2.35	2.72	0.86	0.03	0.63	0.22	
2.	311 Manufacture of fertilisers and pesticides.	138053	34596	568059	120677	0.76	0.24	1.14	0.21	0.29	0.15	0.43	
3.	214 Cashewnut processing	509	2723	32085	7508	0.76	0.02	0.07	0.23	0.36	0.15	1.13	
4.	231 Cotton spinning & weaving	38221	17561	89447	28556	0.63	0.43	1.34	0.32	0.61	0.12	0.25	
5.	212 Tea processing	32534	8328	277194	68040	0.74	0.12	0.48	0.25	0.12	0.22	1.23	
6.	304 Petroleum refineries	2645983	44006	13193948	500988	0.93	0.20	5.28	0.04	0.09	0.03	0.13	
7.	310 Manufacture of basic industrial organic & inorganic chemicals and gases.	258435	32163	212416	48101	0.67	1.22	5.37	0.23	0.67	0.08	0.05	
8.	300 Tyre and tube industries	71144	22798	335781	81379	0.73	0.21	0.87	0.24	0.28	0.17	0.80	

(Contd.)



(Table 18 contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
9. 302 Manufacture of rubber products not elsewhere classified.	39362	14472	278347	46166	0.82	0.14	0.28	0.17	0.37	0.71	0.37	0.71	0.71	0.47
10. 320 Manufacture of structural clay products.	7633	9705	24650	12402	0.47	0.31	0.62	0.50	0.73	0.77	0.73	0.77	0.77	0.23
11. 261 Manufacture of all types of threads, ropes etc.	14831	20231	150190	71022	0.51	0.10	0.21	0.37	0.28	0.34	0.28	0.34	0.34	0.76
12. 357 Manufacture of machine tools, parts and accessories.	39297	31375	109998	47630	0.52	0.36	0.83	0.43	0.66	0.15	0.66	0.15	0.15	0.17
13. 364 Manufacture of radio and television.	69928	24237	309137	88634	0.69	0.23	0.79	0.29	0.27	0.21	0.27	0.21	0.21	0.32
14. 314 Manufacture of perfumes, cosmetics and lotions.	35424	27475	352074	66255	0.80	0.10	0.53	0.19	0.41	0.11	0.41	0.11	0.11	0.46
15. 280 Manufacture of pulp, paper and paper board.	528572	26080	352460	59525	0.64	1.50	8.68	0.77	0.77	0.77	0.77	0.77	0.77	0.77
16. 973 Repair of motor vehicles and motor cycles.	6929	19190	27761	21136	0.22	0.25	0.33	0.76	0.91	0.07	0.91	0.07	0.07	0.16
17. 284 Printing and publishing of newspapers.	34641	25850	226769	44896	0.76	0.15	0.77	0.20	0.58	0.08	0.58	0.08	0.08	0.23
18. 226 Manufacture of beedi	169	6237	13836	1232	0.55	0.01	0.03	0.45	1.00	0.00	1.00	0.00	0.00	(-10.01)

(Contd.)

(Table 18 contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
19. 336 Zinc manufacturing	264909	56374	1049290	236289	0.54	0.25	1.12	0.23	0.24	0.17	0.43	0.17	0.17	0.43
20. 313 Manufacture of drugs and medicines.	36057	16585	126405	38869	0.65	0.29	0.93	0.31	0.43	0.18	0.41	0.18	0.18	0.41
21. 370 Ship building and repairing	320349	30236	125385	37177	0.60	2.55	8.62	0.30	0.81	0.06	0.01	0.06	0.06	0.01
22. 220 Distilling and rectifying of spirits.	40586	18688	249993	89470	0.62	0.16	0.45	0.36	0.21	0.28	0.85	0.21	0.28	0.85
23. 367 Manufacture of electronic components & accessories.	123319	20274	137471	48858	0.57	0.90	0.52	0.36	0.41	0.21	0.18	0.41	0.21	0.18
24. 380 Manufacture of medical and surgical equipments.	58831	20956	127673	44140	0.62	0.46	1.33	0.35	0.47	0.18	0.18	0.47	0.18	0.18
25. 366 Manufacture of electronic computers etc.	122956	18968	568078	151283	0.72	0.22	0.81	0.27	0.13	0.23	0.90	0.13	0.23	0.90
26. 360 Manufacture of electrical industrial machinery.	35640	19608	106605	21510	0.75	0.33	1.66	0.20	0.91	0.02	0.05	0.91	0.02	0.05
27. 203 Canning and preserving fish	26032	8977	484390	32611	0.92	0.05	0.80	0.07	0.28	0.05	0.81	0.28	0.05	0.81
28. 271 Sawing and planing of wood	3118	2444	28089	4663	0.82	0.11	0.67	0.17	0.52	0.08	0.28	0.52	0.08	0.28
29. 304 Manufacture of fabricated metal products.	31282	12427	176088	52651	0.68	0.18	0.59	0.30	0.24	0.23	0.72	0.24	0.23	0.72
30. 268 Manufacture of coil & coil products.	16788	9731	157463	26981	0.82	0.11	0.62	0.17	0.36	0.11	0.39	0.36	0.11	0.39

(Contd.)



(Table 18 contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
31. 285 Printing and publishing of periodicals	12524	17053	46992	18629	0.55	0.28	0.67	0.41	0.92	0.04	0.05			
32. 235 Weaving and finishing of cotton textiles.	4475	7073	34680	10924	0.67	0.13	0.41	0.31	0.65	0.17	0.36			
33. 330 Iron and steel industries	36477	21561	223976	42579	0.79	0.16	0.86	0.19	0.51	0.09	0.34			
34. 270 Manufacture of veneer, plywood and other products	37616	11509	76813	13326	0.78	0.49	2.82	0.17	0.86	0.02	0.04			
35. 341 Manufacture of structural metal products.	30237	17703	146535	46953	0.66	0.21	0.64	0.32	0.38	0.20	0.39			
36. 201 Manufacture of dairy products	4472	17406	296425	36558	0.87	0.02	0.12	0.12	0.47	0.06	0.61			
37. 211 Manufacture of other edible oils.	33673	11047	654606	40977	0.93	0.05	0.82	0.06	0.27	0.05	0.41			
38. 319 Manufacture of chemical products.	94192	22132	728767	95886	0.85	0.13	0.98	0.13	0.23	0.10	0.25			
39. 329 Manufacture of miscellaneous non-metal mineral products	43676	18168	144102	54413	0.55	0.30	0.80	0.38	0.33	0.25	0.47			
40. 979 Repair enterprises not elsewhere classified.	2331	18642	35760	22253	0.07	0.10	0.62	0.84	0.84	0.10	0.88			

(Contd.)

(Table 18 contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
41. 374 Manufacture of motor vehicles and parts.				1038	17674	36765	21970	0.40						
42. 247 Spinning, weaving and finishing of other textiles				48896	15820	166627	47826	0.69	0.29	1.02	0.29	0.33	0.19	0.56
43. 335 Aluminium manufacturing				63495	36477	273500	26571	0.89	0.23	2.39	0.10	1.37	(-)0.04	(-)0.22
44. 362 Manufacture of dry and wet batteries.				62612	27836	335102	48114	0.84	0.19	1.30	0.14	0.58	0.06	0.29
45. 289 Printing, publishing and allied activities not elsewhere classified.				16216	11373	53084	21517	0.54	0.31	0.75	0.41	0.53	0.19	0.50



## CHAPTER - 4 RELATIVE IMPORTANCE OF DIFFERENT INDUSTRIES

4.1 The establishments covered in the annual survey of industries 1986-'87 have been classified into major industry groups at two digit level of industrial classification and have been ranked according to their contribution to the value added by manufacture and presented in table 19. Electricity undertakings occupies first rank in the contribution to the value added by manufacture and its contribution in monetary terms was Rs.244.96 crores. It works out to be 29.91% of the total value added. Manufacture of chemical and chemical products ranks second which was the first rank holder in the previous year. About 70.45% of the total value added by means manufacture was contributed by five major groups of industries viz.

- i. Electricity (29.91%)
- ii. Manufacture of chemicals and chemical products (14.21%).
- iii. Manufacture of food products (11.88%).
- iv. Manufacture of rubber, plastic, petroleum and coal products (9.30%) and
- v. Manufacture of electrical industrial machinery and apparatus and parts (5.15%).

The fixed capital of the above mentioned five groups of industries was Rs.1215.82 crores which is 72.89% of the total fixed capital. These industries together contributed 75.49% of the total output and the consumption of inputs works out to be 77.72%. The above industries provided employment for 53.13% of the total employees and 72.82% of the total loan outstanding as on 31st March 1987 was against these five groups of industries.

It is worth mentioning that the first rank holder in the contribution towards value added by manufacture i.e. electricity, produced 7.87% of the total output consuming only 0.78% of the total consumption of inputs in the factory sector of the state and disbursed 19.92% of the total disbursement towards emoluments to 10.25% of the total employees employed. About 36.08% of the total loan amount outstanding as 31st March 1987 is against electricity undertakings. The second rank holder in the list i.e. manufacture of chemicals and chemical products, produced an output of 15.31% consuming 15.58% of the total input consumed in the factory sector of the state. It provided employment for 6.56% of the total employees in the factory sector and disbursed 14.08% of the total emoluments. The loan amount outstanding against this group works out to be 8.07% of the total.

4.2 Some important aggregates for the two digit level of industrial classification have been worked out and presented in table 20 in monetary terms and their percentages to total in table 21.

4.3 The structural characteristics of each industry group are presented in table 22. The industry groups are arranged in descending order of magnitude of value added by manufacture.



Table No.19 - Ranking of major industry groups according to value added -  
Two digit level 1986-'87

Sl. Code No.	Name of Industry	Value added (Rs. in lakhs)	Rank No.
1	2	3	4
			5
1.	40 Electricity	24496.17	1
2.	31 Manufacture of chemicals and chemical products	11640.11	2
3.	20 & 21 Manufacture of food products	9734.04	3
4.	30 Manufacture of rubber, plastic, petroleum and coal products	7620.68	4
5.	36 Manufacture of electrical industrial machinery and apparatus and parts.	4217.04	5
6.	23 Manufacture of cotton textiles	4015.62	6
7.	28 Manufacture of paper and paper products and printing, publishing and allied industries.	3203.02	7
8.	32 Manufacture of non-metallic mineral products	2526.54	8
9.	26 Manufacture of textile products (including wearing apparel other than footwear)	2411.38	9
10.	22 Manufacture of beverages and tobacco products	2034.65	10
11.	35 Manufacture of machinery, machine tools and parts except electrical machinery.	1740.44	11
12.	33 Basic metal and alloys industries	1719.40	12
13.	97 Repair services	1500.70	13
14.	Manufacture of metal products & parts	1409.34	14
15.	37 Manufacture of transport equipments & parts	1409.34	15
16.	27 Manufacture of wood and wood products	1228.06	16
17.	38 Other manufacturing industries	760.76	17
18.	24 Manufacture of wool, silk and synthetic fibre textiles	286.00	18
19.	29 Manufacture of leather & fur products	74.91	19
20.	42 Water works and supply	29.47	20
21.	96 Laundry	8.35	21
<b>All industries (Total)</b>		<b>81906.59</b>	



Table No.20 - Principal characteristics for each major industry groups  
(Rs. in lakhs)

Sl. No.	Code	Description	No. of units	Rs. in lakhs						No. of persons employed
				Fixed capital	Working capital	Productive capital	Invested capital	Outstanding loan		
1	2		4	5	6	7	8	9	10	
1.	40	Generation and transmission of electric energy	16	66724.39	16155.76	82880.15	71809.91	67608.12	24638	
2.	31	Manufacture of chemicals & chemical products	138	22341.70	7696.30	30028.00	33837.32	15117.13	15755	
3.	20-21	Manufacture of food products	542	3937.52	4322.42	8259.94	9915.03	7349.28	69888	
4.	30	Manufacture of rubber, plastic, petroleum and coal products.	157	21376.77	7834.73	29211.50	35346.89	26848.65	8321	
5.	36	Manufacture of electrical machinery and apparatus	57	7202.16	2787.01	9989.17	13139.13	19522.77	9082	
6.	23	Manufacture of cotton textiles	150	4993.25	1054.89	6048.14	8168.08	7313.20	17815	
7.	28	Manufacture of paper and paper products.	142	12205.36	3700.65	15906.01	16311.13	8689.03	8932	
8.	32	Manufacture of non-metallic mineral products	350	6862.23	1370.70	8232.93	8759.28	7544.34	18262	
9.	26.	Manufacture of textile products (including wearing apparel other than footwear)	90	780.86	1873.80	2654.66	2756.67	1158.76	5553	

(Contd.)



(Table 20 contd.)

1	2	3	4	5	6	7	8	9	10
10.	22	Manufacture of beverages and tobacco products	247	954.37	629.86	1584.23	1588.02	812.73	17186
11.	35	Manufacture of machinery, machine tools & parts except electrical machinery.	85	1408.30	1927.28	3335.58	3861.63	2055.04	4216
12.	33	Basic metal and alloys industries	34	4866.63	967.08	5833.71	7765.37	4545.37	3927
13.	97	Repair services	118	418.50	316.48	734.98	580.08	75.74	7022
14.	34	Manufacture of metal products & parts except machinery & transport equipment.	136	970.15	912.66	1882.81	2267.96	1826.59	4376
15.	37.	Manufacture of transport equipment	19	7996.88	6178.14	14175.02	16022.74	11442.88	4056
16.	27	Manufacture of wood & wood products	691	1894.74	1412.63	3307.37	3877.83	2468.57	18526
17.	38	Other manufacturing industries	18	1170.15	1156.84	2326.99	2222.01	2418.86	1819
18.	24	Manufacture of wool, silk & synthetic fibres	1	292.40	55.26	347.66	564.23	181.04	598
19.	29	Manufacture of leather and fur products	3	100.31	33.46	133.77	132.93	387.05	71
20.	42	Water works & water supply	5	295.37	4.07	299.44	295.98	-	244
21.	96	Personal services	2	7.32	0.01	7.33	7.33	-	46
		<b>All industries</b>	<b>3001</b>	<b>1667999.36</b>	<b>60380.03</b>	<b>227179.39</b>	<b>239229.55</b>	<b>187366.15</b>	<b>240333</b>

(Contd.)



(Table 20 contd.)

Sl. Code No.	Description	Total	Total	Total	Depreci-	Value	Factor	Net
		emoluments 11	Input 12	Output 13	ation 14	added 15	payment 16	Income 17
1. 40	Generation and transmission of electrical energy	6478.16	2061.30	28378.28	1820.81	24496.17	4867.59	19628.58
2. 31	Manufacture of chemical & chemical products	4579.51	41322.00	55223.68	2261.57	11640.11	2255.90	9384.21
3. 20- 21	Manufacture of food products	2953.17	50724.34	60959.71	501.33	9734.04	1201.25	8532.79
4. 30	Manufacture of rubber, plastic, petroleum and coal products.	1587.64	97918.11	108814.01	3275.22	7620.68	3253.44	4367.24
5. 36	Manufacture of electrical machinery	2028.49	14129.53	18947.56	600.99	4217.04	2664.77	1552.27
6. 23	Manufacture of cotton textiles	2503.31	9311.87	13877.39	549.90	4015.62	866.24	3149.38
7. 28	Manufacture of paper and paper products	1641.70	10155.17	15049.83	1691.64	3203.02	1349.59	1853.43
8. 32.	Manufacture of non-metallic mineral products	2037.41	5370.85	8457.03	559.64	2526.54	842.91	1683.63
9. 26.	Manufacture of textile products	762.74	4977.79	7482.38	93.21	2411.38	157.90	2253.48
10. 22	Manufacture of beverages & tobacco products	1240.55	3576.60	5709.31	98.06	2034.65	135.65	1899.00

(Contd.)



(Table 21 contd.)

1	2	3	11	12	13	14	15	16	17
11. 35	Manufacture of machinery, machine tools & parts except electrical machinery.		1121.95	2530.70	4439.33	168.19	1740.44	304.91	1435.53
12. 33	Basic metal & alloys industries		1119.45	9063.03	11952.99	1170.56	1719.40	534.38	1185.02
13. 97	Repair services		1339.43	528.73	2067.77	38.34	1500.70	24.24	1476.46
14. 34	Manufacture of metal products & parts except machinery & transport equipments.		540.96	3447.66	4959.45	102.45	1409.34	265.48	1143.86
15. 37	Manufacture of transport equipments & parts		1016.13	2212.24	3803.05	340.90	1249.91	1235.59	14.32
16. 27.	Manufacture of wood and wood products		853.52	5697.50	7102.82	177.26	1228.06	326.36	901.70
17. 38.	Other manufacturing industries		363.74	1357.38	2202.40	84.26	760.76	311.21	449.55
18. 24	Manufacture of wool, silk & synthetic fibre textiles		94.61	687.98	996.43	22.45	286.00	62.32	223.68
19. 29	Manufacture of leather and fur products (except repair)		6.26	33.37	112.73	4.45	74.91	44.36	30.55
20. 42.	Water works & water supply		42.22	155.54	198.71	13.70	29.47	-	29.47
21. 96	Personal services		8.23	7.79	16.73	0.59	8.35	-	8.35
	<b>All industries</b>		<b>32519.18</b>	<b>265269.48</b>	<b>360751.59</b>	<b>13575.52</b>	<b>81906.59</b>	<b>20704.09</b>	<b>61202.50</b>



Table No. 21 - Principal characteristics for each major industry group  
(Percentage distribution)

Sl. No.	Description	No. of units	Fixed capital	Working capital	Productive capital	Invested capital	Outstanding loan	No. of persons employed
1	2	3	4	5	6	7	8	9
1. 40	Generation and transmission of electric energy	0.53	40.00	26.76	36.48	30.02	36.08	10.25
2. 31.	Manufacture of chemicals and chemical products	4.60	13.39	12.73	13.22	14.14	8.07	6.56
3. 20 21	Manufacture of food products	18.06	2.36	7.16	3.64	4.14	3.92	29.08
4. 30	Manufacture of rubber, plastic, petroleum & coal products.	5.23	12.82	12.98	12.86	14.78	14.33	3.46
5. 36	Manufacture of electrical machinery & apparatus	1.90	4.32	4.62	4.40	5.49	10.42	3.78
6. 23	Manufacture of cotton textiles	5.00	2.99	1.75	2.66	3.41	3.90	7.41
7. 28	Manufacture of paper and paper products	4.73	7.32	6.13	7.00	6.82	4.64	3.72
8. 32	Manufacture of non-metallic mineral products	11.66	4.11	2.27	3.62	3.66	4.03	7.60
9. 26	Manufacture of textile products (including wearing apparel other than foot wear)	3.00	0.47	3.10	1.17	1.15	0.62	2.31



(Table 21 contd.)

	1	2	3	4	5	6	7	8	9	10
10. 22			Manufacture of beverages, tobacco & tobacco products	8.23	0.57	1.04	0.70	0.66	0.43	7.15
11. 35			Manufacture of machinery, machine tools & parts except electrical machinery.	2.83	0.84	3.19	1.47	1.61	1.10	1.75
12. 33			Basic metal and alloys industries	1.14	2.92	1.60	2.57	3.25	2.42	1.63
13. 97			Repair services	3.93	0.25	0.52	0.32	0.24	0.04	2.92
14. 34			Manufacture of metal pro- ducts & parts except machi- nery and transport equipment.	4.53	0.58	1.51	0.83	0.95	0.97	1.82
15. 37			Manufacture of transport equipment	0.63	4.79	10.23	6.24	6.70	6.11	1.69
16. 27			Manufacture of wood and wood products	23.03	1.14	2.34	1.46	1.62	1.32	7.71
17. 38.			Other manufacturing industries	0.60	0.70	1.92	1.02	0.93	1.29	0.76
18. 24			Manufacture of wool, silk and synthetic fibres	0.03	0.18	0.09	0.15	0.24	0.10	0.25
19. 29.			Manufacture of leather and fur coats	0.10	0.06	0.05	0.06	0.06	0.21	0.03
20. 42			Water works and water supply	0.17	0.18	0.01	0.13	0.12	-	0.10
21. 96			Personal services	0.07	0.01	0.00	0.00	0.01	-	0.02
			<b>All services</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>



(Table 21 contd.)

Sl. Code No.	Description	Total emoluments	Total Input	Total Output	Depreciation	Value added	Factor payment	Net Income
1	2	3	12	13	14	15	16	17
1. 40	Generation and transmission of electric energy	19.92	0.78	7.87	13.41	29.91	23.51	32.07
2. 31	Manufacture of chemical and chemical products	14.08	15.58	15.31	16.66	14.21	10.90	15.33
3. 20-21	Manufacture of food products	9.08	19.12	16.90	3.70	11.88	5.80	13.94
4. 30	<del>Manufacture of rubber, plastic, petroleum and coal products.</del>	4.88	36.91	30.16	24.13	9.30	15.72	7.14
5. 36.	Manufacture of electrical machinery & apparatus	6.24	5.33	5.25	4.43	5.15	12.87	2.54
6. 23.	Manufacture of cotton textiles	7.70	3.51	3.85	4.05	4.90	4.18	5.15
7. 28	Manufacture of paper & paper products	5.66	3.83	4.17	12.46	3.91	6.52	3.03
8. 32	Manufacture of non-metallic mineral products	6.27	2.02	2.34	4.12	3.09	4.07	2.75
9. 26.	Manufacture of textile products (including wearing apparel other than footwear)	2.35	1.88	2.07	0.69	2.94	0.76	3.68
10. 22	Manufacture of beverages and tobacco products	3.82	1.35	1.58	0.72	2.49	0.66	3.10

(Contd.)



Table 21 contd.)

	11	12	13	14	15	16	17
11. 35 Manufacture of machinery, machine tools & parts except electrical machinery.	3.45	0.95	1.23	1.24	2.12	1.47	2.35
12. 33 Basic metal and alloys industries	3.44	3.42	3.31	6.62	2.10	2.58	1.94
13. 97 Repair services	4.12	0.20	0.57	0.28	1.83	0.12	2.41
14. 34 Manufacture of metal products and parts except machinery & transport equipment.	1.66	1.30	1.38	0.75	1.72	1.28	1.87
15. 37 Manufacture of transport equipment.	3.12	0.83	1.05	2.51	1.53	5.97	0.02
16. 27 Manufacture of wood and wood products	2.62	2.15	1.97	1.31	1.50	1.58	1.47
17. 38 Other manufacturing industries	1.12	0.51	0.61	0.62	0.93	1.50	0.73
18. 24 Manufacture of wool, silk and synthetic fibres	0.29	0.26	0.28	0.17	0.35	0.30	0.37
19. 29 Manufacture of leather and fur products	0.02	0.01	0.03	0.03	0.09	0.21	0.05
20. 42 Water works and water supply	0.13	0.06	0.06	0.10	0.04	-	0.05
21. 96 Personal services	0.03	0.00	0.01	0.00	0.01	-	0.01
<b>All industries</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>



Table No.22 - Important structural ratios of industries in respect of major groups

Sl. Code No.	Description of industry	Ratios and Values										
		4	5	6	7	8	9	10	11	12		
		Ratio of fixed capital to value added	Ratio of fixed capital to gross output	Ratio of value added to gross output	Input output ratio	Ratio of emolu-ments to value added	Fixed capital per em- ploy- ee	Emolu- ments per em- ploy- ee	Output per em- ploy- ee	Value added per em- ploy- ee		
1. 40	Generation and transmission of electric energy	2.72	2.35	0.86	0.07	0.26	270819	26293	115181	99424		
2. 31	Manufacture of chemical and chemical products	1.92	0.40	0.21	0.75	0.39	141807	29067	350515	73882		
3. 20-21	Manufacture of food products	0.40	0.06	0.16	0.83	0.30	5634	4226	87225	5526		
4. 30	Manufacture of rubber, plastic petroleum & coal products	2.81	0.20	0.07	0.90	0.21	256901	19080	1307704	91584		
5. 36	Manufacture of electrical machinery and apparatus	1.71	0.38	0.22	0.75	0.48	79301	22335	208628	46433		
6. 23	Manufacture of cotton textiles	1.24	0.36	0.29	0.67	0.62	28028	14052	77897	22541		
7. 28	Manufacture of paper and paper products	3.81	0.36	0.21	0.67	0.57	172052	25961	212149	45151		
8. 32	Manufacture of non-metallic mineral products	2.72	0.81	0.31	0.64	0.81	37577	11157	46309	13835		
9. 26	Manufacture of textile products (including wearing apparel other than footwear)	0.32	0.10	0.32	0.67	0.32	14062	13763	134745	43425		



(Table 22 contd.)

1	2	3	4	5	6	7	8	9	10	11	12
10.	22	Manufacture of beverages, tobacco and tobacco products	0.47	0.37	0.36	0.63	0.61	5553	7218	33221	11839
11.	35	Manufacture of machinery, machine tools and parts	0.81	0.31	0.39	0.57	0.64	33404	26612	105297	41282
12.	33	Basic metal and alloys industries	2.83	0.41	0.14	0.76	0.65	123927	28506	304380	43784
13.	97	Repair services	0.28	0.20	0.73	0.26	0.89	5960	19075	29447	21371
14.	34	Manufacture of metal products & parts except machinery and transport equipment.	0.69	0.20	0.28	0.70	0.38	22170	12362	113333	32206
15.	37	Manufacture of transport equipment	6.40	2.10	0.33	0.58	0.81	197162	25053	93764	30816
16.	27	Manufacture of wood and wood products	1.54	0.27	0.17	0.80	0.70	10227	4607	38340	6629
17.	38	Other manufacturing industries	1.54	0.53	0.35	0.62	0.48	64329	19997	121078	41823
18.	24	Manufacture of wool, silk and synthetic fibres	1.02	0.29	0.29	0.69	0.33	48896	15821	166627	47826
19.	29	Manufacture of leather & fur products	1.34	0.89	0.66	0.36	0.08	141282	8817	158775	105507
20.	42	Water works & water supply	1.02	1.49	0.15	0.78	1.43	121053	17303	81439	12078
21.	96	Personal services	0.88	0.44	0.50	0.47	0.99	15913	17891	36370	18152
		All industries	2.04	0.46	0.23	0.74	0.40	69938	13635	151262	34343



A P P E N D I X

S1. Code No.	Name of industry	No. of units	Fixed capital	Working capital	Productive capital	Invested capital	Outstanding loan	Man-days worked (Nos.)	All workers (Nos.)	All employees (Nos.)	Wages to workers	
1	2	3	4	5	6	7	8	9	10	11	12	13
1. 200	Slaughtering, preparation and preservation of meat	2	38.72	0.06	38.78	50.96	25.30	32544	75	110	9.01	
2. 201	Manufacture of dairy products	10	51.96	86.99	138.95	105.54	19.44	412863	804	1162	122.76	
3. 202	Canning and preservation of fruits and vegetables	17	105.35	92.92	199.27	290.90	218.66	175950	524	648	25.42	
4. 203	Canning, preserving and processing of fish	57	520.39	65.69	586.08	1133.03	927.55	591752	1367	1999	94.14	
5. 204	Grain mill products	45	171.59	53.17	224.76	268.19	335.69	136101	432	573	23.09	
6. 205	Manufacture of bakery products	7	137.85	73.83	211.68	194.89	75.07	131965	303	436	32.00	
7. 206	Manufacture and refining of sugar	1	57.59	293.52	351.11	260.50	17.20	152254	355	502	52.30	
8. 210	Manufacture of hydrogenated oils, vanaspathi, ghee, etc	1	31.82	7.02	38.84	46.33	125.35	7315	18	25	2.70	
9. 211	Manufacture of other edible oils and fats	32	324.60	377.26	701.86	734.68	554.92	264876	690	964	67.04	
10. 212	Tea processing	82	1574.65	777.96	2352.61	2393.47	226.53	1353713	4179	4840	243.97	

(Contd.)



S1. Code No.	Name of industry	3	4	5	6	7	8	9	10	11	12	13
		Total emoluments	Fuels consumed	Materials consumed	Other input	Total input	Product	Other output	Total output	Depreciation	Value added	
1. 200	Slaughtering preparation and preservation of meat	16.02	4.43	59.96	6.21	70.60	71.82	0.67	72.49	2.64	(-)0.75	
2. 201	Manufacture of dairy products	201.09	71.00	2838.17	104.37	3013.54	3431.10	13.36	3444.46	6.11	424.81	
3. 202	Canning and preservation of fruits & vegetables	40.59	12.13	270.18	32.02	314.33	392.62	8.68	401.30	14.03	72.94	
4. 203	Canning, preserving and processing of fish	179.45	143.56	8466.64	341.45	8951.65	9171.97	511.00	9682.97	79.42	651.90	
5. 204	Grain mill products	37.47	24.25	1452.88	54.32	1531.45	1619.78	4.28	1624.06	20.14	72.47	
6. 205	Manufacture of bakery products	61.83	28.68	443.71	48.89	521.28	607.58	19.24	626.82	12.69	92.85	
7. 206	Manufacture and refining of sugar	101.76	17.96	174.96	60.34	253.26	296.39	7.12	303.51	7.15	43.10	
8. 210	Manufacture of hydrogenated oils, vanaspathi, ghee etc	4.63	6.24	41.18	7.41	54.83	45.19	3.66	48.85	4.95	(-)10.93	
9. 211	Manufacture of other edible oils and fats	106.50	57.46	5622.76	204.62	5884.84	6242.59	67.81	6310.40	30.53	395.03	
10. 212	Tea processing	403.07	692.10	8878.62	357.32	9928.04	13306.14	110.03	13416.17	195.02	3293.11	

(Contd.)



	1	2	3	4	5	6	7	8	9	10	11	12	13
11. 213				6	33.48	68.62	102.10	75.06	36.03	150469	579	747	27.95
12. 214				245	287.42	2095.88	2388.30	3389.99	3546.86	8814287	52079	56448	1046.48
13. 215				8	67.27	65.07	132.34	73.85	202.95	41838	40	116	2.47
14. 216				5	321.12	158.37	479.55	435.46	248.16	20633568	323	453	44.89
15. 217				6	141.05	14.23	155.28	287.23	754.14	186818	358	527	49.90
16. 219				18	76.60	91.83	164.43	174.95	35.43	97324	230	338	18.98
17. 220				10	385.17	406.38	791.55	763.00	432.92	210174	614	949	82.23
18. 222				2	192.38	109.93	302.31	307.63	169.33	74450	184	228	32.42
19. 223				2	86.82	12.31	99.13	118.00	4.06	28833	75	93	10.50
20. 224				11	26.45	14.09	277.64	284.36	199.85	59042	170	222	8.83
21. 226				222	26.45	87.15	113.60	115.03	6.56	4581668	15343	15694	812.17
22. 231				25	4529.56	710.58	5240.14	7110.49	6507.56	3896258	10640	11851	1618.54

(Contd.)



(Appendix A.)

	1	2	3	14	15	16	17	18	19	20	21	22	23
11. 213. Coffee curing, roasting and grinding				46.98	4.63	148.99	35.19	188.81	191.08	100.51	291.59	3.40	99.38
12. 214. Cashewnut processing like drying, shelling, roasting, salting				1537.09	41.97	13207.31	589.12	13838.40	17836.84	274.60	18111.44	34.95	4238.09
13. 215. Manufacture of ice				12.53	19.65	39.69	31.00	90.34	75.68	13.76	89.44	10.44	(-)11.34
14. 216. Manufacture of prepared animal feeds				79.43	38.41	1348.48	76.06	1462.95	1613.85	12.13	1625.98	40.46	122.57
15. 217. Manufacture of starch				88.01	107.10	805.92	140.18	1017.20	1202.85	18.45	1221.30	27.12	176.98
16. 219. Manufacture of food products not elsewhere classified				36.72	48.02	3521.53	33.27	3602.82	3563.21	125.72	3688.93	12.28	73.83
17. 220. Distilling, rectifying and blending of spirits				177.35	85.17	1181.34	214.32	1480.83	2356.77	15.66	2372.43	42.52	849.09
18. 222. Malt liquors and malt				49.84	28.94	283.56	62.72	375.22	356.05	97.77	453.82	11.57	67.03
19. 223. Production of country liquor and toddy				17.90	24.63	302.30	29.77	356.70	544.62	5.92	550.54	16.49	177.35
20. 224. Soft drinks and carbonated water industries				16.57	9.30	120.84	42.00	172.14	121.90	39.20	161.10	25.88	(-)36.92
21. 226. Manufacture of beet				978.89	4.16	603.46	584.09	1191.71	1241.68	929.74	2171.42	1.60	978.11
32. 231. Cotton spinning, weaving, shrinking, sanforizing, mercerizing and finishing of cotton textiles in mills.				2081.21	781.93	5322.70	613.92	6718.55	10521.89	78.48	10600.37	497.59	3384.23

(Contd.)



1	2	3	4	5	6	7	8	9	10	11	12	13
23.	232	Printing, dyeing and bleaching of cotton textiles	6	66.13	31.04	97.17	108.18	100.25	40147	118	158	9.55
24.	234	Production of khadi	1	3.09	3.10	6.19	4.13	6.13	6586	19	21	0.47
25.	235	Weaving and finishing of cotton textiles in handlooms, other than khadi.	99	239.08	334.84	573.92	737.92	530.71	1465114	4654	5342	264.54
26.	236	Weaving and finishing of cotton textiles in powerlooms	19	155.39	(-)-24.67	130.72	207.36	168.55	117606	323	443	16.37
27.	247	Spinning, weaving and finishing of synthetic fibres, rayons etc.	1	292.40	55.26	347.66	564.23	181.04	207905	501	598	72.35
28.	260	Knitting mills	4	33.75	32.02	65.77	73.67	69.43	139740	376	463	20.67
29.	261	Manufacture of all types of threads, cordage, ropes etc.	3	354.75	1247.38	1602.13	1622.89	113.68	725279	2034	2392	354.04
30.	264	Manufacture of all types of textiles, garments, including wearing apparel.	4	25.88	(-)-15.74	10.14	59.77	45.18	145249	428	485	17.85
31.	265	Manufacture of raincoats, hats etc.	4	0.66	1.05	1.71	1.53	4.61	7314	28	34	1.98
32.	268	Manufacture of coir and coir products	75	365.82	609.09	974.91	998.91	925.86	662118	1672	2179	121.04
33.	270	Manufacture of veneer, plywood and their products.	91	1314.31	491.38	1805.69	2359.87	1935.36	915274	2756	3494	249.45

(Contd.)



1	2	3	14	15	16	17	18	19	20	21	22	23
23.	232	Printing, dyeing and bleaching of cotton textiles.	15.84	22.78	234.90	13.92	277.60	229.93	83.29	313.22	11.59	24.03
24.	234	Production of khadi	0.59	0.05	0.76	0.10	0.91	1.87	0.03	1.90	0.20	0.79
25.	235	Weaving and finishing of cotton textiles in handlooms, other than khadi.	377.81	33.52	1012.03	201.42	1246.97	1753.40	99.22	1852.62	22.10	583.55
26.	236	Weaving and finishing of cotton textiles in powerlooms.	27.86	18.84	1007.49	41.51	1067.84	1079.11	30.17	1109.28	18.42	23.02
27.	247	Spinning, weaving and finishing of synthetic fibres, rayons etc.	94.61	45.39	602.33	40.26	687.98	928.39	68.04	996.43	22.45	286.00
28.	260	Knitting mills.	34.51	6.53	147.81	17.82	178.16	248.08	1.30	249.38	5.33	71.89
29.	261	Manufacture of all types of threads, cordage, ropes etc.	483.92	153.85	1605.08	86.52	1845.45	3579.34	13.21	3592.55	48.27	1698.83
30.	264	Manufacture of all types of textiles, garments, including wearing apparel.	29.66	1.10	131.78	7.66	140.54	172.22	20.53	192.75	3.36	48.85
31.	265	Manufacturing of raincoats, hats etc.	2.62	0.48	11.22	0.87	12.57	16.56	0.02	16.58	0.11	3.90
32.	268	Manufacture of coir and coir products.	212.03	30.32	2596.51	180.24	2807.07	3266.18	164.94	3431.12	36.14	587.91
33.	270	Manufacture of veneer, plywood and their products.	402.12	124.53	1747.70	226.61	2098.84	2609.65	74.19	2683.84	119.37	465.63



## (Appendix contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13
34. 271			Sawing & planing of wood other than plywood	552	432.42	671.58	1104.00	1109.76	387.81	1946928	8308	13870	243.87
35. 272			Manufacture of wooden and cane boxes, crates, drums, barrels and other wooden containers, baskets & other rattan bamboo, reed and willow wares etc.	6	4.22	5.96	10.18	10.48	10.28	22636	72	118	3.28
36. 273			Manufacture of structural wooden goods (including treated timber) such as beams, posts, doors and windows (excluding hewing and rough shaping poles, bolts and other wood material which is classified under logging).	5	17.72	46.05	63.77	67.12	32.92	38623	105	203	9.74
37. 274			Manufacture of wooden industrial goods, such as bobbins, blocks handles saddling and similar equipment and fixtures.	6	3.10	1.80	4.90	9.49	5.80	12184	40	54	2.17
38. 275			Manufacture of cork and cork products	1	2.02	(-)5.51	(-)3.49	2.93	2.72	5310	12	22	0.68

(Contd.)



(Appendix contd.)

1	2	3	14	15	16	17	18	19	20	21	22	23
34.	271	Sawing & planing of wood other than plywood.	339.03	86.00	2903.63	218.22	3207.85	3713.15	182.84	3895.99	41.35	646.79
35.	272	Manufacture of wooden and cane, boxes, crates, drums, barrels and other wooden containers, baskets & other rattan, bamboo, reed and willow wares etc.	4.93	0.56	42.80	1.42	44.78	44.20	1.99	46.19	0.28	1.13
36.	273	Manufacture of structural wooden goods (including treated timber) such as beams, posts, doors and windows (excluding hewing and rough shaping poles, bolts and other wood material which is classified under logging).	14.81	1.52	54.70	12.46	68.68	80.12	13.57	93.69	1.41	23.60
37.	274	Manufacturing of wooden industrial goods, such as bobbins, blocks, handles, saddling and similar equipment and fixtures.	2.61	0.40	5.42	0.58	6.40	11.14	0.31	11.45	0.21	4.84
38.	275	Manufacture of cork and cork products.	1.01	0.13	2.66	0.59	3.38	3.03	0.59	3.62	0.26	(-)0.02

(Contd.)



(Appendix contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13
39.	276	Manufacture of wooden furniture and fixtures.	27	61.64	184.79	246.43	249.21	79.59	196225	551	727	55.87
40	279	Manufacture of wood and wood, bamboo and cane products not elsewhere classified.	3	59.31	16.58	75.89	68.97	13.99	11135	19	38	0.99
41.	280	Manufacture of pulp, paper and paper board (including newsprint)	12	10677.14	1864.88	12542.02	13764.64	6827.27	652130	1517	2020	307.15
42.	281	Manufacture of containers and boxes of paper and paper boards	14	101.71	(-)14.71	88.00	158.71	101.36	66140	156	176	7.49
43.	284	Printing and publishing of newspapers.	19	844.55	1193.92	2038.47	1424.01	1241.16	834244	1225	2438	248.62
44.	285	Printing and publishing of periodicals, books, journals, atlases, maps, etc.	56	393.38	594.55	987.93	683.43	335.77	908019	2548	3141	342.92
45.	287	Engraving, etching, block making etc.	2	10.50	(-)1.67	8.83	11.24	5.48	5122	12	22	1.02
46.	288	Book binding	2	0.49	21.08	21.57	20.49	14.00	12380	42	45	2.42

(Contd.)



(Appendix contd.)

1	2	3	14	15	16	17	18	19	20	21	22	23
39.	276	Manufacture of wooden furnitures and fixtures.	85.15	5.07	219.22	35.83	260.12	349.73	11.88	361.61	6.47	95.02
40.	279	Manufacture of wood and wood bamboo and cane products not elsewhere classified.	3.86	0.95	5.23	1.27	7.45	6.39	0.04	6.43	7.91	(-)8.93
41.	280	Manufacture of pulp, paper and paper board (including newsprint)	526.83	1852.93	2266.22	441.47	4560.62	7068.38	51.30	7119.68	1356.65	1202.41
42.	281	Manufacture of containers and boxes of paper & paper boards.	20.64	4.71	261.30	30.65	296.66	342.19	28.72	370.91	14.52	59.73
43.	284	Printing and publishing of newspapers.	630.22	35.82	3606.64	549.74	4192.20	5318.72	209.91	5528.63	241.87	1094.56
44.	285	Printing and publishing of periodicals and books, journals, atlases, maps etc.	535.62	20.53	661.75	97.73	780.01	2734.36	678.84	1413.20	48.07	585.12
45.	287	Engraving, etching, block making etc.	1.83	0.09	6.91	0.80	7.80	15.50	1.12	16.62	1.47	7.35
46.	288	Book binding.	2.70	0.05	2.08	0.99	3.12	22.70	-	22.70	0.05	19.53

(Contd.)



## (Appendix cont'd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13
47. 289 Printing, publishing and allied activities not elsewhere classified like envelopes printing, 37 post card printing, embossing etc.					176.59	42.60	219.19	248.61	163.99	494338	902	1089	80.45
48. 290 Tanning, curing, finishing, embossing and jappanning of leather 1				1	97.83	25.01	122.84	122.98	378.60	2114	11	41	2.60
49. 291 Manufacture of foot wear (including repair) except vulcanized or moulded rubber or plastic footwear. 2				2	2.48	9.45	10.93	9.95	8.45	9038	24	30	1.05
50. 300 Tyre and tube industries. 18				18	1825.54	43.91	1869.45	3387.49	2666.43	842541	1711	2566	308.60
51. 301 Manufacture of footwear made primarily of vulcanized or moulded rubber and plastics. 8				8	67.74	97.70	165.44	193.75	108.62	94806	196	326	21.56
52. 302 Manufacture of rubber products not elsewhere classified. 111				111	1750.03	1221.70	2971.73	2990.05	1979.01	1321204	3609	4446	413.47
53. 303 Manufacture of plastic products not elsewhere classified (except house furnishings). 19				19	481.65	181.75	663.40	602.84	521.00	104021	229	331	15.12
54. 304 Petroleum refineries 1				1	17251.81	6289.67	23541.48	28172.76	21573.39	237757	319	652	98.02

(Contd.)



(Appendix contd.)

1	2	3	14	15	16	17	18	19	20	21	22	23
47.	289	Printing, publishing and allied activities not elsewhere classified like envelopes printing, post card printing, embossing etc.	123.86	11.79	250.83	52.14	314.76	312.48	265.61	578.09	29.01	234.32
48.	290	Tanning, curing, finishing, embossing and japanning of leather.	4.32	1.77	0.14	3.39	5.30	(-)8.41	0.58	(-)7.83	4.11	(-)17.24
49.	291	Manufacture of footwear (excluding repair) except vulcanized or moulded rubber or plastic footwear.	1.94	0.35	21.34	6.38	28.07	120.56	-	120.56	0.34	92.15
50.	300	Tyre and tube industries	585.00	549.24	5374.49	340.82	6264.55	8286.87	329.26	8616.13	263.40	2088.18
51.	301	Manufacture of footwear made primarily of vulcanized or moulded rubber and plastics.	40.36	19.51	810.93	148.17	978.61	1119.63	28.07	1147.70	19.71	149.38
52.	302	Manufacture of rubber products not elsewhere classified.	643.42	364.17	9367.99	362.81	10094.97	11960.27	415.04	12375.31	229.67	2050.67
53.	303	Manufacture of plastic products not elsewhere classified (except house furnishings).	31.94	13.41	495.05	74.24	582.70	649.32	1.02	650.34	1.63	66.01
54.	304	Petroleum refineries	286.92	601.67	77462.12	1933.49	79997.28	85766.84	257.69	2760.81	3266.44	
										86024.53		



(Appendix contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13
55.	310	Manufacture of basic industrial organic & inorganic chemicals and gases.	34	11557.22	2288.05	13845.27	14491.19	6644.88	1635302	3137	4472	761.19
56.	311	Manufacture of fertilizers and pesticides.	1957.80	3473.74	18429.54	2376.98	24280.26	31779.71	366.7532146.46	1037.07	6829.13	
57.	312	Manufacture of paints, varnishes and lacquers.	5.11	7.44	9.36	5.12	21.91	19.34	0.17	19.51	11.25(-)	13.65
58.	313	Manufacture of drugs and medicines.	413.31	139.73	1745.19	175.29	2060.21	3132.94	17.07	3150.01	121.18	968.62
59.	314	Manufacture of perfumes, cosmetics, lotions, hair dressings etc.	561.59	360.73	5222.09	195.30	5778.12	7109.56	86.83	7196.39	64.02	1354.25
60.	315	Manufacture of inedible oils	9.02	12.44	8.36	4.72	25.52	27.51	3.79	31.30	4.63	1.15
61.	316	Manufacture of turpentine, synthetic resins, plastic materials and synthetic fibres like nylon, terylene except glass etc.	102.93	52.77	170.93	62.94	286.64	272.09	3.10	275.19	23.36(-)	34.81

(Contd.)



(Appendix contd.)

1	2	3	14	15	6	17	18	19	20	21	22	23
55.	310	Manufacture of basic industrial organic & inorganic chemicals & gases.	1438.35	1817.60	3691.03	899.48	6408.11	9384.18	115.06	9499.24	940.07	2151.06
56.	311	Manufacture of fertilizers and pesticides.	1957.80	3473.74	18429.54	2376.98	24280.26	31779.71	366.75	32146.46	1037.07	6829.13
57.	312	Manufacture of paints, varnishes and lacquers	5.11	7.44	9.35	5.12	21.91	19.34	0.17	19.51	11.25	(-)13.65
58.	313	Manufacture of drugs and medicines	413.31	139.73	1745.19	175.29	2060.21	3132.94	17.07	3150.01	121.18	968.62
59.	314	Manufacture of perfumes, cosmetics, lotions, hair dressings etc.	561.59	360.73	5222.09	195.30	5778.12	7109.56	86.83	7196.39	64.02	1354.25
60.	315	Manufacture of inedible oils	9.02	12.44	8.36	4.72	25.52	27.51	3.79	31.30	4.63	1.15
61.	316	Manufacture of turpentine, synthetic resins, plastic materials & synthetic fibres like nylon, terylene except glass etc.	102.93	52.77	170.93	62.94	286.64	272.09	3.10	275.19	23.36	(-)34.81

(Contd.)



## (Appendix contd.)

	3	4	5	6	7	8	9	10	11	12	13
62. 317	Manufacture of matches	10	1.52	1.68	3.20	3.71	8.13	114656	122	146	2.89
63. 319	Manufacture of chemical products not elsewhere classified (including photo-chemicals, sensitised films and paper)	6	372.06	809.28	1181.34	1381.30	473.43	127985	249	395	36.03
64. 320	Manufacture of structural clay products	326	1136.82	631.42	1768.24	1917.38	1065.44	3570019	11622	14893	978.43
65. 321	Manufacture of glass and glass products	3	157.70	187.82	345.52	226.80	176.12	127707	279	353	43.63
66. 322	Manufacture of earthenware and earthen pottery	1	0.40	1.86	2.26	0.80	0.09	3040	7	11	0.78
67. 323	Manufacture of chinaware and porcelain ware.	9	259.64	(- )3.37	256.27	353.04	956.56	199023	736	1097	63.50
68. 324	Manufacture of cement, lime and plaster	4	4500.77	269.23	4770.00	5079.20	4636.36	404630	825	1171	180.10
69. 328	Manufacture of asbestos, cement and other cement products.	1	504.22	54.05	558.27	595.54	404.84	13471	27	44	2.11
70. 329	Manufacture of miscellaneous non-metal mineral products	6	302.68	229.69	532.37	586.52	244.93	197373	507	693.	83.96

(Contd.)



(Appendix contd.)

1	2	3	14	15	16	17	18	19	20	21	22	23
62.	317	Manufacture of matches	3.98	0.66	17.74	2.89	21.29	26.76	0.19	26.95	0.05	5.61
63.	319	Manufacture of chemical products not elsewhere classified (including dyeing photographic sensitised films and paper)	87.42	138.32	2124.27	177.35	2439.94	2702.74	175.89	2878.63	59.94	378.75
64.	320	Manufacture of structural clay products.	1445.47	962.87	502.88	247.93	1713.68	3627.13	43.92	3671.05	110.33	1847.04
65.	321	Manufacture of glass and glass products	65.69	144.81	151.79	20.66	317.26	469.73	6.65	476.38	21.26	137.86
66.	322	Manufacture of earthenware and earthen pottery	1.00	0.90	0.13	0.10	1.13	2.33	0.04	2.37	0.03	1.21
67.	323	Manufacture of chinaware and porcelain ware	95.88	72.63	31.07	25.37	129.07	189.84	9.81	199.65	10.38	60.20
68.	324	Manufacture of cement, lime and plaster.	297.37	1040.18	1300.41	235.97	2576.56	2937.23	72.31	3009.54	335.97	97.01
69.	328	Manufacture of asbestos cement and other cement products.	6.09	4.44	71.73	7.60	83.77	98.13	1.29	99.42	9.51	6.14
70.	329	Manufacture of miscellaneous non-metal mineral products.	125.91	107.43	368.86	73.09	549.38	990.52	8.10	998.62	72.16	377.08

(Contd.)



(Appendix contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13
71. 330			Iron and steel industries	12	488.43	328.33	816.76	1321.96	607.10	326422	963	1339	160.42
72. 331			Foundries for casting & forging iron and steel	16	2619.56	182.33	2801.89	3190.67	2858.19	341344	769	1095	116.11
73. 333			Copper manufacturing	2	8.03	8.54	16.57	30.67	26.27	13908	38	46	2.50
74. 355			Aluminium manufacturing	3	656.52	(-)192.27	464.25	1065.85	10.79	374875	806	1034	228.94
75. 336			Zinc manufacturing	1	1094.09	640.15	1734.24	2156.22	1044.02	226364	256	413	112.84
76. 340			Manufacture of fabricated metal products	46	381.02	297.19	678.21	971.42	561.07	316035	885	1218	89.74
77. 341			Manufacture of structural metal products	30	297.24	436.90	734.14	629.99	623.99	291281	635	983	85.27
78. 342			Manufacture of furniture and fixtures primarily of metal	4	47.20	30.06	77.26	63.01	50.47	54817	157	193	11.43
79. 343			Manufacture of handtools and general hardware	34	186.59	67.00	253.59	412.56	520.99	373508	1027	1314	96.13
80. 345			Manufacture of metal utensils, cutlery and kitchenware	22	58.10	81.51	139.61	190.98	70.07	195674	565	668	42.18
81. 350			Manufacture of agricultural machinery and equipments and parts.	7	88.76	207.79	296.55	349.47	262.05	125332	282	420	39.22

(contd.)



(Appendix contd.)

1	2	3	14	15	16	17	18	19	20	21	22	23
71.	330	Iron and steel industries	288.70	285.19	1694.65	400.81	2380.65	2673.10	325.94	2999.04	48.26	570.13
72.	331	Foundries for casting and forging iron and steel.	207.00	116.41	1493.14	82.21	1691.76	1625.34	27.46	1652.80	66.11	(-105.07)
73.	333	Copper and its alloys	3.75	6.67	123.48	4.27	134.42	134.61	4.99	139.60	1.47	3.71
74.	335	Aluminium manufacturing	377.17	923.14	1345.32	236.80	2505.26	2827.60	0.38	2827.98	47.98	274.74
75.	336	Zinc manufacturing	232.82	500.50	1461.76	388.68	2350.94	4270.48	63.09	4333.57	1006.74	975.89
76.	340	Manufacture of fabricated metal products	151.37	28.05	1314.11	125.40	1467.56	2066.49	78.27	2144.76	35.91	641.29
77.	341	Manufacture of structural metal products	174.02	23.67	671.31	256.58	951.56	581.89	858.54	1440.43	27.33	461.54
78.	342	Manufacture of furniture and fixtures primarily of metal	17.19	2.66	30.15	2.88	35.69	58.08	0.90	58.98	2.61	20.68
79.	343	Manufacture of hand tools and ageneral hardware	141.88	85.99	487.56	76.37	649.92	775.21	96.77	871.98	27.26	194.80
80.	345	Manufacture of metal utensils, cutlery and kitchenware	58.50	29.76	280.20	32.97	342.93	433.89	9.41	443.30	9.34	91.03
81.	350	Manufacture of agricultural machinery and equipment and parts	72.47	8.30	366.30	23.60	398.20	556.72	6.18	562.90	10.41	154.29

(Contd.)



(Appendix contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13
82. 353				8	10.53	7.63	18.16	24.43	45.20	11220	30	43	1.88
Industrial machinery for food and textile industries													
83. 354				13	26.78	10.20	36.98	44.51	26.05	58179	175	219	15.88
Industrial machinery for other than food and textile industries													
84. 356				2	6.01	1.31	7.32	8.56	10.27	5242	14	20	1.22
Manufacture, alteration and repair of general items of non-electrical machinery, components, equipment & accessories not elsewhere classified.													
85. 357				32	1229.99	1677.89	2907.88	3308.14	1633.22	965557	1877	3130	409.16
Manufacture of machine tools, their parts & accessories													
86. 358				5	14.80	(-)13.00	1.80	26.02	5.95	34976	62	98	5.80
Manufacture of office computing & accounting machinery and their parts.													
87. 359				18	31.43	35.46	66.89	100.50	72.30	77753	222	286	19.04
Manufacture and repair of non-electrical machinery, equipment, components, and accessories not elsewhere classified.													
88. 360				14	1130.51	(-)10.47	1120.04	2389.36	4159.06	9727569	2240	3172	346.77
Manufacture of electrical machinery & apparatus, & parts.													
89. 361				4	845.76	138.77	984.53	1534.46	3365.49	285260	615	945	139.22
Manufacture of insulated wires and cables													
90. 362				2	354.39	46.10	400.49	662.03	546.34	208393	365	566	75.14
Manufacture of dry and wet batteries													

(Contd.)



	1	2	3	14	15	16	17	18	19	20	21	22	23
82. 353 Industrial machinery for food & textile industries			4.76	0.96	32.59	1.93	35.48	37.10	2.38	39.48	1.11	2.89	
83. 354 Industrial machinery for other than food & textile industries			23.61	4.95	72.79	6.92	84.66	111.77	9.78	121.55	2.90	33.99	
84. 356 Manufacture, maintenance and repair of general items of non-electrical machinery components, equipments and accessories not elsewhere classified.			1.77	0.26	5.75	1.48	7.49	10.81	0.75	11.56	0.51	3.56	
85. 357 Manufacture of machine tools, their parts & accessories.			982.04	108.74	1375.18	321.30	1805.22	3217.33	225.60	3442.93	146.89	1490.82	
86. 358 Manufacture of office computing and accounting machinery and their parts.			10.67	1.18	38.82	9.61	49.61	59.32	6.93	66.25	2.63	14.01	
87. 359 Manufacture and repair of non-electrical machinery, equipment, components and accessories not classified.			26.63	5.19	90.61	54.24	150.04	148.63	46.03	194.66	3.74	40.88	
88. 360 Manufacture of electrical machinery & apparatus & parts			621.98	64.70	2248.98	234.20	2547.88	3345.76	35.74	3381.50	151.31	682.31	
89. 361 Manufacture of insulated wires and cables.			255.78	41.31	2663.35	177.68	2882.34	3077.99	62.89	3140.88	63.34	195.20	
90. 362 Manufacture of dry and wet batteries			157.55	32.81	1492.92	74.03	1599.76	1885.53	11.14	1896.67	24.59	272.32	



(Appendix contd.)

	1	2	3	4	5	6	7	8	9	10	11	12	13
91. 363	Manufacture of electrical apparatus, appliances and other parts.	5	1084.82	(-)153.95	930.87	1371.58	1189.99	208335	442	600	121.30		
92. 364	Manufacture of radio & television, transmitting & receiving sets including transistor radio sets etc.	10	1149.62	2155.11	3305.73	3088.67	6173.92	492395	1066	1644	201.22		
93. 366	Manufacture of electronic computers, control instruments & other equipments.	5	579.13	112.38	691.51	1031.59	665.80	143765	235	471	31.25		
94. 367	Manufacture of electronic components & accessories not elsewhere classified.	15	1945.97	515.17	2461.14	2927.67	3557.09	472577	929	1578	142.05		
95. 369	Manufacture of electrical machinery, apparatus, appliances & supplies and parts not elsewhere classified.	2	111.96	(-)17.10	94.86	133.83	165.08	32914	62	106	3.76		
96. 370	Ship building & repairing	11	7967.09	5814.91	13782.00	15882.31	11387.70	731120	1468	2487	332.79		
97. 374	Manufacture of motor vehicles and parts	1	14.50	352.85	367.35	39.00	-	424541	1226	1397	196.19		
98. 376	Manufacture of bicycles, cycle-rickshaws & parts	7	15.29	10.38	25.67	51.43	55.18	45748	142	172	10.91		

(Contd.)



## (Appendix contd.)

1	2	3	14	15	16	17	18	19	20	21	22	23
91.	363	Manufacture of electrical apparatus, appliances and other parts.	175.89	109.41	245.64	47.40	402.45	555.55	0.74	556.29	29.46	124.38
92.	364	Manufacture of radio & television sets including transmitter, transmitting & receiver radio sets etc.	398.46	32.33	3000.33	475.80	3508.46	4011.08	1071.12	5082.20	116.61	1457.13
93.	366	Manufacture of electronic computers, control instruments & other equipments.	89.34	4.84	1694.48	221.90	1921.22	2625.59	50.05	2675.64	41.88	712.54
94.	367	Manufacture of electronic components & accessories not elsewhere classified.	319.91	52.55	1020.27	157.61	1230.43	2129.15	40.15	2169.30	167.90	770.97
95.	369	Manufacture of electrical machinery, apparatus appliances & supplies and parts not elsewhere classified.	9.58	0.34	28.25	8.40	36.99	37.13	7.95	45.08	5.90	2.19
96.	370	Ship building & repairing	751.98	75.20	906.63	874.79	1856.62	1810.23	1308.10	3118.33	337.11	924.60
97.	374	Manufacture of motor vehicles, and parts	246.90	25.47	178.09	1.72	205.28	56.34	457.26	513.60	1.40	306.92
98.	376	Manufacture of bicycles, cycle-rickshaws & parts.	17.25	1.87	134.93	13.54	150.34	170.85	0.27	171.12	2.39	18.39

(Contd.)



(Appendix contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13
99.	390	Manufacture of medical, surgical & scientific equipments.	12	1001.31	1154.51	2155.82	2048.37	2413.79	497733	1160	1702	195.04
100	383	Manufacture of jewellery & related articles.	1	167.18	-	167.18	-	-	-	-	-	-
101	387	Manufacture of stationery articles like fountain pens pencils, pens, pin cushions tags etc. not elsewhere classified.	2	0.46	0.04	0.50	3.36	2.23	4481	11	16	0.54
102	389	Manufacture of miscellaneous products not elsewhere classified such as costume jewellery, costume neckties feathers, plumes, artificial flowers, brooms, brushes, lamp shades, tobacco pipes, cigaratte holders, ivory goods, badges, wigs and similar articles.	3	1.20	2.29	3.49	3.10	2.84	29340	87	101	4.21
103	400	Generation & transmission of electric energy & distribution of electric energy to household, industrial & commercial & other users.	16	66724.39	16155.76	82880.15	71809.91	67608.12	8991191	15820	24638	3954.83

(Contd.)



## (Appendix contd.)

	14.	15	16	17	18	19	20	21	22	23
99. 380 Manufacture of medical, surgical and scientific equipments.	356.67	35.77	1114.96	186.92	1337.65	2058.85	114.14	2172.99	84.09	751.25
100 383 Manufacture of jewelry and related articles	-	-	-	0.02	0.02	-	-	-	-	(-)0.02
101 387 Manufacture of stationery articles like fountain pens, pencils, pens, pin cushions, tags etc. not elsewhere classified.	1.10	0.36	5.48	0.80	6.64	8.34	0.01	8.35	0.08	1.63
102 389 Manufacture of miscellaneous products not elsewhere classified such as costume jewelry, costume novelties feathers, plumes, artificial flowers, brooms, brushes lamp shades, tobacco pipe, cigarette holders, ivory goods, badges, wigs and similar articles.	5.97	0.18	11.33	1.56	13.07	20.85	0.21	21.06	0.09	7.90
103 400 Generation and transmission of electric energy and distribution of electric energy to household, industrial and commercial & other users.	6478.16	27.76	246.05	1787.49	2061.30	27891.95	486.33	28378.28	1820.81	24496.17

(Contd.)



(Appendix contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13
104	420	Water supply ie. collection, purification and distribution of water.	5	295.37	4.07	299.44	295.98	-	88216	208	244	32.37
105	961	Laundries, laundry services and cleaning and dyeing plants.	2	7.32	0.01	7.33	7.33	-	13978	40	46	6.60
106	973	Repair of motor vehicles and motor cycles	108	384.00	290.48	674.48	522.96	75.74	1840413	4499	5542	798.02
107	979	Repair enterprises not elsewhere classified.	10	34.50	26.00	60.50	57.12	-	432626	1214	1480	208.87
		<b>All industries</b>	<b>3001</b>	<b>166799.36</b>	<b>60380.03</b>	<b>227179.39</b>	<b>239229.55</b>	<b>187366.15</b>	<b>83950909</b>	<b>189514</b>	<b>240333</b>	<b>19881.32</b>

(Contd.)



(Appendix contd.)

	1	2	3	14	15	16	17	18	19	20	21	22	23
104 420	Water supply ie. collection, purification and distribution of water.	42.22	48.29	104.40	2.85	155.54	60.43	138.28	198.71	13.70	29.47		
105 961	Laundries, laundry services and cleaning and dyeing plants.	8.23	5.45	1.00	1.34	7.79	-	16.73	16.73	0.59	8.35		
106 973	Repair of motor vehicles and motor cycles	1063.52	47.31	176.35	108.69	332.35	5.88	1532.64	1538.52	34.81	1171.36		
107 979	Repair enterprises not elsewhere classified.	275.91	15.48	41.99	138.91	196.38	2.74	526.51	529.25	3.53	329.34		88
<b>All Industries</b>		<b>32519.18</b>	<b>17355.52</b>	<b>228098.76</b>	<b>19815.20</b>	<b>265269.48</b>	<b>346725.85</b>	<b>14025.74</b>	<b>360751.59</b>	<b>13575.52</b>	<b>81906.59</b>		

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