

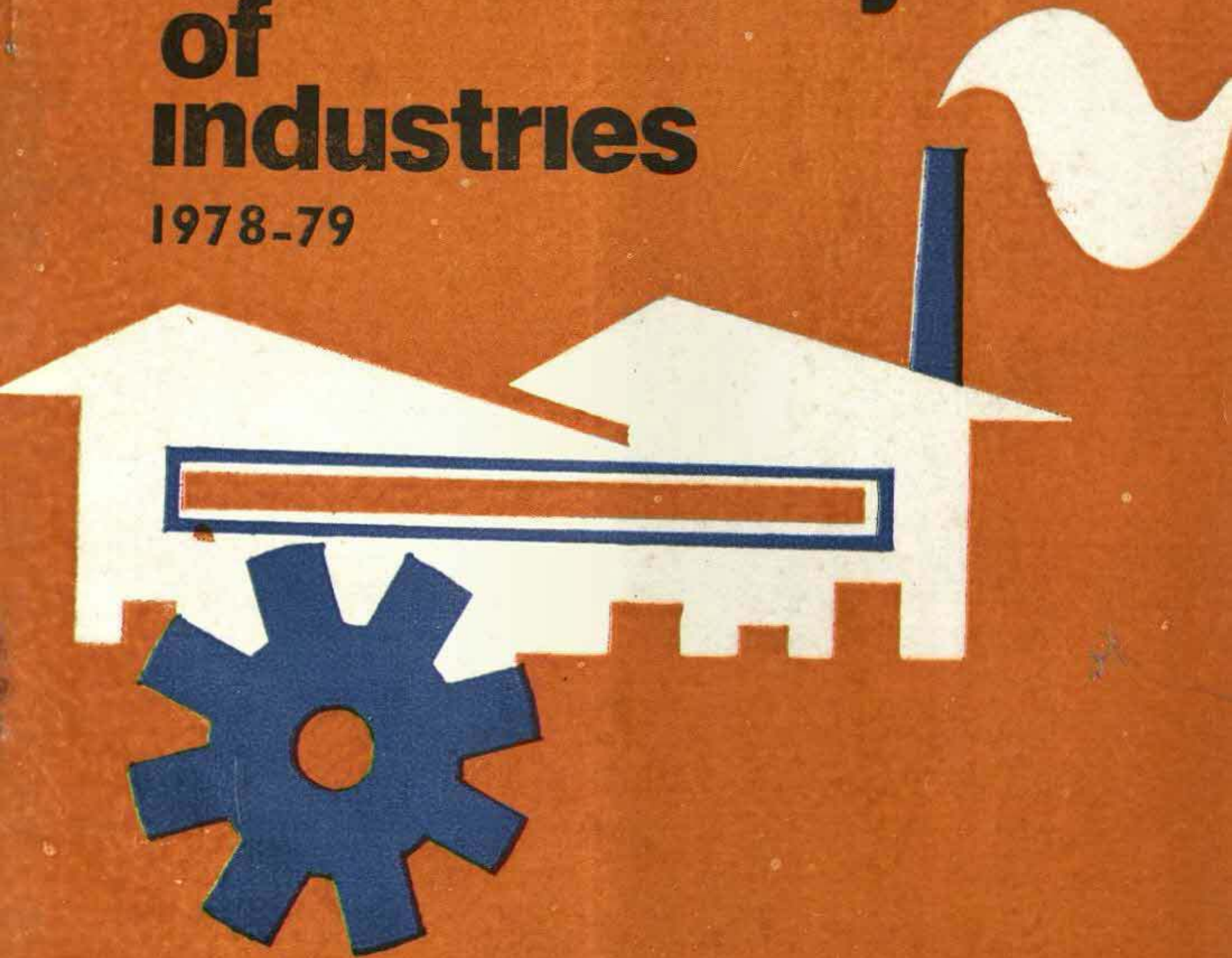


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GOVERNMENT OF KERALA

report on annual survey of industries

1978-79



DEPARTMENT OF
ECONOMICS & STATISTICS
KERALA

FEBRUARY-1985

ANNUAL SURVEY OF INDUSTRIES

1978-79

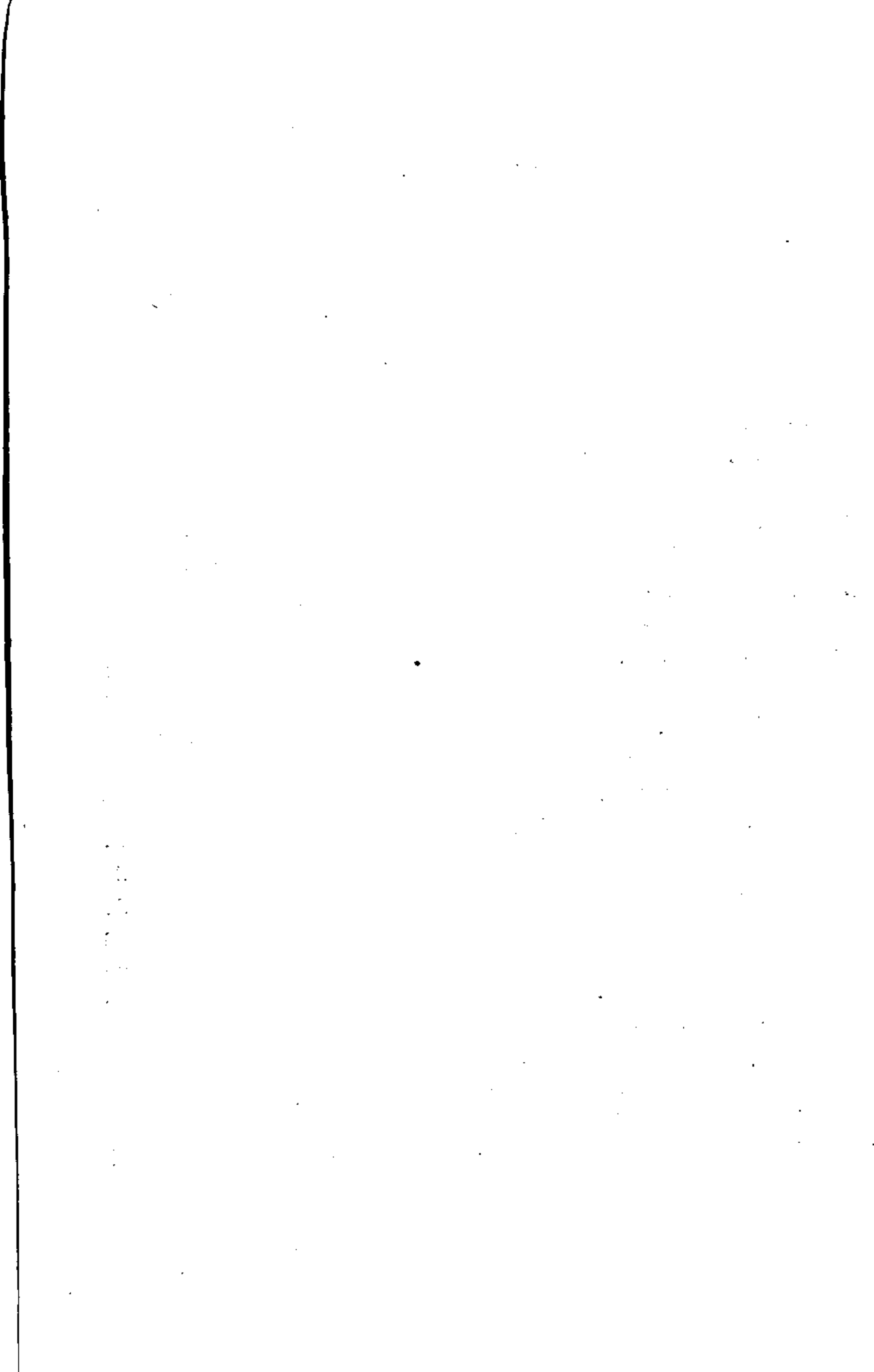
KERALA STATE

**DEPARTMENT OF ECONOMICS AND STATISTICS,
TRIVANDRUM.**

FEBRUARY, 1985

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PREFACE

The report on the Annual Survey of Industries 1978-79 is the fourteenth publication in its series and present a broad picture of the pattern and growth of registered factory sector of Kerala.

The important features and results of the survey are presented under four chapters. The first-one deals with the coverage, concepts, definition, etc., of the survey. The second chapter provides the review of the results. The third gives the analysis of major structural characteristics and the fourth deals with the relative importance of different industries.

This report was prepared by Shri P. Sivaraman, Research Officer and by Shri K. P. Alexander, Assistant Director.

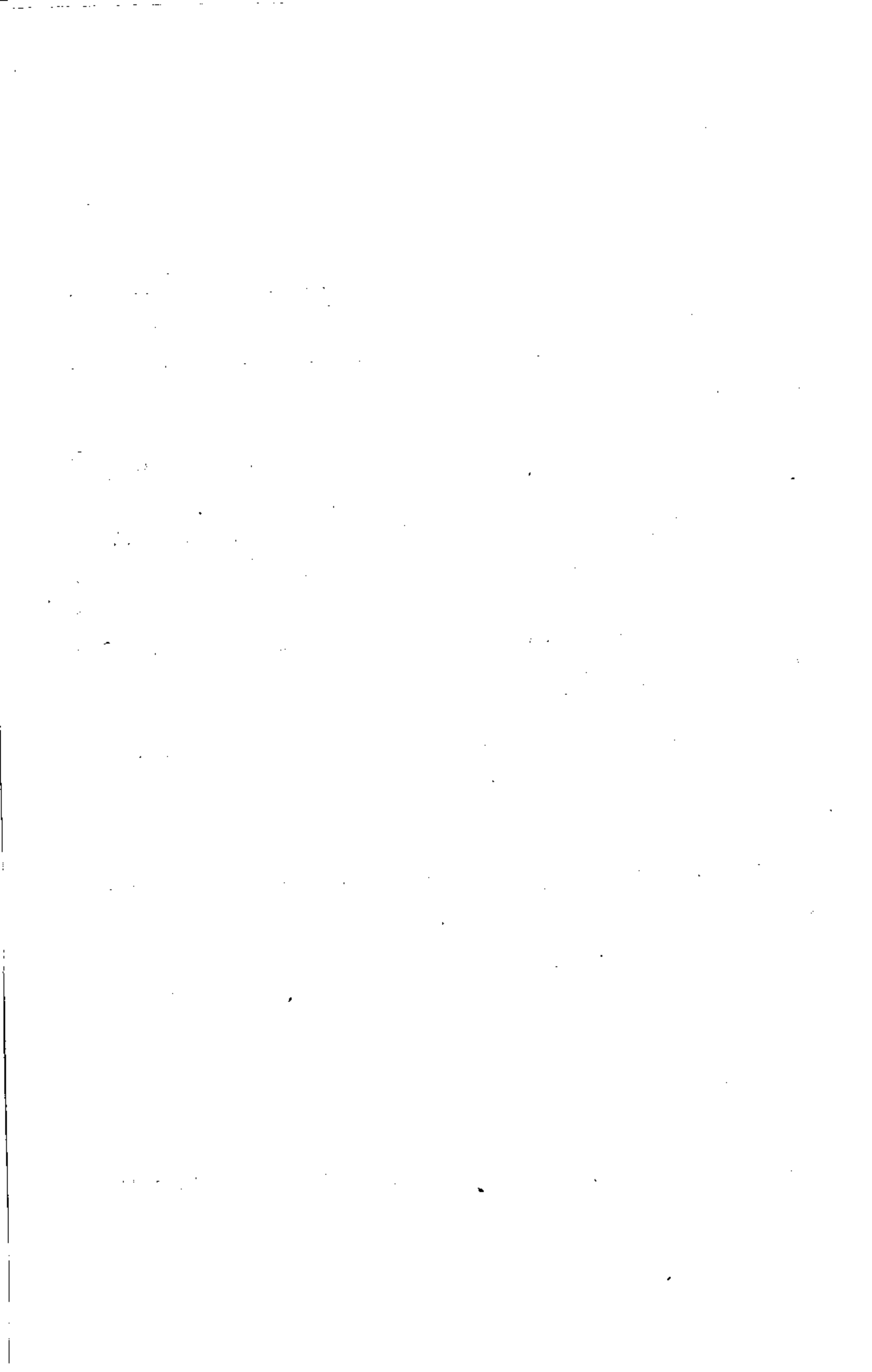
I hope that this report will be useful to planners, administrators and researchers.

Suggestions for the improvement of the report are welcome.

(Sd.)

Trivandrum,
19-2-1985.

N. GEORGE JOHN,
Director of Economics and Statistics.



CHAPTER I

GENERAL

1.1. *Introduction.*—Annual Survey of Industries (A.S.I.) is the principal source of industrial statistics in India. It provides valuable data on various aspects of the registered industrial sector covering economic activities relating to manufacturing, electricity, gas, water supply and repair services. It is conducted annually under the statutory provisions of the Collection of Statistics Act, 1953 and the rules framed thereunder in 1959. The Director, Field operations Division (FOD), National Sample Survey Organisation (N.S.S.O.) is the Statistics Authority appointed under the above Act for the purpose of collection of these statistics.

1.2. *Coverage & Design of the Survey.*—The survey covered all establishments registered under section 2 m (i) and 2 m (ii) of the factories Act 1948, Electricity undertakings engaged in generation and distribution of electric energy, beedi manufacturing units registered under the Beedi and Cigar Workers (condition of employment) Act, 1966, registered units rendering certain types of services like cold storage, repair of motor vehicles etc, factories located in jails/reformatories and satisfying the required conditions for the registration under the 'Factories Act' and units engaged in grading and packing like the Food Corporation of India and certain drugs distribution firms though not strictly come under any manufacturing activity.

Sections 2 m (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 preceding twelve months, and in any part of which a manufacturing process is being carried out with the aid of power or ordinarily so carried on and factories wherein 20 or more workers are working or were working on any day of the preceding twelve months and in any part of which a manufacturing process is being carried out without the aid of power or ordinarily so carried on.

The primary unit of enumeration of the survey is the factory for all industries except electricity where it is an undertaking. If the owner has two or more factories in the same industry group and in the same state he is permitted to submit a single consolidated return for all units.

The frame for the ASI. 1978-79 is comprised of (i) The list of electricity undertakings as on 31st December 1978 maintained by central electricity authority, and (ii) The list of factories registered under the 'Factories Act' 1948, as on 31st December 1978 and not covered in (i)

For the purpose of ASI the factories in the frame are classified into census and non-census sectors. Factories employing 50 or more workers and using power and those employing 100 or more workers and not using power come under the census sector. More over all units in the electric and power industry are included in the census sector irrespective of the size of employment. The balance in the frame constitute the non-census sector. This classification is made, based on the employment data available from the survey of the previous year. The frame is revised once in two years.

All the units in the census sector and some from the non-census sector in which the total number of units were less than 50 in the entire country were completely enumerated. One half of the factories in the remaining non-census sector are enumerated each year in rotation so as to achieve complete coverage of the non-census sector in a period of two consecutive years.

Reference period for ASI 1978-79 was the financial year commencing on 1st April, 1978. Information was accordingly collected from all the establishments whose accounting year ended on any day during the period (1st April 1978— 31st March 1979).

1.3. *Concepts and Definitions:*

Reference year for Annual Survey of Industries 1978-79 means the accounting year of the factory ending on any date between 1st April 1978 and 31st March 1979.

Registered factory is one registered under the 'Factories Act, 1948 employing 10 or more workers and using power and 20 or more workers and not using power. Closed factories with fixed assets on site, both in census and non-census sectors, are also included till they are deleted from the lists maintained by the chief inspectors of factories in the state.

Gross value of plant and machinery represents the total original (undepreciated) value of 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 rented in plant and machinery at the time of renting in but excludes the value of rented-out plant and machinery. Total value of all the plants and machinery acquired on hire purchase basis is also included.

Fixed Capital represents the depreciated value of all fixed assets of the factory as on the closing day of the accounting year. Fixed capital covers all goods, new or used, that have a normal economic life of one year or more (for example land, buildings including those under construction, plant and machinery, transport equipment etc). It includes the fixed assets of the head office allocable to the factory. Assets solely used for post manufacture distribution as well as intangible assets are, however excluded from fixed capital.

Working capital comprises stock of materials, stores, fuels, semi-finished goods and finished goods, cash in hand and at bank, net balance of amount receivable over amounts payable as at the end of the accounting year. It, however, excludes fixed deposits long-term loans 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 comprising stocks of materials, stores, fuels etc, semi-finished goods and finished products and by products as at the end of the accounting year.

Outstanding loan represents all loans whether short-term or long-term whether interest bearing or not, remaining outstanding according to the books of the factory on the closing day of the accounting year.

Workers: The term 'workers' is used in the same sense as defined in section 2(i) of Factories Act, 1948 where worker is defined as a person employed directly or through any agency whether for wages or not in any manufacturing process or in cleaning any part of the machinery or premises used for manufacturing process or any kind of work incidental to or connected with the manufacturing process or the subject of the manufacturing process. However, persons holding positions of supervision and management or employed in a confidential position are excluded.

Employees relate to all persons engaged by the factory in work connected directly or indirectly with manufacturing process and include all administrative, technical and clerical staff as also labour engaged in production of capital assets for factory's own use. These include employees in the so called sales department as also those engaged on purchase of raw materials etc. and fixed assets for the factory. They also include the proprietors and partners and their unpaid family members who work in or outside the factory. Persons in the head office connected with the manufacturing activity of the factory are also included in this item.

The number of workers or employees is an average number per working day (days on which the manufacturing process was carried on). It is calculated by adding for each category, persons attending and on leave with pay (including those in strike but excluding those on unlimited leave, or leave without pay) in each shift over all the shifts worked on all days (working and non-working) and dividing the result by the number of days on which the manufacturing process was carried on.

Man days. This represent, the total number of man days worked by the factory during the accounting year. It is obtained by summing up the number of persons of all categories attending on each shift over all the shifts worked on all days (working and non-working.)

Wages include all payments made to workers in cash as compensation for work done during the year, for example, basic wages, dearness allowance, overtime payments, shift allowances, leave wages, wages paid for holidays and regular bonuses such as production bonus, good attendance bonus incentive bonus etc, which are paid more or less regularly for each pay period.

Emoluments include the salaries and wages paid during the year to persons on employment. It includes profit sharing, festival and other bonuses and ex-gratia payments paid at less frequent intervals (other than bonuses paid more or less regularly for each pay-period). Benefits in kind in respect of supplies made or services rendered such as housing, medical, education and recreational facilities are included in this item. It excludes factory expenses in the shape of employers' contribution to provide provident fund, pension, gratuity or similar other charges.

Fuels consumed represent the total purchase value of all items of fuels, lubricants, electricity, water etc., consumed by the factory during the survey year and excludes that part of fuels which is produced and consumed by the factory.

Materials consumed represent the total value of all items of raw materials, chemicals, packing materials, and stores actually consumed during the survey year for manufacture including capital assets for factory's own use. It excludes the intermediate products, i.e. goods produced within the factory and consumed for further manufacture.

Total input comprises all manufacturing costs of the factory. The costs of fuels and materials consumed (as defined above) for manufacture as well as for repair and maintenance of factory's fixed assets, office supplies, stationery, technical magazines and periodicals etc., purchase value of goods sold in the same condition as purchased, purchase value of products reported for sale in the previous year but consumed during the survey year for further manufacture and the costs of services purchased, are included in it.

Products The term 'product' represents the ex-factory value (that is exclusive of taxes, duties etc on sales) of all finished products and by-products manufactured during the survey year. It excludes the value of intermediate product i.e. those produced and consumed for the further manufacture in a factory but includes the value of assets produced for factory's own use.

Net value of semi finished goods It represents the excess of value of goods in process at the end of the accounting year over that at the beginning of the year. It includes the value of semifinished goods of last year sold in the current year.

Gross output is the ex-factory value of products and the value of services rendered by the factory for others during the survey year. It includes the net value of semi-finished goods and sale value of goods sold in the same condition as purchased.

Depreciations is the consumption of fixed capital by the factory during the survey year and is taken as provided for by the factory and is estimated on the basis of cost of installation and working life of the fixed assets calculated in terms of the number of years.

Value added by manufacture provides a measure of the contribution made by four factors of production i.e., land, labour, capital and entrepreneur the resources of labour and capital entrepreneur in producing the output of an activities obtained by deducting from the total value of output, the total value of input, and depreciation.

Factor payments to others represents the share in value added income from capital other than land and is the sum total of 'rent' (excluding rent on land) and interest.

Net income represents the factor shares of employees and entrepreneur in the value added and is obtained by deducting the factor payments to other's from the value added. As such the net income is inclusive of land rent as well.

Operating surplus is the excess of the value added over the cost of employee's compensation (i.e. emoluments).

Profits is the excess of the net income over the cost of employee's compensation (i.e. emoluments). This would include land rent as well.

Limitations The data presented in this report relate only to the factories responded to the Survey. The factories which did not respond constituted only a negligible proportion of the total number of factories. Therefore the data presented in this report has this limitation.

1.4. *Summary results of the Survey.*—In Kerala, 2684 factories responded to the Survey during 1978-79. The total investment in the above 2684 registered factories in 1978-79 was Rs. 924 crores of which Rs. 673 crores were in fixed capital and the balance Rs. 251 crores in working capital. They produced output worth Rs. 1383 crores by utilising an input worth Rs. 1081 crores and contributed Rs. 264 crores towards state income by way of value added. These factories together employed 269 thousand of people and disbursed Rs. 132 crores by way of emoluments. The principal aggregates for Kerala and India are given below:

TABLE I

Principal aggregates 1978-79

Sl. No.	Major Characteristics	Unit	India	Kerala	
				Actuals	% to all India
(1)	(2)	(3)	(4)	(5)	(6)
1.	Factories responded	No.	88077	2684	3.05
2.	Fixed capital	Rs. crores	22886	673	2.94
3.	Productive capital	"	31413	924	2.94
4.	Invested capital	"	35154	977	2.78
5.	Total inputs	"	33312	1081	3.25
6.	Value added	"	9554	264	2.76
7.	Gross output	"	44344	1383	3.12
8.	Total employees	('000)	7248	269	3.71
9.	Emoluments	Rs. crores	4612	132	2.86

Though total factory employment of the State constituted 3.71% of the all India employment, employees compensation (emoluments) constituted only 2.86% of the total amount of the factory sector of the country as a whole. This shows a relatively less average annual wages per worker of the factory employees of the state. This was so because about 35% of the employment in the factory sector was in cashewnut processing industry which being seasonal in nature, pays lesser average annual wages per employee.

CHAPTER 2

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 separately for the three sectors of economic activity, namely, manufacturing, 'electricity and water-supply' and other repair services. The structural ratios and technical coefficients have also been worked out and incorporated in this chapter.

The salient features of all industries for 1978-79 with comparative data for the year 1977-78 are given below:—

TABLE 2
Salient features

Sl. No.	Aggregates	Units	1977-78	1978-79	% increase in 1978-79 over 1977-78
(1)	(2)	(3)	(4)	(5)	(6)
1.	Factories	No.	2824	2684	(—)5.0
2.	Fixed Capital	Rs. Crores	591	673	13.9
3.	Working capital	"	209	252	20.6
4.	Productive capital	"	800	925	15.6
5.	Invested capital	"	849	977	15.1
6.	Outstanding loan	"	527	631	19.7
7.	Employees	('000 Nos.)	279	269	(—)3.6
8.	Emoluments	Rs. crores	114	132	15.8
9.	Input	"	907	1081	19.2
10.	Output	"	1176	1383	17.6
11.	Value added	"	236	264	11.9
12.	Factor-Payments	"	35	59	68.6
13.	Net income	"	201	205	2.0
14.	Profit	"	86	73	(—)15.1

It may be seen from the above table that inspite of the lower number of factories reported in 1978-79, fixed capital and consequently productive and invested capitals, have been increased during the year by 13.9%, 15.6%, and 15.1% respectively.

A sizeable growth in fixed capital (Rs. 79 crores) was noticed in generation and commission of electric energy. The gross input as well as output increased by 19.2% and 17.6% respectively. The maximum output of Rs. 76 crores was in the generation of electric energy. The decrease in the number of responded factories has affected the number of employees also in 1978-79. The total emoluments has however been increased by 15.8%. Value added by manufacture has been increased by 11.9% during the year. Factor payments to others has increased by 68.6% during the year and net income has only a marginal increase and profit showed a decreasing trend compared to the previous year.

2.2 *Selected Aggregates by Principal economic activity.*—Selected aggregates of the factory sector by the three broad divisions of economic activity, namely

(i) Manufacturing

(ii) Electricity and water supply

and (iii) Repair services, are presented in table 3 below.

TABLE 3

Selected aggregates by principal economic activity

<i>Sl. No.</i>	<i>Items</i>	<i>Unit</i>	<i>Manu- facturing</i>	<i>Electricity and water supply</i>	<i>Repair services</i>	<i>All Indus- tries</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Number of factories	No.	2577 (96.01)	11 (0.41)	96 (3.58)	2684 (100.00)
2.	Fixed capital	Rs. in lakhs	31897 (47.41)	35204 (52.31)	185 (0.28)	67286 (100.00)
3.	Working capital	"	20187 (80.26)	4868 (19.35)	98 (0.39)	25153 (100.00)
4.	Productive capital	"	52084 (56.34)	40072 (43.35)	283 (0.31)	92439 (100.00)
5.	Employees	No.	233542 (86.86)	30382 (11.30)	4945 (1.84)	268864 (100.00)
6.	Total emoluments	Rs. in lakhs	10410 (79.05)	2366 (17.96)	394 (12.99)	13170 (100.00)
7.	Total input	Rs. in lakhs	1063170 (98.34)	1102 (1.02)	695 (0.64)	108114 (100.00)
8.	Total output	"	129467 (93.62)	7655 (5.54)	1164 (0.84)	138286 (100.00)
9.	Value added	"	20224 (76.57)	5735 (21.72)	451 (1.71)	26410 (100.00)
10.	Factor payments	"	3984 (67.08)	1947 (32.78)	8 (0.14)	5939 (100.00)
11.	Operating surplus	"	9814 (74.12)	3369 (25.45)	57 (0.43)	13240 (100.00)
12.	Profits	"	5829 (79.84)	1423 (19.49)	49 (0.67)	7301 (100.00)

(Figures in brackets are percentage)

It may be seen from the table that 96% of the total factories covered in the survey belonged to the manufacturing sector, 0.42% to electricity and water supply sector and the remaining 3.58% belonged to repair services. The percentage composition of the three divisions is almost the same as that of the previous year, namely 1977-78. Electricity and water supply undertakings, though few in number, accounted for 52.3% of the total fixed capital of the registered factories in Kerala. This shows the high capital intensity of the sector. On the other hand, the manufacturing sector accounted for 47.41% of the total fixed capital while repair services had only 0.28% of the total fixed capital to carry on their activities. Though 86.86% of the total employees belonged to the manufacturing sector, its share in the total emoluments constituted only 79%. This shows the low rate of emoluments per employee. Electricity and water supply covered 17.96% of the total emoluments against 11.30% share of employees. Similarly repair services covered 2.99% of total emoluments against 1.84% share of employees. These showed that the average emoluments per employee were higher in electricity and repair services than in manufacturing sector. The average emolument per employee was the highest in repair services (Rs. 7,976) followed by electricity and water supply (Rs. 7,786) and manufacturing (Rs. 4,457). Though 93.62% of the total output was from manufacturing sector the value added by manufacture from this sector constituted only 76.57% of the total. But from a mere 5.54% share of output, the electricity sector was able to raise 21.72% of total value added by manufacture. This was due to the very low input output ratio (0.14) associated with the production of hydro power. It may be seen from the above table that out of the total profit of Rs. 7,301 lakhs, the contribution of manufacturing sector is Rs. 5,829 lakhs (79.84%) and the contribution of other sectors is Rs. 1,472 lakhs (20.06%).

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 1978-79 are presented in table 4. Items one to six give per-factory ratios and 7 to 11 give per employee ratio's. Technical co-efficients are shown against items 12 to 20.

TABLE 4

Structural Ratios and Technical Co-efficients

Sl. No.	Structural ratios/ technical co-efficients	Unit	Manu- facturing	electri- city and water supply	Repair services	All industries
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Structural ratios:</i>						
1.	Fixed capital per factory	Rs. lakhs	12.36	3200.35	1.93	25.07
2.	Productive capital per factory	„	20.21	3642.93	2.95	34.44

(1)	(2)	(3)	(4)	(5)	(6)	(7)
3.	Gross output per factory	”	50.24	695.88	12.13	51.52
4.	Value added per factory	”	7.85	521.41	4.70	9.84
5.	Workers per factory	Nos.	76	1790	47	82
6.	Employees per factory	”	91	2762	52	100
7.	Fixed capital per employee	Rs.	13658	115874	3748	25025
8.	Productive capital per employee	”	22302	131895	5722	34331
9.	Gross output per employee	”	55436	25195	23546	51433
10.	Value added per employee	”	8660	18878	9127	9823
11.	Emoluments per employee	”	4457	7786	7976	4898
<i>Technical Co-efficients</i>						
12.	Fixed capital to value added		1.58	6.14	0.41	2.55
13.	Fixed capital to gross output		0.25	4.60	0.16	0.49
14.	Value added to gross output		0.16	0.75	0.39	0.19
15.	Emoluments to value added		0.51	0.41	0.87	0.50
16.	Profits to value added		0.29	0.25	0.11	0.28
17.	Profit to gross output (%)		4.50	18.59	4.21	5.28
18.	Profit to productive capital (%)		11.19	3.55	17.31	7.90
19.	Operating surplus to productive capital (%)		18.84	8.41	20.14	14.32
20.	Operating surplus to gross output (%)		7.58	44.01	4.90	9.57

All the structural ratios given in the table above showed an increasing trend during the year 1978-79, compared to the previous year. It may be seen from the table that an average factory in the state had a fixed capital of Rs. 25.07 lakhs and a productive capital Rs. 34.44 lakhs. On an average it employed 100 persons on each working day and produced a gross output worth Rs. 51.52 lakhs in the year. The value added by manufacture per factory during 1978-79 was Rs. 9.84 lakhs. It may be noted that an average factory in the electricity and water supply sector had a fixed capital of Rs. 32 crores and a productive capital of Rs. 36 crores. It employed 2762 persons and produced output worth Rs. 7 crores. On the otherhand an average factory in the repair services sector had been working with a fixed capital of Rs. 1.93 lakhs. It employed 52 persons and produced output worth Rs. 12.13 lakhs in an year.

An employee in the registered industrial sector, on an average, had been working with a fixed and productive capital of Rs. 25 thousand and Rs. 34 thousand respectively. The average emolument drawn during the year by an employee was Rs. 4,898.

On an average an employee with the productive capital of Rs. 34,381 produced gross output worth Rs. 51,433, value added per employee being Rs. 9,823. It may be seen from the above table that fixed capital, productive capital and gross output per employee were the highest in electricity sector. Next to it was the manufacturing sector. The average fixed capital required to employ a person in the repair service sector was only Rs. 3,748. The productive capital per employee also was low in this sector. The gross output per employee in the factory sector was Rs. 51,433 per annum. The highest output was in manufacturing sector, followed by electricity and the repair service sector. The value added by manufacture per employee during the year under review was Rs. 9,823, Electricity sector stood in the first place with Rs. 18,878 followed by repair sector and then the manufacturing sector. Average emoluments of an employee in the repair sector were Rs. 7,976 while the emoluments in electricity and manufacturing sector were Rs. 7,786 and Rs. 4,457 respectively.

The capital output co-efficient measured by the ratio of fixed capital to value added for the industry as a whole had increased from 2.51 to 2.55 in 1978-79. That is, the fixed capital required to produce unit value added increased during the year. The co-efficients in electricity and repair service sector increased while in manufacturing sector, the co-efficient declined from 1.68 in 1977-78 to 1.58 in 1978-79. The ratio of fixed capital to gross output was 0.49 during the year. The value added to gross output ratio decreased from 20% to 19% in the reference period. It may be seen from the table that the ratio had decreased in all the three sectors of economic activity. The share of labour in the total income generated, defined as the ratio of emoluments to value added showed an increase from 48% in 1977-78 to 50% in 1978-79 while the share of profits defined as the ratio of profit to value added decreased from 37% to 28% during the same period. Thus it may be seen from the above table that out of every rupee of state income generated from the factory sector in 1978-79, 50 paise went to labour as emoluments, 28 paise to the entrepreneur as profit and the other two factors of production i.e. land and capital, shared the remaining 22 paise. As usual the ratio of profit to gross output (18.59%) was high in electricity and water supply sector. But the ratio of profit to productive capital was highest in repair sector. The operating surplus defined as the excess of value added over the cost of employee's compensation (i.e. emoluments) was 50% in 1978-79 against 52% in 1977-78. The co-efficient profitability, measured by the ratio of operating surplus to gross output, therefore showed a slight decrease from 10.3% to 9.6% during the year. The rate of return on capital, defined as the ratio of operating surplus to productive capital also decreased from 15.17% to 14.32% during the same period.

CHAPTER 3

ANALYSIS OF MAJOR STRUCTURAL CHARACTERISTICS, ALL INDUSTRIES

The establishments surveyed under ASI-1978-79 have been classified into three digit level of the National Industrial classification and their important structural characteristics are presented in this chapter.

3.1. *Number of units.*—The total number of units in respect of 24 industries having 20 units or more and the number of census units in each of these groups are given in table 5 here under.

TABLE 5

Arrangement of Industries according to Number of units

<i>Si. No.</i>	<i>Code</i>	<i>Name of Industry</i>	<i>No. of units</i>	<i>Census sector units</i>	<i>Percent- age to total</i>
(1)	(2)	(3)	(4)	(5)	(6)
1.	271	Sawing and planting of wood	438	24	16.32
2.	226	Manufacture of Beedi	341	46	12.70
3.	214	Cashnut processing	267	221	9.95
4.	320	Manufacture of structural clay product	245	57	9.13
5.	302	Manufacture of other rubber products	110	19	4.10
6.	235	Weaving and finishing of cotton textiles in handlooms other than Khadi	98	10	3.65
7.	973	Repair of motor vehicles	96	25	3.58
8.	212	Tea processing	84	38	3.13
9.	268	Manufacture of coir and coir products	75	13	2.79
10.	204	Manufacture of grain mill products	69	3	2.57
11.	203	Canning preserving and processing of fish and similar goods	57	17	2.12

(1)	(2)	(3)	(4)	(5)	(6)
12.	285	Printing and publishing of books and journals	52	8	1.94
13.	270	Manufacture of veneer and plywood	50	16	1.86
14.	289	Printing of picture and post cards	40	4	1.49
15.	313	Manufacture of drugs and medicines	35	3	1.30
16.	211	Manufacture of other edible oils	33	1	1.23
17.	340	Manufacture of metal cans and tin plates	29	3	1.08
18.	341	Manufacture of structural metal products	25	1	0.93
19.	231	Cotton spinning, weaving etc. in mills	24	24	0.89
20.	310	Manufacture of organic and inorganic chemicals	24	8	0.89
21.	276	Manufacture of wooden furniture and fixtures	20	6	0.75
22.	311	Manufacture of fertilizers and pesticides	20	4	0.75
23.	331	Foundries for casting and forging iron and steel	20	4	0.75
24.	343	Manufacture of hand tools and general hardware	20	4	0.75
		Other industries	412	125	15.35
		All Industries	2684	684	100.00

As in the previous year, in terms of number of units, sawing and plaining of wood (other than plywood) manufacture of Beedi, cashewnut processing manufacture of structural clay products, Manufacture of rubber products (others) and weaving and finishing of cotton textiles in handlooms other than Khadi were the most important industries in the State.

There were 24 industries in the state with 20 or more units in 1978-79 as against 26 industries in 1977-78.

3.2. *Fixed capital.*—The total fixed capital investment in the factory sector during the year 1978-79 is estimated at Rs. 673 crores as against 591 crores during 1977-78. Fixed capital under different items are given below:

TABLE 6

Distribution of fixed capital all Industries

<i>Sl.No.</i>	<i>Items</i>	1978-79	
		<i>Amount (Rs. lakhs)</i>	<i>% to total</i>
(1)	(2)	(3)	(4)
1.	Land	2,027	3.02
2.	Improvement to land	1,808	2.69
3.	Building	7,841	11.65
4.	Plant and Machinery	22,932	34.08
5.	Transport equipments	569	0.83
6.	Tools and other fixed assets	24,623	36.60
7.	Assets under construction	7,484	11.13
Total		67,286	100.00

The above break up shows that 34.07% fixed capital was in plant and machinery while 36.60 was in tools and other fixed assets. But 95.45% of the total amount reported under tools and other fixed assets was in electricity alone. All the other industries accounted for the remaining 4.55%. Building and assets under construction constituted 22.78%. The share of the other components of fixed capital was below 4%.

The fixed investment was highest in generation and distribution of electric energy with 52% of the total fixed capital. The second place in the fixed capital investment was in the ship building and repairs industry with Rs. 80 crores. This formed near about 12 % of the total fixed capital. The above two industries and fertilizers and pesticides, organic and inorganic chemicals, pulp, paper and paper board and cotton spinning and weaving in mills shared nearly 80% of the fixed capital. These six groups accounted for 3.73% of the total registered factories covered in the survey. There were 27 groups of industries with fixed capital investment of Rs. 2 crores and above. Out of these 27 groups, 19 groups of industries had only less than 1% share of the total fixed capital in each of them. These industries are arranged in descending order according to fixed capital investment in table 7..

TABLE 7

Arrangement of Industries according to fixed Capital

<i>Sl.No.</i>	<i>Code</i>	<i>Name of Idnustry</i>	<i>Fixed capital (Rs. lakhs)</i>	<i>Percentage to total</i>
(1)	(2)	(3)	(4)	(5)
1.	40	Generation, transmission and distribution of electric energy	35179.19	52.28
2.	370	Ship building and repairing	8007.39	11.90
3.	311	Manufacture of fertilisers and pesticides	5039.05	7.49
4.	310	Manufacture of basic industrial organic and inorganic chemicals	2271.66	3.38
5.	280	Manufacture of pulp, paper and paper board	1745.20	2.59
6.	231	Cotton spinning and weaving in mills	1465.55	2.18
7.	316	Manufacture of turpentine, synthetic resins etc.	806.53	1.20
8.	247	Spinning, weaving and finishing of other textiles	676.91	1.00
9.	360	Manufacture of electrical industrial machinery & apparatus	658.19	0.98
10.	302	Manufacture of Rubber product not elsewhere classified	650.01	0.97
11.	320	Manufacture of structural clay products	597.78	0.89
12.	357	Manufacture of machine tools, their parts and accessories	544.01	0.81
13.	300	Tyre and tube industries	542.05	0.81
14.	212	Tea processing	536.96	0.80
15.	335	Aluminium processing	505.75	0.75
16.	203	Canning, preserving and processing of fish	421.66	0.63
17.	362	Manufacture of dry and wet batteries	413.26	0.61
18.	264	Manufacture of all types of textiles, garments including wearing apparels	376.72	0.56
19.	314	Manufacture of perfumes, cosmetics lotions etc.	365.03	0.54
20.	270	Manufacture of veneer plywood and their products	341.37	0.51
21.	380	Manufacture of medical surgical & scientific equipment	327.74	0.49
22.	330	Iron & steel industries	327.04	0.49
23.	214	Cashewnut processing	250.88	0.37

(1)	(2)	(3)	(4)	(5)
24.	361	Manufacture of insulated wires & cables	242.09	0.36
25.	325	Manufacture of chinaware & porcelain-ware	229.87	0.34
26.	205	Manufacture of Bakery products	210.64	0.31
27.	367	Manufacture of electronic components and accessories	204.19	0.30
		Other industries	4349.23	6.46
All Industries			67285.97	100.00

3.3 *Working Capital.*—The total working capital in the factory sector during 1978-79 is estimated at Rs. 252 crores as against Rs. 209 crores during the previous year. The working capital utilization was highest in the electricity undertaking with 19% followed by fertilizers and pesticides with 8% of the total of the working capital. There were 25 groups of industries with working capital utilization of Rs. 2 crores or more during 1978-79. Even out of these 25 groups, 11 had only less than 2% each of the total working capital. The industries are arranged in descending order of working capital employed in table 8 below.

TABLE 8

Arrangements of Industries According to working capital

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Working capital (Rs. in lakhs)</i>	<i>Percentage to total</i>
(1)	(2)	(3)	(4)	(5)
1.	40	Generation and transmission of electric energy	4868.26	19.35
2.	311	Manufacture of fertilizers and pesticides	2084.41	8.29
3.	360	Manufacture of electrical industrial machinery and apparatus	1297.47	5.16
4.	214	Cashewnut processing	1267.68	5.04
5.	310	Manufacture of organic and inorganic chemicals	1143.33	4.55
6.	370	Ship building and repairing	1131.83	4.50
7.	335	Aluminium manufacturing	1000.33	3.98
8.	264	Manufacture of all types of textiles garments including wearing apparel	970.20	3.86

(1)	(2)	(3)	(4)	(5)
9.	231	Cotton spinning, weaving, shrinking and finishing of cotton textiles in mills	804.60	3.20
10.	314	Manufacture of perfumes, cosmetic, lotions, hairdressing etc.	788.84	3.14
11.	380	Manufacture of medical, surgical scientific equipment	659.59	2.62
12.	280	Manufacture of pulp, paper and paper board	636.16	2.53
13.	212	Tea processing	582.21	2.31
14.	357	Manufacture of Machine tools, their parts and accessories	559.44	2.22
15.	300	Tyre and tube industries	464.67	1.84
16.	361	Manufacture of insulated wires and cables	433.50	1.72
17.	247	Spinning-weaving and finishing of other textiles	380.83	1.51
18.	320	Manufacture of structural clay products	300.52	1.19
19.	268	Manufacture of coir and coir products	296.68	1.18
20.	219	Manufacture of food products not elsewhere classified	294.21	1.17
21.	270	Manufacture of veneer, plywood and their products	273.45	1.09
22.	220	Distilling, rectifying and blending of spirits	261.66	1.05
23.	285	Printing and publishing of periodicals books	246.64	0.98
24.	313	Manufacture of drugs and medicines	234.53	0.93
25.	302	Manufacture of rubber products not elsewhere classified	228.04	0.91
		Other industries	3944.19	15.68
		• All Industries	25153.27	100.00

3.4 *Productive capital.*—Productive capital is the sum total of fixed capital and working capital. The total productive capital utilised by the factory sector during 1978-79 is estimated at Rs. 924 crores as against 800 crores during the previous year. There were 36 groups of industries with a productive capital investment of Rs. 3 crores or more during 1978-79. Electricity, ship building and repairing, fertilizers and pesticides, organic and inorganic chemicals, manufacture of pulp paper and paper board and cotton spinning weaving in mills shared about 69.7% of the total productive capital investment in the factory sector. There were 17 industries with more than 1% share each in productive capital investment. The industries with productive capital Rs. 3 crores or more are arranged in descending order of capital in table 9.

TABLE 9

Arrangements of Industries According to Productive Capital

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Productive capital (Rs. in lakhs)</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)
1.	40	Generation and transmission of electric energy	40047.45	43.33
2.	370	Ship building and repairing	9139.22	9.89
3.	311	Manufacture of fertilizers and pesticides	7123.46	7.71
4.	310	Manufacture of organic and inorganic chemicals	3415.01	3.70
5.	280	Manufacture of pulp paper and paper board	2381.36	2.57
6.	231	Cotton spinning, weaving, shrinking and finishing of cotton textiles	2270.17	2.45
7.	360	Manufacture of electrical industrial machinery and apparatus	1955.66	2.11
8.	214	Cashewnut processing	1518.56	1.64
9.	335	Aluminium manufacturing	1506.10	1.62
10.	264	Manufacture of all types of textiles garments including wearing apparel	1346.92	1.45
11.	311	Manufacture of perfumes, cosmetic, lotion, hair dressing etc.	1153.88	1.24
12.	212	Tea processing	1119.17	1.21
13.	357	Manufacture of machine tools, their parts and accessories	1103.45	1.19
14.	247	Spinning weaving and finishing of other textiles	1057.74	1.14
15.	300	Tyre and Tube industries	1006.72	1.09
16.	380	Manufacture of medical, surgical and scientific equipment	987.33	1.07
17.	316	Manufacture of turpentine synthetic resins & plastic materials	971.24	1.04
18.	320	Manufacture of structural clay products	898.30	0.98

(1)	(2)	(3)	(4)	(5)
19.	302	Manufacture of Rubber products notelse where classified	878.05	0.95
20.	361	Manufacture of insulated wires and cables	675.59	0.74
21.	270	Manufacture of veneer, plywood and their products	614.82	0.67
22.	268	Manufacture of coir and coir products	469.11	0.51
23.	203	Canning, preserving and processing of fish	463.24	0.50
24.	285	Printing and publishing of periodicals and books	423.95	0.46
25.	313	Manufacture of drugs and medicines	422.62	0.46
26.	220	Distilling, rectifying and blending of spirit	415.62	0.45
27.	362	Manufacture of dry and wet batteries	411.63	0.44
28.	271	Sawing and planing of wood	385.45	0.42
29.	330	Iron and Steel industries	382.71	0.41
30.	331	Foundaries for casting and forging Iron & Steel	366.88	0.40
31.	219	Manufacture of food products not else- where classified	364.51	0.39
32.	206	Manufacture of bakery products	362.92	0.39
33.	284	Printing and publishing of newspaper	345.17	0.37
34.	367	Manufacture of electronic components and accessories	342.82	0.37
35.	323	Manufacture of chinaware and porcelainware	324.29	0.35
36.	226	Manufacture of Beedi	301.00	0.33
		Other industries	5487.07	5.94
All industries			92439.24	100.00

3.5 *Invested Capital*: Invested capital is the sum of fixed capital and physical working capital. The total invested capital in the factory sector is estimated at Rs. 977 crores in 1978-79 as against Rs. 849 crores during the previous year. The invested capital was highest in electricity undertaking with 38.87% of the total invested capital. The invested capital in electricity, ship building and repair and fertilizers and pesticides together formed 57% of the total in 1978-79, as against 54% during the previous year. There were 17 groups of industries with more than 1% share in invested capital. There were altogether 34 industry groups with Rs. 3 crores or more as invested capital and they are arranged in descending order of magnitude in table 10.

TABLE 10

Arrangement of Industries According to Invested Capital

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Invested capital (Rs. lakhs)</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)
1.	40	Generation, transmission and distribution of electric energy	37963.86	38.87
2.	370	Ship building and repairing	10779.45	11.04
3.	311	Manufacture of fertilizers & pesticides	7238.20	7.41
4.	310	Manufacture of organic & inorganic chemicals	3582.13	3.67
5.	231	Cotton spinning and weaving in mills	3011.32	3.08
6.	280	Manufacture of pulp paper and paper board	2598.21	2.66
7.	214	Cashewnut processing	2339.71	2.40
8.	335	Aluminium manufacturing	1723.18	1.76
9.	360	Manufacture of electrical industrial machinery and apparatus	1682.82	1.72
10.	314	Manufacture of perfumes, cosmetic lotions etc.	1361.59	1.39
11.	264	Manufacture of all types of textiles, garments including wearing apparatus	1327.84	1.36
12.	247	Spinning, weaving and finishing of other textiles	1316.07	1.35
13.	357	Manufacture of machine tools, their parts and accessories	1154.61	1.18
14.	302	Manufacture of rubber products not elsewhere classified	1074.23	1.10
15.	300	Tyre and tube industries	1058.40	1.07
16.	316	Manufacture of turpentine, synthetic resins etc.	1030.90	1.06
17.	212	Tea processing	1022.47	1.04
18.	380	Manufacture of medical, surgical & scientific equipments	915.92	0.94
19.	320	Manufacture of structural clay products	906.04	0.93
20.	361	Manufacture of insulated wires and cables	834.94	0.85
21.	270	Manufacture of veneer, plywood and their products	758.28	0.78

(1)	(2)	(3)	(4)	(5)
22.	362	Manufacture of dry and wet batteries	699.68	0.72
23.	203	Canning, preservaing and processing of fish	639.09	0.66
24.	330	Iron and Steel industries	510.90	0.52
25.	205	Manufacture of Bakery products	469.83	0.48
26.	313	Manufacture of drugs & Medicines	457.97	0.47
27.	220	Distilling, rectifying and blending of spirits	413.45	0.42
28.	331	Foundries for casting and forging Iron & Steel	388.52	0.40
29.	268	Manufacture of coir & coir products	380.66	0.39
30.	285	Printing & publishing of periodicals & books	380.26	0.39
31.	219	Manufacture of food product not elsewhere classified	368.11	0.38
32.	271	Sawing and planing of wood (other than plywood)	346.50	0.36
33.	323	Manufacture of china ware and porcelain ware	340.30	0.35
34.	226	Manufacture of Beedi	328.54	0.34
		Other industries	8264.39	8.46
All Industries			97665.37	100.00

3.6 *Outstanding Loans.*—The total amount of loans outstanding as on 31st March 1979 against the factories of the state was estimated at Rs. 631 crores during 1978-79 as against Rs. 527 crores during the previous year. Outstanding loans constituted 94% of the total fixed capital and 68% of the total productive capital respectively, of the factory sector as a whole. About 70% of the total loans was outstanding against five industries viz. electricity ship building, fertilizers and pesticides, organic and inorganic chemicals and cashewnut processing. The highest amount of outstanding loan was against electricity undertaking with Rs. 311 crores. This constituted nearly 49% of the total loans outstanding against the factory sector. It may be seen that loan equity ratio of the electricity undertaking was higher than the average for the sector as a whole. Outstanding loans of the electricity undertaking constituted 88% of the fixed capital and 77% of the productive capital respectively. There were 15 groups of industries with more than 1% share of the outstanding loans and 26 groups of industries with Outstanding loans of Rs. 2 crores or more during the year 1978-79. They are arranged in descending order of magnitude in table 11.

TABLE II

Arrangement of Industries according to outstanding loans

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Outstanding loans (Rs. lakhs)</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)
1.	40	Generation, transmission and distribution of electric energy	31108.09	49.30
2.	370	Ship building and repairing	5249.96	8.32
3.	311	Manufacture of fertilizers and pesticides	3466.25	5.49
4.	310	Manufacture of basic industrial organic and inorganic chemicals	2321.60	3.68
5.	214	Cashewnut processing	2286.36	3.62
6.	231	Cotton spinning, and weaving in mills	2052.88	3.25
7.	203	Canning, preserving and processing of fish	1254.30	1.99
8.	360	Manufacture of electrical industrial machinery and apparatus	1068.91	1.69
9.	302	Manufacture of rubber products not elsewhere classified	917.52	1.45
10.	247	Spinning, weaving and finishing of other textiles	862.88	1.37
11.	300	Type and tube industries	855.22	1.36
12.	280	Manufacture of pulp, paper and paper board	754.93	1.20
13.	270	Manufacture of veneer, plywood and their products	753.87	1.19
14.	330	Iron & Steel industries	694.94	1.10
15.	361	Manufacture of insulated wires and cables	686.07	1.08
16.	205	Manufacture of Bakery products	562.31	0.89
17.	314	Manufacture of perfumes, cosmetics, lotions, hairdressing etc.	558.72	0.89
18.	362	Manufacture of dry and wet batteries	547.95	0.87
19.	264	Manufacture of all types of textiles garments including wearing apparel	505.44	0.80
20.	323	Manufacture of chinaware and porcelainware	451.08	0.71
21.	380	Manufacture of Medical, surgical & scientific equipment	443.91	0.70
22.	268	Manufacture of coir and coir products	400.78	0.64
23.	331	Foundries for casting and forging Iron & Steel.	357.63	0.57

(1)	(2)	(3)	(4)	(5)
24.	320	Manufacture of structural clay products	302.23	0.48
25.	313	Manufacture of Drugs and Medicine	244.21	0.39
26.	217	Manufacture of starch	240.60	0.38
		Other industries	4155.44	6.59
		All industries	63104.08	100.00

3.7 *Workers*—There were 2.19 lakhs of workers in the factory sector during 1978-79, out of this, nearly 40% was in cashew processing industry alone. The number of workers in cashewnut processing industry declined from 94243 in the previous year to 86916 in 1978-79. The number of workers in cashewnut processing, beedi manufacturing, spinning and weaving mills, structural clay products and sawing and planing of wood (other than plywood) together constituted about 60% of the total workers. There were 28 groups of industries with more than 1000 workers in each of them. Even out of these 28 groups, 12 groups of industries had only less than 1% share of the total number of workers in each. These industries are arranged in descending order of magnitude of employment in table 12.

TABLE 12

Arrangement of industries according to number of workers

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Number of workers</i>	<i>% to total workers</i>
(1)	(2)	(3)	(4)	(5)
1.	214	Cashewnut processing	86916	39.60
2.	40	Generation, transmission and distribution of electric energy	18586	8.47
3.	226	Manufacture of Beedi	18458	8.40
4.	231	Cotton spinning and weaving in mills	10468	4.77
5.	320	Manufacture of structural clay products	10052	4.58
6.	271	Sawing and planing of wood (other than plywood)	7301	3.33
7.	212	Tea processing	5022	2.29
8.	973	Repair of Motor vehicles and motor cycles	4511	2.06
9.	311	Manufacture of fertilizers and pesticides	3824	1.74

(1)	(2)	(3)	(4)	(5)
10.	302	Manufacture of rubber products others	3653	1.66
11.	270	Manufacture of veneer, plywood and their products	2853	1.30
12.	235	Weaving and finishing of cotton textiles	2825	1.29
13.	357	Manufacture of machine tools, their parts and accessories	2464	1.12
14.	285	Printing and publishing of periodicals & books	2259	1.03
15.	280	Manufacture of pulp, paper and paper board	2256	1.02
16.	268	Manufacture of coir and coir products	2192	1.00
17.	264	Manufacture of all types of textiles, garments including wearing apparel	2172	0.99
18.	310	Manufacture of organic & inorganic chemicals	2076	0.95
19.	247	Spinning, weaving and finishing of other textiles	1844	0.84
20.	360	Manufacture of electrical industrial machinery and apparatus	1733	0.79
21.	376	Manufacture of bicycles, cycle-rickshaws and parts	1514	0.69
22.	370	Ship, building and repairing	1505	0.69
23.	335	Aluminium manufacturing	1427	0.65
24.	203	Canning, preserving and processing of fish	1397	0.64
25.	323	Manufacture of chinaware and porcelainware	1337	0.61
26.	313	Manufacture of drugs & medicines	1300	0.59
27.	314	Manufacture of perfumes, cosmetics, lotion, hairdressing etc.	1105	0.50
28.	284	Printing and publishing of newspapers	1023	0.47
		Others industries	17404	7.93
All industries			219477	100.00

3.8. *Employment.*—Total employment provided by the factory sector during 1978-79 is estimated at 2.69 lakhs as against 2.79 lakhs during the previous year. The number of employees was highest in cashewnut processing industry. This constituted about 35 % of the total employment in the factory sector in 1978-79 as against 37 % during the previous year. Hence it may be seen that employment opportunities have been considerably decreased in this industry during the year, compared to the previous year. Kerala State electricity Board was the single largest employer. It constituted near about 11 % of the total employees as against 10% during the previous year. Cashewnut processing and manufacture of beedi provided 42 % of the total employment in the factory sector.

The ratio of workers engaged in production to non-production in the factory sector is worked out to 4.4 in 1978-79 as against 4.9 during the previous year. This was because the number of workers in the labour intensive industries decreased especially in cashew processing industry and handlooms. There were 37 groups of industries with 1000 or more of employees during the year. They are arranged in descending order of magnitude in table 13.

TABLE 13

Arrangement of Industries according to total number of employees

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Total No. of employes</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)
1.	214	Cashewnut processing	94419	35.12
2.	40	Generation transmission & Distribution of electric energy	30252	11.25
3.	226	Manufacture of Beedi	18200	6.77
4.	320	Manufacture of structural clay products	11491	4.27
5.	231	Cotton spinning and weaving in mills	11439	4.25
6.	271	Sawing and planing of wood (other than plywood)	8551	3.18
7.	302	Manufacture of rubber products not elsewhere classified	7158	2.66
8.	212	Tea processing	5577	2.07
9.	311	Manufacture of fertilizers and pesticides	5139	1.91
10.	973	Repair of Motor Vehicles and Motor cycles	4945	1.84
11.	235	Weaving and finishing of cotton textiles in handloom other than khadi	3924	1.46
12.	360	Manufacture of Electrical industrial machinery and apparatus	3894	1.45
13.	270	Manufacture of veneer, plywood and their products	3490	1.30
14.	357	Manufacture of machine tools, their parts and accessories	3459	1.29
15.	280	Manufacture of pulp, paper and paper board	3106	1.16
16.	310	Manufacture of Basic industrial organic and inorganic chemical	3054	1.14
17.	268	Manufacture of coir and coir products	2824	1.05
18.	285	Printing and publishing of periodicals and books	2654	0.99

(1)	(2)	(3)	(4)	(5)
19.	264	Manufactur of all types of textiles, garments including wearing apparel	2651	0.98
20.	370	Ship building and repairing	2526	0.94
21.	203	Canning, preserting and processing of fish	2486	0.92
22.	247	Spinning, weaving and finishing of other textiles	2273	0.85
23.	300	Tyre and tube industries	2067	0.77
24.	335	Aluminium manufacturing	1963	0.73
25.	313	Manufacture of drugs and medicines	1794	0.67
26.	376	Manufacture of Bicycles, cycle rickshaws and parts	1794	0.67
27.	284	Printing and publishing newspaper	1664	0.62
28.	323	Manufacture of chinaware and porcelainware	1637	0.61
29.	314	Manufacture of perfumes, cosmetics, lotions etc.	1427	0.53
30.	205	Manufacture of Bakery products	1289	0.48
31.	362	Manufacture of dry and wet batteries	1228	0.46
32.	330	Iron and Steel industries	1162	0.43
33.	361	Manufacture of insulated wires and cables	1120	0.42
34.	380	Manufacture of medical, surgical and scientific equipment	1116	0.41
35.	289	Printing, publishing and allied activities not elsewhere classified	1082	0.40
36.	316	Manufacture of turpentine, synthetic resins, plastic materials etc	1078	0.39
37.	343	Manufacture of hand tools and general hardware	1015	0.38
		Other industries	13921	5.18
All industries			268869	100.00

3.9 *Wages to workers.*—The wages paid to workers in the factory sector during 1978-79 amounted to Rs. 77 crores against Rs. 70 crores in the previous year. The quantum of wages paid was the highest in electricity sector with 10.66 crores followed by cashewnut processing industry with 7.62 crores. There were 21 groups of industries with annual wage bill of Rs. 1 crore or more during the year. It may be seen that though cashewnut processing workers formed nearly 40% of the total workers, their share in the total wage bill of the sector was only 10%. On the contrary 8% of the total workers who found their employment in electricity undertaking shared 14% of the total

amount paid as wages. The low average annual earnings per worker in cashewnut processing industry was due to the seasonal nature of the industry. The quantum of wages paid to workers in tea processing and sawing and planing of wood and their products were more or less same with Rs. 128.97 lakhs and 124.94 lakhs respectively. There were 21 group of industries with wages given to worker Rs. 1 crore or more as against 20 groups during the previous year. They are arranged in descending order of magnitude in table 14.

TABLE 14

Arrangement of Industries According to Wages given to Workers

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Wages to workers (Rs. in lakhs)</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)
1.	40	Generation, transmission and Distribution of electric energy	1066.67	13.82
2.	214	Cashewnut processing	762.83	9.88
3.	231	Cotton spinning, and weaving in mills	572.35	7.41
4.	311	Manufacture of fertilizers and pesticides	446.69	5.79
5.	226	Manufacture of Beedi	412.74	5.35
6.	320	Manufacture of structural clay products	318.32	4.12
7.	975	Repair of motor vehicles and motor cycles	292.87	3.79
8.	357	Manufacture of machine tools, their parts and accessories	280.68	3.64
9.	310	Manufacture of Basic industrial organic and inorganic chemicals	277.33	3.59
10.	264	Manufacture of all types of textiles, garments including wearing apparels	236.21	3.06
11.	280	Manufacture of pulp, paper and paper board	188.70	2.44
12.	247	Spinning, weaving and finishing of other textiles	177.37	2.29
13.	376	Manufacture of bicycles, cycle-rickshaws and parts	168.23	2.18
14.	302	Manufacture of rubber products not elsewhere classified	163.41	2.12
15.	360	Manufacture of electrical industrial machinery and apparatus	161.61	2.09
16.	335	Aluminium manufacturing	158.15	2.05

(1)	(2)	(3)	(4)	(5)
17.	285	Printing & publishing of periodicals books, journals etc.	144.81	1.88
18.	212	Tea processing	128.97	1.67
19.	271	Sawing and planing of wood (other than ply wood)	124.94	1.62
20.	270	Manufacture of veneer, plywood and their products	118.06	1.53
21.	370	Ship building & repairing	113.68	1.47
		Other industries	1406.12	18.21
All industries			7720.74	100.00

3.10 *Emoluments*.—Wages, Salaries, bonus and inputed value of benefits in kind together constitute emoluments. The total amount thus paid by the factory sector during the year under report was estimated at Rs. 132 crores in 1978-79 as against Rs. 114 crores during the previous year. The highest emolument paid to employces was in electricity undertakings. It contributed to 17% of the total emoluments. The percentage contribution of cashewnut processing as well as cotton spinning and weaving industries were more or less same. There were 31 groups of industries with emoluments of Rs. 1 crore or more as against 28 groups during the previous year. They are arranged in descending order in able 15.

TABLE 15

Arrangement of Industries According to Total Emoluments

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Total emoluments (Rs. lakhs)</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)
1.	40	Generation, transmission and Distribution of electric energy	2354.33	17.87
2.	214	Cashewnut processing	1111.21	8.43
3.	231	Cotton spinning and weaving in mills	992.03	7.53
4.	311	Manufacture of fertilizers and pesticides	656.39	4.98
5.	226	Manufacture of Beedi	540.76	4.10
6.	310	Manufacture of organic and inorganic Chemicals	496.50	3.71

(1)	(2)	(3)	(4)	(5)
7.	357	Manufacture of Machine tools, their parts and accessories	438.05	3.32
8.	320	Manufacture of structural clay products	426.70	3.24
9.	280	Manufacture of pulp, paper and paperboard	420.01	3.19
10.	973	Repair of Motor Vehicles and Motor cycles	394.39	2.99
11.	247	Spinning, weaving and finishing of other textiles	280.16	2.13
12.	360	Manufacture of electrical industrial Machinery & apparatus	279.89	2.12
13.	335	Aluminium processing	271.07	2.06
14.	302	Manufacture of rubber products not elsewhere classified	265.68	2.02
15.	370	Ship building & repairing	252.58	1.92
16.	264	Manufacture of all types of textiles garments including wearing apparel	247.38	1.88
17.	212	Tea processing	213.57	1.62
18.	376	Manufacture of bicycle, cycle-rickshaws and parts	205.54	1.56
19.	300	Tyre and tube industries	201.65	1.53
20.	270	Manufacture of veneer, plywood and their products	186.55	1.42
21.	285	Printing and publishing of periodicals and books	177.89	1.35
22.	271	Sawing and planing of wood (other than plywood)	171.11	1.30
23.	284	Printing and publishing of newspaper	163.90	1.24
24.	314	Manufacture of perfumes, cosmetic, lotions hairdressing etc.	153.14	1.16
25.	361	Manufacture of insulated wires and cables	141.78	1.08
26.	235	Weaving and finishing of cotton textiles	137.40	1.04
27.	268	Manufacture of coir and coir products	134.88	1.02
28.	316	Manufacture of turpentine, synthetic resins etc.	132.23	1.00
29.	313	Manufacture of drugs and medicins	129.95	0.99
30.	362	Manufacture of Dry and Wet batteries	118.30	0.90
31.	380	Manufacture of Medical, Surgical & Scientific equipment	107.65	0.82
		Miscellaneous Industries	1367.48	10.42
All industries			13170.45	100.00

3.11 *Input.*—The total input comprises all manufacturing costs of the factory. The total inputs consumed by the factory sector during the year 1978-79 is estimated at Rs. 1081 crores as against 907 crores during the previous year. Out of this, 85% was cost of materials 5% cost of fuels and the remaining 10% cost of other items of input. There were 38 groups of industries with a consumption of inputs worth Rs. 5 crores or more. They are arranged in descending order of value of inputs in table 16.

TABLE 16

Arrangement of Industries according to Total Input

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Total inputs (Rs. in lakhs)</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)
1.	214	Cashewnut processing	6734.75	6.23
2.	311	Manufacture of fertilizers of pesticides	5233.70	4.84
3.	231	Cotton spinning and weaving in mills	4291.65	3.97
4.	212	Tea processing	4027.55	3.73
5.	302	Mnufacture of Rubber products not elsewhere classified	3776.54	3.49
6.	314	Manufacture of perfumes, cosmetic, lotions etc.	3216.10	2.98
7.	203	Canning, preserving and processing of fish	2550.80	2.36
8.	335	Aluminium manufacturing	2448.24	2.26
9.	310	Manufacture of Basic industrial organic and inorganic chemicals	2160.78	2.00
10.	211	Manufacture of other edible oils and fats	2063.71	1.91
11.	226	Manufacture of Beedi	1613.10	1.49
12.	361	Manufacture of insulated wires and cables	1598.62	1.48
13.	264	Manufacture of all types of textiles, garments including wearing apparel	1596.16	1.47
14.	247	Spinning,weaving and finishing of other textiles	1561.36	1.44
15.	360	Manufacture of electrical industrial machinery and apparatus	1504.39	1.39
16.	280	Manufacture of pulp, paper and paper board	1403.01	1.30
17.	316	Manufacture of turpentine, synthetic resins, plastic materials	1373.34	1.27

(1)	(2)	(3)	(4)	(5)
18.	268	Manufacture of coir and coir products	1351.14	1.25
19.	219	Manufacture of food products and not elsewhere classified	1308.05	1.21
20.	335	Weaving and finishing of cotton textiles in hand looms other than Khadi	1180.20	1.09
21.	300	Tyre and tube industries	1148.45	1.06
22.	40	Generation, transmission and distribution of electric energy	1076.68	1.00
23.	271	Sawing and planing of wood	1067.97	0.99
24.	330	Iron and Steel industries	805.57	0.75
25.	270	Manufacture of veneer, plywood and their products	800.51	0.74
26.	284	Printing and publishing of newspapers	782.28	0.72
27.	362	Manufacture of Dry and wet batteries	781.68	0.72
28.	204	Grain mill products	771.40	0.71
29.	313	Manufacture of drugs and medicines	727.99	0.67
30.	973	Repair of motor vehicles & Motor cycles	695.05	1.64
31.	320	Manufacture of structural clay products	644.74	0.60
32.	331	Foundries for casting a forging iron & steel	579.16	0.54
33.	201	Manufacture of Dairy products	574.51	0.53
34.	357	Manufacture of machine tools, their parts and accessories	561.27	0.52
35.	202	Canning & preservation of fruits and vegetables	550.40	0.51
36.	380	Manufacture of medical, surgical & scientific equipment	530.63	0.49
37.	220	Distilling, rectifying and blending of spirits	505.31	0.47
38.	205	Manufacture of bakery products	503.24	0.47
		Other industries	44014.03	40.71
All Industries			108114.06	100.00

3.12 *Output.*—The gross value of goods and services produced in the factory sector during 1978-79 is estimated at Rs. 1382 crores as against Rs. 1176 crores during the previous year. The value of output was highest in electricity sector with Rs. 75 crores as against Rs. 57 crores during the previous year. It produced 5.48% of the total output. The cashewnut processing produced 5.40% of output. There were 42 industry groups with an output of Rs. 5 crores or more during the year. They are arranged in the descending order of output in table 17.

TABLE 17

Arrangement of Industries According to total output

<i>Sl. No.</i>	<i>Code</i>	<i>Name of industry</i>	<i>Total output (Rs. in lakhs)</i>	<i>percentage to total</i>
(1)	(2)	(3)	(4)	(5)
1	40	Generation transmission and distribution of electric energy	7581.29	5.48
2	214	Cashewnut processing	7469.59	5.40
3	311	Manufacture of fertilizers and pesticides	6357.01	4.60
4	231	Cotton spinning, weaving in mills	5849.09	4.23
5	212	Tea processing	5514.54	3.99
6	302	Manufacture of rubber products not elsewhere classified	4895.01	3.54
7	314	Manufacture of perfumes, cosmetics, lotions, hair dressing	4049.39	2.93
8	310	Manufacture of basic & industrial organic and inorganic chemicals	3734.16	2.70
9	335	Alluminium processing	3573.81	2.58
10	203	Canning, preserving & processing of fish	2752.50	1.99
11	264	Manufacture of all types of textiles garments including wearing apparels	2676.22	1.93
12	226	Manufacture of beedi	2393.79	1.73
13	247	Spinning, weaving and finishing of other textiles	2255.36	1.63
14	360	Manufacture of electrical industrial machinery and apparatus	2191.98	1.59
15	211	Manufacture of other edible oils and fats	2136.30	1.55
16	280	Manufacture of pulp, paper and paper board	2106.87	1.52
17	361	Manufacture in insulated wires and cables	1757.31	1.27
18	268	Manufacture of coir and coir products	1626.32	1.18
19	300	Tyre and tube industries	1563.39	1.13
20	316	Manufacture of turpentine synthetic resins plastic materials etc.	1480.81	1.07
21	370	Ship building and repairing	1417.74	1.03
22	235	Weaving and finishing of cotton textiles	1417.61	1.03
23	320	Manufacture of structural clay products	1387.13	1.00
24	271	Sawing & planing of wood (other than plywood)	1371.89	1.99

(1)	(2)	(3)	(4)	(5)
25	219	Manufacture of food product not elsewhere classified	1329.72	0.96
26	270	Manufacture of veneer, plywood and their products	1273.38	0.92
27	973	Repair of motor vehicles and motor cycles	1164.33	0.84
28	313	Manufacture of Drugs & medicines	1110.84	0.80
29	357	Manufacture of machine tools, their parts & accessories	1105.11	0.80
30	362	Manufacture of dry and wet batteries	1062.04	0.77
31	284	Printing & publishing of newspapers	1028.38	0.74
32	330	Iron and Steel industries	959.55	0.69
33	380	Manufacture of medical, surgical and scientific equipments	860.87	0.62
34	204	Grain mill products	820.65	0.59
35	220	Distilling, rectifying & blending of spirits.	745.57	0.54
36	331	Foundries for casting & forging iron and steel	688.88	0.50
37	340	Manufacture of fabricated metal products such as metal cans from tin plate	670.05	0.48
38	201	Manufacture of dairy products	657.34	0.48
39	205	Manufacture of bakery products	634.29	0.46
40	376	Manufacture of bicycles and Cycle rickshaws & parts	630.53	0.46
41	202	Canning & preservation of fruits & vegetables	598.84	0.43
42	217	Manufacture of starch miscellaneous	524.80	0.34
		Miscellaneous	44,861.99	32.45
Total			1,38,286.27	100.00

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 manufacture sector is estimated at Rs. 264 crores in 1978-79 as against 236 crores during the previous year. The highest contribution towards value added came from electricity undertaking with 21.54%

of the total value added. Cotton spinning and waving in mills occupied the second place with 5.41 % of the total value added, which was more than that in the previous year's. But the total value added by tea processing industry decreased from 9 % in 1977-78 to 5.35 % in the reference year. There were 22 groups of industries with a value added by manufacture for more than Rs. 3 crores. They are arranged in descending order in table 18.

TABLE 18

**Arrangement of Industries according to value added by
Manufacture**

Sl. No.	Code	Name of industry	Value added (Rs in lakhs)	percentage to total
(1)	(2)	(3)	(4)	(5)
1	40	Generation, transmission and distribution of electric energy	5689.03	21.54
2	231	Cotton spinning, weaving in mills	1428.63	5.41
3	212	Tea processing	1412.39	5.35
4	310	Manufacture of basic and industrial organic and inorganic chemicals	1276.77	4.83
5	335	Aluminium manufacturing	1057-80	4.01
6	264	Manufacture of all types of textiles garments including wearing apparel	1055.87	4.00
7	302	Manufacture of rubber products not elsewhere classified	1023.94	3.88
8	370	Ship building and repairing	819.00	3.10
9	314	Manufacture of perfumes, cosmetics, lotions hair dressing	794.37	3.01
10	226	Manufacture of beedi	768.41	2.91
11	214	Cashewnut processing	704.13	2.67
12	320	Manufacture of structural clay products	682.55	2.58

1	2	3	4	5
13	280	Manufacture of pulp, paper and paper board	653.40	2.47
14	247	Spinning, weaving and finishing of other textiles	623.78	2.36
15	360	Manufacture of electrical industrial Machinery and apparatus	618.30	2.34
16	357	Manufacture of machine tools, their parts and accessories	478.46	1.81
17	973	Repair of motor vehicles and motor cycles	451.32	1.70
18	270	Manufacture of veneer, plywood and their products	428.84	1.62
19	311	Manufacture of fertilizers and pesticides	374.03	1.42
20	300	Tyre and tube industries	368.65	1.40
21	313	Manufacture of drugs & medicines	366.10	1.39
22	380	Manufacture of medical, surgical and scientific equipment	304.62	1.15
		Miscellaneous	5030.04	19.05
		Total	26410.43	100.00

3.14 *Structural ratio of selected industries.*—The structural ratios in respect of 27 industries have been worked out and presented in table 19. These industries have been selected on the basis of their contribution towards value added by manufacture.

The table shows that capital employee ratio was very high in electricity undertaking with Rs. 116287 while it was very low in beedi industry with only Rs. 173 against the state average of Rs. 25026. The amount of fixed capital required to employ one person in cashew processing industry which provides nearly 35% of the total employment in the factory sector was the second lowest with Rs. 266. Out of the 27 industries considered, fixed capital per employee was less than the state average in 17 industries. Out of the remaining 10 industries only four industries viz electricity undertaking, manufacture of pulp, paper and paper board, organic and inorganic chemicals and fertilizers and pesticides had a capital employee ratio of more than Rs. 50,000/-

Productivity of labour measured by output per employee was lowest in cashew processing with Rs. 7911 while it was the highest in the manufacture of perfumes, cosmetics, soaps etc with Rs. 2,83,769 as against Rs. 51,433 for all

industries together. The output per employee was less than the state average, in highly capital intensive industries like electricity, machine tools etc and in the labour intensive industries like cashewnut processing, beedi manufacturing, sawing and planing of wood and structural clay products industries and repair services.

The average annual earnings of an employee was lowest in cashewnut processing industry with only Rs. 11,77 as against Rs. 16262 for organic and inorganic chemicals and Rs. 5,127 for the factory sector as a whole. The average annual earnings per employee in cashewnut processing, tea processing and sawing and planing of wood were less than the state average. About 40% of the total employment was in these three industries alone. The average emoluments per employee in 19 industries were more than state average. The average annual emoluments per employee were more than Rs. 10,000 in seven industries

The input output ratio (0.78) in industries show a steady trend during the year 1978-79. Out of the 27 industries this ratio was highest in cashewnut processing with 0.90, while it was very low in electricity with 0.14.

The amount of fixed capital required to produce output worth Re. one was highest in ship building and repairing industry with Rs. 5.65 followed by electricity with Rs. 4.64 as against one paise for beedi, 3 paise for cashew and 49 paise for all industries taken together. This shows that while beedi and cashewnut industries are highly labour intensive, electricity undertakings are highly capital intensive. Pulp, paper and paper board, organic and inorganic chemicals and fertilizers and pesticides are the other important industries which required capital above state average to produce one unit of output.

The fixed capital required to generate value added worth Re. 1 was very high in fertilizers and pesticides with Rs. 13.47 as against Rs. 6.18 in electricity in Rs. 2.55 for the industries sector as a whole. The amount was only 4 paise in beedi and 36 paise in cashewnut processing industry. The capital output co-efficient (ratio of fixed capital to value added) in cotton textile in mills, spinning and weaving of other textiles, pulp, paper and paper board industry tyres and tubes, organic and inorganic chemical, machine tools, electrical machinery and parts and medical surgical and scientific equipments were higher than 1.

The ratio of value added to output was highest in electricity with 0.75 and was lowest in fertilizers and pesticides with 0.06 as against the state average of 0.20. The state ratio was 0.20 during 1977-78 also. The ratio was lower than the state average in cashewnut processing, cotton textiles, coir and fertilizers and pesticides industries.

The ratio of emoluments to value added was highest in fertilizers and pesticides with 1.75 as against 0.53 for the factory sector as a whole. The ratio was the lowest in tea processing with 0.15.

TABLE 19

Structural ratios in selected Industries

Sl.No.	Industry code	Description of industry	Fixed capital per employee (Rs.)	Emoluments per employee (Rs.)	Output per employee (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
1	40	Generation and transmission of electric energy	116287	7782	25060
2	212	Tea processing	9628	3829	98880
3	214	Cashewnut processing	266	1177	7911
4	220	Distilling, rectifying and blending of spirits	22775	8098	110291
5	226	Beedi manufacturing	173	2906	12448
6	231	Cotton spinning and weaving in mills	12812	8672	51133
7	235	Spinning, weaving and finishing of cotton textiles in handlooms	2401	3502	36127
8	247	Spinning weaving and finishing of other textiles	29780	12326	99224
9	264	Manufacture of all types of textiles, garments including wearing apparel	14210	9332	100951
10	268	Coir manufacturing	6106	4776	57589
11	270	Manufacture of venners and plywood	9781	5345	36487
12	271	Sawing and planing of wood other than plywood	2260	2005	16044
13	280	Manufacture of pulp, paper and paper board	56188	13523	67832
14	284	Printing and publishing of newspapers	8883	9850	61802
15	300	Tyre and tube industries	26223	9756	75636

Sl.No.	Industry code	Value added per employee Rs.	input output ratio	Ratio of fixed capital to output	Ratio of fixed capital value added to output	Ratio of emolument to value added	Ratio of operating surplus to output	Ratio of operating surplus to productive capital			
(1)	(2)	(7)	(8)	(9)	(10)	(12)	(13)	(14)			
1	40	18805	0.14	4.64	6.18	0.75	0.41	0.44	0.08		
2	212	25325	0.73	0.10	0.38	0.26	0.15	0.22	10.7		
3	214	746	0.90	0.03	0.36	0.09	1.58	(-)	0.05	(-)	0.27
4	220	31769	0.68	0.21	0.72	0.29	0.25	0.21	0.39		
5	226	4048	0.67	0.01	0.04	0.33	0.72	0.09	1.34		
6	231	12489	0.73	0.25	1.03	0.24	0.69	0.07	0.19		
7	235	5805	0.83	0.07	0.41	0.16	0.60	0.06	0.35		
8	247	27443	0.69	0.30	1.09	0.28	0.45	0.15	0.32		
9	264	39829	0.60	0.14	0.36	0.39	0.23	0.30	0.60		
10	268	9521	0.83	0.11	0.67	0.16	0.52	0.08	0.26		
11	270	12288	0.62	0.27	0.80	0.34	0.44	0.19	0.39		
12	271	3333	0.77	0.14	0.68	0.21	0.60	0.08	0.29		
13	280	21037	0.66	0.83	2.67	0.31	0.64	0.11	0.10		
14	284	13764	0.76	0.14	0.65	0.22	0.72	0.66	0.19		
15	300	17835	0.73	0.35	1.47	0.24	0.55	0.11	0.17		

<i>Sl. No.</i>	<i>Industry code</i>	<i>Description of Industry</i>	<i>Fixed capital employee (Rs.)</i>	<i>Emoluments employee (Rs.)</i>	<i>Output employee (Rs.)</i>
(1)	(2)	(3)	(4)	(5)	(6)
16	302	Manufacture of rubber products others	9081	3712	68385
17	310	Manufacture of organic and inorganic chemicals	74384	16262	122271
18	311	Manufacture of fertilizers and pesticides	98055	12773	123701
19	313	Manufacture of drugs and medicines	10486	7244	61920
20	314	Manufacture of perfumes, cosmetics, soaps etc.	25580	10732	283769
21	320	Manufacture of structural clay products	5202	3713	12071
22	335	Aluminium manufacturing	25764	13809	182059
23	357	Manufacture of machine tools	15727	12663	31949
24	360	Manufacture of electrical in industrial machinery and apparatus and parts	16903	7188	56471
25	370	Ship building and repairing	316999	9999	56126
26	380	Manufacturing of medical, surgical and scientific equipments	29367	9646	77139
27	973	Repair of motor vehicles	3748	7976	23546

Sl.No.	Industry code	Value added employee (Rs.)	Input/output ratio	Ratio of fixed capital to output	Ratio of fixed capital value added to output	Ratio of emoluments to value added	Ratio of operating surplus to output	Ratio of operating surplus to productive capital	
(1)	(2)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
16	302	14305	0.77	0.13	0.66	0.21	0.26	0.16	0.86
17	310	41806	0.57	0.61	0.78	0.34	0.39	0.21	0.23
18	311	7278	0.82	0.79	13.47	0.06	1.75	(-)-0.04	(-)-0.04
19	313	20407	0.65	0.17	0.51	0.33	0.33	0.21	0.56
20	314	55667	0.79	0.09	0.46	0.20	0.19	0.16	0.56
21	220	5940	0.46	0.43	0.88	0.49	0.63	0.18	0.28
22	335	53887	0.68	0.14	0.48	0.30	0.26	0.22	0.52
23	357	13832	0.50	0.49	1.14	0.43	0.92	0.04	0.04
24	360	15878	0.68	0.30	1.06	0.28	0.45	0.15	0.17
25	370	32423	0.31	5.65	9.78	0.58	0.31	0.40	0.06
26	380	27296	0.61	0.38	1.08	0.35	0.35	0.23	0.20
27	973	9427	0.59	0.16	0.41	0.39	0.87	0.05	0.20

RELATIVE IMPORTANCE OF DIFFERENT INDUSTRIES

4.1. In order to assess the relative importance of different industries in the factory sector, the establishments covered in the ASI 1978-79 have been classified into major industry groups (two digit level of classification) and have been ranked in the descending order of contribution to value added by manufacture and presented in table 20. Some other important aggregates like fixed capital, working capital, outstanding loan, employment, earnings, gross input, output etc are given in table 21 and their percentages in table 22. Ranking according to value added shows that the first four places were occupied by (i) electricity (21.5%), (ii) chemical and chemical products (11.0%) (iii) food products (10.5%) and (iv) rubber and plastic industries, (8.7%). These four industries employed 60% of the total employees, and accounted for 72% of input, 68% of the total output, and 52% of total value added in the registered industrial sector of the state. These four groups had nearly 72% of the total fixed capital. Electricity alone accounted for the major share (73% of the total fixed capital owned by the above four industry groups). It may be noted that according to the ranking electricity industry occupied, the first place and it alone accounted for 21.5% of value added, 11.2% of the total employees 17% of the total emoluments and 5.5% of the total output originating from the registered industrial sector in the State. This industry is highly capital intensive and accounted for 52.3% of the total fixed capital investment. Manufacture of chemical and chemical products industries occupied the second place. This industry accounted for 11% of value added but employed only 4% of the total employees in the factory sector. The gross value of output produced by this group constituted 12.3% of the total output, which was more than the output of electricity. Fixed capital investment in the sector was only 13% of the industries taken as a whole and 1/4 of fixed capital in electricity. The third place was occupied by the manufacture of food products, which was in the first place during 1977-78. This industry accounted for 10% of the total state income-generated in the factory sector by employing 40.1% of the total employees. It shows that food production industries in the state are labour intensive. Rubber and plastic industry which has high potential for development in the state had only the fourth place in the list of industries.

4.2 Table 22, shows that the contribution of repair services (code-97), manufacture of metal products and parts (code-34) and other manufacturing services (code-38) towards the various aggregates were below 2% of the total of each aggregates and the contribution of water works and supply industry group was almost negligible.

TABLE 20

Ranking of Major Industry groups according to value added

<i>Industry code (Major group)</i>	<i>Description</i>	<i>Value added Rs. in crores</i>	<i>Rank</i>
(1)	(2)	(3)	(4)
40	Electricity	56.89	1
31	Manufacture of chemicals and chemical products (except products of petroleum & Coal)	29.03	2
20&21	Manufacture of food products	27.66	3
30	Manufacture of Rubber, plastic petroleum and coal products	22.85	4
23	Manufacture of cotton textiles	16.83	5
26	Manufacture of textile products (including wearing aparels other than foot wear)	13.43	6
33	Basic metal and alloys industries	12.88	7
36	Manufacture of electrical machinery, apparatus and supplies and parts	11.99	8
28	Manufacture of paper and paper products and printing, publishing and allied industries	11.95	9
37	Manufacture of transport equipments and parts	10.22	10
22	Manufacture of beverages, tobacco and tobacco products	9.83	11
32	Manufacture of non metplic mineral proudcts	8.99	12
27	Manufacture of wood and wood products, furniture and fixtures	7.87	13
24	Manufacture of wool, silk and synthetic fibre textiles	6.24	14
35	Manufacture of machinery, machine tools and parts except elecrical machinery	5.43	15
97	Repair Services	4.51	16
34	Manufacture of metal products and parts except machinery and transport equipments	3.90	17
38	Other manufacturing industries	3.13	18
42	Water works and supply	0.47	19

Principal Characteristics for each Major Industry Groups

(Rs. lakhs)

Sl. No. Industry code (Major groups)	Description	No. of units (4)	fixed capital (5)	working capital (6)	productive capital (7)	Invested Out standing loans (8)	No. of persons employed (9)	(10)
1	40 Electricity	7	35179	4868	40047	37963	31108	30252
2	31 Manufacture of chemical and chemical products (except products of petroleum and coal)	108	8735	4455	13190	13784	6746	13037
3	20-21 Manufacture of food products	562	1911	2676	4587	5645	4753	10791
4	30 Manufacture of Rubber, plastic, petroleum and coal products	134	2483	1474	3956	6533	3231	9642
5	23 Manufacture of cotton textiles	137	1582	985	2567	3336	2236	15992
6	26 Manufacture of textile products (including wearing apparel other than foot wear)	91	565	1303	1868	1750	953	6005
7	33 Basic metal and alloys industries	41	1008	1248	2256	2623	1118	4046
8	36 Manufacture of electrical machinery, apparals and supplies and parts)	33	1598	1933	3531	3609	2623	7185
9	28 Manufacture of paper and paper products and printing and publishing and allied industries	127	2236	1241	2477	3532	1083	8763
10	37 Manufacture of transport, equipment and parts	32	8134	1253	9387	11005	5411	4320
11	22 Manufacture of beverages, tobacco and tobacco products	345	290	427	717	742	184	18876
12	32 Manufacture of non metallic mineral products	266	904	545	1449	1439	815	13884
13	27 Manufacture of wood and wood products furniture and fixtures	528	582	567	1149	1236	966	13082
14	24 Manufacture of wool, silk and synthetic fiber textiles	4	677	381	1058	1316	863	2273
15	35 Manufacture of machinery, mochine tools and parts except electrical machinery	51	629	646	1275	1337	223	4333
16	97 Repair services	96	185	98	283	249	28	4945
17	34 Manufacture of metal products and parts except machinery and transport equipments	102	232	390	623	616	313	2919
18	38 Other manufacturing industries	16	331	663	994	925	450	1274
19	42 Water works and supply	4	25	..	25	25	..	130
	All industries	2684	67286	25153	92439	97665	63104	268869

St. No.	Industry code	Description	Total		Total Deprecia- tion	Value added	Factor	Net	
			emolument (11)	input (12)					output (13)
(1)	(2)	(3)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1	40	Electricity	2354	1077	7581	816	5689	1946	3743
2	31	Manufacture of chemical and chemical products (except products of petroleum and coal)	1588	12968	17025	1155	2903	1021	1882
3	20-21	Manufacture of food products	1673	19558	22547	222	2766	610	2156
4	30	Manufacture of Rubber, plastic, petroleum and coal products	630	44433	47179	460	2285	287	1998
5	23	Manufacture of cotton textiles	1149	5558	7383	141	1683	252	1431
6	26	Manufacture of textile products (including wearing apparel other than foot wear)	400	3040	4425	42	1343	152	1191
7	33	Basic metal and alloys industries	417	3833	5222	102	1288	143	1145
8	36	Manufacture of electrical machinery, apparatus and supplies and parts	626	4268	5627	159	1199	356	843
9	28	Manufacture of paper and paper products and printing and publishing and allied industries	827	2686	3974	93	1195	151	1044
10	37	Manufacture of transport equipment and parts	458	846	2048	180	1022	473	549
11	22	Manufacture of beverages, tobacco and tobacco products	596	2118	3139	38	983	29	954
12	32	Manufacture of non metallic mineral products	601	1087	2069	83	899	87	812
13	27	Manufacture of wood and wood products furniture and fixtures	417	2047	2900	66	787	119	668
14	24	Manufacture of wool, silk and synthetic fiber textiles	280	1561	2255	70	624	97	527
15	35	Manufacture of machinery, machine tools and parts except electrical machinery	484	687	1302	73	543	96	447
16	97	Repair services	394	695	1164	18	451	9	442
17	34	Manufacture of metal products and parts except machinery and transport equipments	153	1075	1483	19	390	44	346
18	38	Other manufacturing industries	112	551	889	26	313	66	247
19	42	Water works and supply	11	26	74	1	47	..	47
All Industries			13170	108114	138286	3762	26410	5938	20472

TABLE 22

Principal characteristics for each Major Industry Group (Percentage Distribution)

Sl. No.	Industry code (Major group)	Description	(4) Factories units	(5) Fixed capital	(6) Working capital	(7) Productive capital	(8) Invested capital	(9) Outstand- ing loans	(10) No. of persons employed
1	40	Electricity	0.3	52.3	19.3	43.2	38.9	49.3	11.2
2	31	Manufacture of chemicals and chemical products (except products of petroleum and coal)	4.0	13.0	17.7	14.3	14.1	10.7	4.8
3	20&21	Manufacture of food products	20.9	2.8	10.7	5.0	5.8	7.5	40.1
4	30	Manufacture of Rubber plastic, petroleum and coal products	5.0	3.7	5.9	4.3	6.7	5.1	3.6
5	23	Manufacture of cotton textiles	5.1	2.4	3.9	2.8	3.4	3.5	6.0
6	26	Manufacture of textile products (including wearing apparel other than wear	3.4	0.8	5.2	2.0	1.8	1.5	2.2
7	33	Basic metal and alloys industries	1.5	1.5	5.0	2.4	2.7	1.8	1.5
8	36	Manufacture of electrical machinery apparatus and supplies and parts	1.2	2.4	7.7	3.8	3.7	4.2	2.7
9	28	Manufacture of paper and paper products and printing and publishing and allied industries	4.7	3.3	4.9	3.8	3.6	1.7	3.3
10	37	Manufacture of transport equipment and parts	1.2	12.1	5.0	10.2	11.2	8.6	1.6
11	22	Manufacture of beverages, tobacco and tobacco products	12.8	0.4	1.7	0.8	0.8	0.3	7.0
12	32	Manufacture of non-metallic mineral products	9.9	1.3	2.2	1.6	1.5	1.3	5.2
13	27	Manufacture of wood and wood products, furniture and fixtures	19.7	0.9	2.2	1.2	1.3	1.5	4.9
14	24	Manufacture of wool, silk and synthetic fiber textiles	0.2	1.0	1.5	1.1	1.4	1.4	0.8
15	35	Manufacture of machinery, mechanic tools and parts except electrical machinery	1.9	0.9	2.6	1.4	1.4	0.3	1.6
16	97	Repair Services	3.6	0.3	0.4	0.3	0.2	0.1	1.8
17	34	Manufacture of metal products and parts except machinery and transport equipment	3.8	0.3	1.5	0.7	0.6	0.5	0.1
18	38	Other manufacturing industries	0.6	0.5	2.6	1.1	0.9	0.7	0.5
19	42	Water works and supply	0.2	0.1	..	0.1	0.0	..	0.1
All industries			100.00	100.00	100.00	100.00	100.00	100.00	100.00

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Sl. No.	Industry Code (Major group)	Description	Total emoluments input (11)	Total output (12)	Depreciation (13)	Value added (14)	Factor payments (15)	Net income (16)	(17)
1	40	Electricity	17.9	1.0	5.5	21.7	21.5	32.3	18.3
2	33	Manufacture of chemicals and chemical products (except products of petroleum and coal)	12.1	12.0	12.3	30.7	11.00	17.2	9.2
3	30 & 21	Manufacture of food products	12.7	18.1	16.3	5.9	10.5	10.3	10.5
4	30	Manufacture of Rubber plastic, petroleum and coal products	4.8	41.1	34.1	12.2	8.7	4.8	9.7
5	23	Manufacture of cotton textiles	8.7	5.1	5.3	3.7	6.4	4.2	7.0
6	26	Manufacture of textile products (including wearing apparel other than foot wear)	3.0	2.8	3.2	1.1	5.1	2.6	5.8
7	33	Basic metal and alloys industries	3.2	3.6	3.8	2.7	4.9	2.4	5.6
8	36	Manufacture of electrical machinery apparatus and supplies and parts	4.8	4.0	4.1	4.2	4.5	6.0	4.1
9	28	Manufacture of paper and paper products and printing and publishing and allied industries	6.3	2.5	2.9	2.5	4.5	2.5	5.1
10	37	Manufacture of transport equipment and parts	3.5	0.8	1.5	4.8	3.9	8.0	2.7
11	22	Manufacture of beverages, tobacco and tobacco products	4.5	2.0	2.3	1.0	3.7	0.5	4.7
12	32	Manufacture of non-metallic mineral products	4.5	1.0	1.5	2.2	3.4	1.5	4.0
13	27	Manufacture of wood and wood products, furniture and fixtures	3.1	1.9	2.1	1.7	3.0	2.0	3.3
14	24	Manufacture of wool, silk and synthetic fibre textiles	2.1	1.4	1.6	1.9	2.4	1.6	2.6
15	35	Manufacture of machinery, machine tools and parts except electrical machinery	3.6	0.6	0.9	2.9	2.0	1.6	2.2
16	97	Repair services	3.0	0.6	0.8	0.5	1.6	0.2	2.1
17	34	Manufacture of metal products and parts except machinery and transport equipment	1.2	1.0	1.1	0.5	1.5	0.7	1.7
18	38	Other manufacturing industries	0.9	0.5	0.6	0.7	0.2	1.1	1.2
19	42	Water works and supply	0.1	0.0	0.1	0.1	0.2	..	0.2
All industries			100.00	1000.0	100.00	100.00	100.00	100.00	100.00

4.4 Structural ratios in respect of each of these major industry groups are presented in table 23, the industry groups have been arranged in the ascending order of capital value added ratio. The table shows that transport equipment and parts industry had highest capital, value added ratio (7.96) followed by electricity (6.18) chemicals and chemical products (3.01) and paper and paper products (1.87). The major industry group beverages, tobacco and tobacco products recorded the lowest ratio (0.30) because of the presence of beedi industry which is a highly labour intensive industry and required very low fixed capital to work with. The fixed capital per employee was lowest in beverages tobacco and tobacco products industry with Rs. 1535 and the same was highest in the transport equipment and parts. The average emoluments per employee were highest (Rs. 12326) in wool silk and synthetic fibre textiles industry. As in the last year, average earnings were the lowest (Rs. 1550) in food products industry. This was mainly due to the lower wages (Rs. 878 only) paid to the workers in the cashewnut processing industry which alone accounted for 89 per cent of the total employment in the major industry group. Beverages, tobacco and tobacco products also had a very low average emolument rate (Rs. 3155). The output per employee was the lowest in non-metallic product with Rs. 14,902 and the same was the highest in rubber, plastic petroleum and coal products industry with Rs. 489305. Value added per employee was lowest in 'food products' with Rs. 2563 while it was the highest in 'other manufacturing industries' with Rs. 43207. The ratio of operating surplus to productive capital was highest in 'water work and supply' (1.42) while it was lowest in the 'manufacture of machinery, machine tools and parts' (0.05).

Detailed table in respect of each industry is given in Appendix.

TABLE 24

Important structural ratios of Industry by Groups Major

<i>Sl. No.</i>	<i>Industry code</i>	<i>Description of industry</i>	<i>Ratio of F.C. to value added</i>	<i>Ratio of F.C. to gross output</i>	<i>Ratio of value gross output</i>
(1)	(2)	(3)	(4)	(5)	(6)
1	22	Manufacture of beverages, Tobacco and tobacco products	0.30	0.09	0.31
2	97	Repair services	0.41	0.16	0.39
3	26	Manufacture of textile products including weaving apparel.	0.42	0.13	0.30

4	42	Water works and supply	0.53	0.34	0.63
5	34	Manufacture of metal products and parts except machinery and transport equipment	0.60	0.16	0.26
6	20-21	Manufacture of food products	0.69	0.09	0.12
7	27	Manufacture of wood and wood products furniture and fixtures	0.74	0.20	0.27
8	33	Basic metal and alloy industries	0.78	0.19	0.25
9	23	Manufacture of cotton textiles	0.94	0.21	0.23
10	32	Manufacture of non-metallic mineral products	1.01	0.44	0.44
11	38	Other manufacturing industries	1.06	0.37	0.35
12	24	Manufacture of wool, silk and synthetic fiber textiles	1.09	0.30	0.28
13	30	Manufacture of rubber, plastic, petroleum and coal products	1.09	0.05	0.05
14	35	Manufacture of machinery, machine tools, and parts except electrical machinery	1.16	0.48	0.42
15	36	Manufacture of electrical machinery, apparatus, appliances and supplies and parts	1.33	0.28	0.21
16	28	Manufacture of paper and paper products, printing, publishing and allied industries	1.87	0.56	0.30
17	31	Manufacture of chemical and chemical products except products of petroleum and coal	3.01	0.51	0.17
18	40	Electricity	6.18	4.64	0.75
19	37	Manufacture of transport equipment and parts	7.96	3.97	0.50
All industries			2.55	0.49	0.19

Important Structural Ratios of Industry by Major Groups

Sl. No. Industry code	Description of industry	Ratio of F.C. to value added	Ratio of gross output to value added	Ratio of gross input to value added	Ratio of operating surplus to value added	Ratio of fixed capital per employee	Emolument per employee	Output per employee	Value added			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	22	Manufacture of beverages, Tobacco and tobacco products	0.30	0.09	0.31	0.68	0.61	0.54	1535	3155	16631	5209
2	97	Repair services	0.41	0.16	0.39	0.60	0.87	0.20	3748	7876	23546	9127
3	26	Manufacture of textile products including weaving	0.42	0.13	0.30	0.69	0.30	0.51	9404	6654	73689	22358
4	42	Water works and supply	0.53	0.34	0.63	0.35	0.24	1.42	19000	8708	56446	3576
6	20-21	Manufacture of food products	0.69	0.09	0.12	0.87	0.61	0.24	1771	1550	20894	2563
7	27	Manufacture of wood and wood products furniture and fixtures	0.74	0.20	0.27	0.71	0.53	0.32	4451	3188	22163	6014
8	33	Basic metal and alloy industries	0.78	0.19	0.25	0.73	0.33	0.38	24908	10309	129072	31827
9	23	Manufacture of cotton textiles	0.94	0.21	0.23	0.75	0.68	0.21	9892	7185	46163	10527
10	32	Manufacture of non-metallic mineral products	1.01	0.44	0.44	0.53	0.67	0.21	6513	4329	14902	6478
11	38	Other manufacturing industries	1.06	0.37	0.35	0.62	0.36	0.20	25972	8782	69790	4320

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
12	24	Manufacture of wool, silk and synthetic fibertextiles	1.09	0.30	0.28	0.69	0.45	0.33	29780	12326	99224	27443
13	30	Manufacture of rubber, plastic petroleum and coal products	1.09	0.05	0.05	0.94	0.28	0.42	25749	6534	489305	23703
14	35	Manufacture of machinery, machine, tools, and parts except electrical machinery	1.16	0.48	0.42	0.53	0.89	0.05	14510	11163	30038	12524
15	36	Manufacture of electrical machinery, apparatus, appliances and supplies and parts and supplies and parts	1.33	0.28	0.21	0.76	0.52	0.16	22235	8716	78317	16692
16	28	Manufacture of paper and paper products printing publishing and allied industries	1.87	0.56	0.30	0.68	0.69	0.16	25521	9440	45352	13642
17	31	Manufacture of chemical and chemical products except product of petroleum and coal	3.01	0.51	0.17	0.76	0.55	0.10	67003	12184	130592	22266
18	40	Electricity	6.18	4.64	0.75	0.14	0.41	0.08	116287	7782	25060	3559
19	37	Manufacture of transport equipment and parts	7.96	3.97	0.50	0.41	0.45	0.06	188292	10605	47414	23661
All industries			2.55	0.49	0.19	0.78	0.52..	0.14	25026	4898	51433	9823

APPENDIX I

Annual Survey of Industries 1978-79

(Rs. in lakhs)

Sl. No.	Industry Code	Name of Industry	No. of units	Fixed Capital	Working Capital	Productive Capital	Invested Capital	Outstanding loans
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	40	Generation, transmission and distribution of electric energy	7	35179.19	4868.26	40047.45	37963.86	31108.09
2.	201	Manufacture of dairy products	7	85.62	(-)-10.95	74.67	92.70	38.73
3.	202	Canning and preservation of fruits and vegetables	12	20.80	21.73	42.53	93.52	64.04
4.	203	Canning and processing of fish	57	421.66	41.58	463.24	639.09	1254.30
5.	204	Grain mill products	69	109.62	25.85	135.47	158.98	91.23
6.	205	Manufacture of bakery products	7	210.64	152.28	362.92	469.83	562.31
7.	211	Manufacture of other edible oils	33	76.41	94.96	171.37	230.51	104.32
8.	212	Tea Processing	84	536.96	582.21	1119.17	1022.47	24.91
9.	213	Coffee curing, roasting and grinding	5	16.48	23.23	39.71	21.34	2.86
10.	214	Cashewnut processing	267	250.88	1267.68	1518.56	2339.71	2286.36
11.	215	Manufacture of ice	4	9.35	3.92	13.27	15.05	19.79
12.	217	Manufacture of starch	7	102.47	179.39	281.84	193.51	240.60
13.	219	Manufacture of food products others	10	70.33	294.21	364.56	368.11	63.06

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14.	220	Distilling and blending of spirits	4	153.96	261.66	415.62	413.45	60.95
15.	226	Manufacture of beedi	341	135.85	165.19	301.00	328.54	122.78
16.	231	Cotton spinning and weaving in mills	24	1465.55	804.60	2270.17	3011.32	2052.88
17.	235	Weaving and finishing of textiles handloom	98	94.23	162.63	256.86	274.55	143.40
18.	236	Weaving and finishing powerlooms	11	19.85	15.38	35.22	46.34	39.16
19.	239	Cotton textiles not elsewhere classified	4	2.32	2.16	4.47	3.59	0.91
20.	247	Spinning and weaving of other textiles	4	676.91	380.83	1057.74	1316.07	862.88
21.	260	Knitting mills	4	14.70	34.17	48.87	39.47	44.48
22.	264	Manufacture of garments	4	376.72	970.20	1346.92	1327.84	505.44
23.	265	Manufacture of rain coats and hats	8	0.87	2.00	2.87	2.65	2.11
24.	268	Manufacture of coir and coir products	75	172.43	296.68	469.11	380.66	400.78
25.	270	Manufacture of veneers and plywood	50	341.37	273.45	614.82	758.28	753.87
26.	271	Sawing and planing of wood other than plywood	436	193.28	192.17	385.45	346.50	169.04
27.	272	Cane and bamboo works	6	2.93	1.47	4.40	7.40	1.46
28.	273	Manufacture of wooden doors and windows	4	7.65	15.17	22.82	23.09	2.90
29.	274	Manufacture of wooden industrial goods	10	12.00	3.35	15.35	20.37	8.89
30.	276	Manufacture of wooden furniture and fixtures	20	25.04	81.01	106.07	80.08	30.05
31.	280	Manufacture of paper and paper board	7	1745.20	636.16	2381.36	2598.21	754.93
32.	281	Manufacture of containers and boxes of paper	13	44.60	27.12	71.72	95.44	55.32

33.	284	Printing and publishing of newspaper	15	147.82	197.35	345.17	232.62	163.56
34.	285	Printing and publishing of books and journals	52	177.32	246.64	423.95	380.26	45.76
35.	289	Printing picture and post cards	40	121.47	133.97	255.44	225.98	63.23
36.	300	Tyre and tube industries	17	542.03	464.67	1006.72	1058.40	855.22
37.	302	Manufacture of rubber products others	111	1917.87	1000.61	2918.46	5444.23	2350.73
38.	303	Manufacture of plastic and plastic products	6	22.77	8.24	31.01	29.99	25.23
39.	310	Manufacture of organic and inorganic chemicals	24	2271.68	1143.33	3415.01	3582.13	2321.60
40.	311	Manufacture of fertilisers and pesticides	20	5039.05	2084.41	7123.46	7238.20	3466.25
41.	313	Manufacture of drugs and medicines	35	188.11	234.53	422.62	457.97	244.21
42.	314	Manufacture of perfumes and lotions	7	365.03	788.84	1153.88	1361.59	558.72
43.	315	Manufacture of edible oils	3	64.42	37.97	102.39	109.43	39.83
44.	316	Manufacture of turpentine	9	806.53	164.72	971.24	1030.90	115.40
45.	317	Manufacture of matches	10	0.37	1.91	2.28	4.18	..
46.	320	Manufacture of structural clay products	245	597.78	300.52	898.30	906.04	302.23
47.	323	Manufacture of chinaware and porcelainware	12	229.87	94.42	324.29	340.30	451.08
48.	324	Manufacture of cement	3	31.24	81.17	112.41	107.40	2.72
49.	329	Manufacture of non-metallic mineral products	6	45.34	68.86	114.21	84.82	59.02
50.	330	Iron and steel industries	12	327.04	55.66	382.71	510.90	694.94
51.	331	Casting and forging of iron and steel	20	174.97	191.91	366.88	388.52	357.63
52.	335	Aluminium manufacturing	9	505.75	1000.33	1506.10	1723.18	65.91

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
53.	340	Manufacture of metal cane and tinplate	29	119.34	134.71	254.05	233.14	59.09
54.	341	Manufacture of structural metal products	25	11.34	110.49	122.23	101.41	18.29
55.	342	Manufacture of metal furniture and fixtures	10	18.10	3.66	21.85	32.41	35.83
56.	343	Manufacture of hand tools and hardware	20	53.72	74.63	128.35	125.66	144.25
57.	345	Manufacture of metal utensils and cutlary	18	29.17	66.96	96.13	123.26	55.12
58.	350	Manufacture of agricultural machinery and equipment	6	5.98	30.05	36.03	33.41	6.84
59.	353	Industrial machinery for food and textiles	6	12.95	20.06	33.01	33.15	..
60.	354	Industrial machinery for other than food	11	20.92	11.09	32.01	39.78	26.11
61.	357	Manufacture of machine tools	10	544.01	559.44	1103.45	1154.61	151.03
62.	359	Manufacture or repair of non-electrical machinery equipments etc.	18	44.87	25.80	70.67	75.67	38.73
63.	360	Manufacture of transformers and electricals	11	658.19	1297.47	1955.66	1682.82	1068.91
64.	361	Manufacture of insulated wires and cables	5	242.09	433.50	675.59	834.94	686.07
65.	362	Manufacture of dry and wet batteries	5	413.26	(-)-1.63	411.63	699.68	547.98
66.	366	Manufacture of electronic components	4	66.82	46.97	113.79	122.23	82.25
67.	367	Manufacture of electric and components and accessories	3	204.19	138.63	342.82	229.82	188.64
68.	369	Manufacture of electrical machinery	5	13.04	18.06	31.10	39.14	49.36
69.	370	Shipbuilding and repairing	18	8007.39	1131.83	9139.22	10779.45	5249.96

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
70.	376	Manufacture of bicycles and cycle rickshaws	14	126.82	121.28	248.10	225.93	161.44
71.	380	Manufacture of medical and surgical equipments	8	327.74	659.59	987.33	915.92	443.91
72.	387	Manufacture of pen and pencils	3	2.19	1.63	3.82	7.35	5.20
73.	389	Manufacture of jewellery articles	5	0.95	1.51	2.48	2.09	0.79
74.	420	Water supply and collection	4	24.70	0.13	24.83	24.82	..
75.	973	Repair of motor vehicles	96	185.36	97.60	282.96	249.04	27.70
		All Industries	2684	67285.97	25153.27	92439.24	97665.37	63104.08

(Rs. lakh)

Sl. No. Industry Code	Name of Industry	No. of units	Mandays worked (No.)	All workers (No.)	All employees (No.)	Wages to workers	Total emoluments	Fuels consumed	Materials consumed	
(1)	(2)	(3)	(4)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1.	40	Generation, transmission and distribution of electric energy	7	11039631	18586	30252	1066.67	2354.33	33.66	172.90
2.	201	Manufacture of dairy products	7	187792	325	568	16.70	34.67	16.43	525.25
3.	202	Canning and preservation of fruits and vegetables	12	173760	513	626	12.69	21.08	3.55	531.17
4.	203	Canning and processing of fish	57	647531	1397	2486	45.13	103.12	54.05	1907.08
5.	204	Grain mill products	69	183766	662	876	17.63	23.62	11.05	700.72
6.	205	Manufacture of bakery products	7	320907	873	1289	43.39	76.70	21.80	422.10
7.	211	Manufacture of other edible oils	33	161525	423	640	12.28	21.80	8.80	1788.53
8.	212	Tea processing	84	1607763	5022	5577	128.97	213.57	246.70	3609.78
9.	213	Coffee curing, roasting and grinding	5	121220	414	563	6.63	14.35	1.04	4.52
10.	214	Cashewnut processing	267	9753089	86916	94419	762.83	1111.21	47.81	5827.34
11.	215	Manufacture of ice	4	12964	24	58	0.76	2.45	3.38	47.83
12.	217	Manufacture of starch	7	160019	378	529	21.03	35.96	39.37	318.00
13.	219	Manufacture of food products others	10	67046	194	280	6.64	13.09	6.00	260.02

14.	220	Distilling and blending of spirits	4	208584	393	676	23.37	54.74	21.50	295.74
15.	226	Manufacture of beedi	341	5857122	18458	18200	412.74	540.76	12.69	1105.91
16.	231	Cotton spinning and weaving in mills	24	3500637	10468	11439	572.35	992.03	175.06	3239.22
17.	235	Weaving and finishing of textile handloom	98	971578	2825	3924	94.60	137.40	14.52	987.94
18.	236	Weaving and finishing powerlooms	11	171467	525	587	16.79	17.86	2.37	68.56
19.	239	Cotton textiles not elsewhere classified	4	12692	28	42	0.81	1.70	2.28	0.15
20.	246	Spinning and weaving of other textiles	4	786903	1844	2273	177.37	280.05	228.05	1196.55
21.	260	Knitting mills	4	135341	349	450	8.51	15.01	3.76	75.28
22.	264	Manufacture of garments	4	781673	2172	2651	236.21	247.38	61.35	1425.94
23.	265	Manufacture of rain coats and hats	8	22260	70	80	2.09	2.31	0.46	6.01
24.	268	Manufacture of coir and coir products	75	802430	2192	2824	81.92	134.88	13.99	1187.80
25.	270	Manufacture of veneers and plywood	50	1068130	2853	3490	118.06	186.55	48.10	638.43
26.	271	Sawing and planing of wood other than plywood	436	2182142	7301	8551	124.94	171.41	22.53	893.07
27.	272	Cane and bamboo works	6	3246	26	40	0.32	0.63	0.10	3.64
28.	273	Manufacture of wooden doors and windows	4	28126	62	102	3.82	6.56	0.09	45.04
29.	274	Manufacture of wooden industrial goods	10	42494	110	144	2.84	2.95	0.31	20.57

(1)	(2)	(3)	(4)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
30.	276	Manufacture of wooden furniture and fixtures	20	221635	578	755	32.49	47.97	1.73	80.86
31.	280	Manufacture of paper and paper board	7	771797	2256	3106	188.70	420.01	358.84	877.47
32.	271	Manufacture of containers and boxes of paper	13	72936	182	257	7.21	13.10	2.19	155.02
33.	283	Printing and publishing of news-paper	15	562819	1023	1664	70.98	163.90	7.37	672.15
34.	285	Printing and publishing of books and journals	52	727927	2259	2654	144.81	177.89	5.38	112.18
35.	289	Printing picture and post cards	40	316750	868	1082	35.89	52.33	4.36	132.78
36.	300	Tuyre and tube industries	17	670452	887	2067	83.65	201.65	52.96	1016.43
37.	302	Manufacture of rubber products others	111	1544670	3826	7467	223.44	425.01	217.60	42537.58
38.	303	Manufacture of plastic and plastic products	6	29538	74	108	1.86	3.38	0.72	16.97
39.	310	Manufacture of organic and inorganic chemicals	24	1088448	2076	3054	277.35	496.50	496.50	1346.78
40.	311	Manufacture of fertilisers and pesticides	20	1809560	3824	5139	446.69	656.39	925.50	3588.78
41.	313	Manufacture of drugs and medicines	35	533789	1300	1794	71.63	129.95	34.34	576.87
42.	314	Manufacture of perfumes and lotions	7	487170	1105	1427	95.78	153.14	140.10	2981.17
43.	315	Manufacture of edible oils	3	86305	225	319	8.86	17.80	11.06	222.70

44.	316	Manufacture of turpentine	9	323325	186	1078	74.58	132.23	190.84	1100.61
45.	317	Manufacture of matches	10	65108	206	226	1.67	2.30	0.16	12.36
46.	320	Manufacture of structural clay products	245	3116414	10052	11491	318.32	426.70	303.14	227.23
47.	323	Manufacture of chinaware and porcelain ware	12	484948	1337	1637	49.11	88.17	79.74	63.44
48.	324	Manufacture of cement	3	102218	230	288	34.57	53.86	101.38	70.95
49.	329	Manufacture of non-metallic mineral products	6	133888	356	468	20.25	32.34	9.97	51.47
50.	330	Iron and steel industries	12	321690	853	1162	40.98	71.03	93.62	579.11
51.	331	Casting and forging of iron and steel	20	271040	648	921	39.33	74.99	37.67	507.52
52.	335	Aluminium manufacturing	9	482031	1427	1963	158.15	271.07	490.96	1648.78
53.	340	Manufacture of metal cane and tin plate	29	167616	481	781	23.48	42.13	5.40	417.41
54.	341	Manufacture of structural metal products	25	120781	295	508	12.14	33.50	1.49	96.06
55.	342	Manufacture of metal furniture and fixtures	10	29426	86	114	3.42	4.67	1.65	30.88
56.	343	Manufacture of hand tools and hardware	20	298106	831	1015	32.63	50.83	28.51	174.98
57.	345	Manufacture of metal utensils and cutlery	18	141919	382	501	15.09	21.55	7.65	190.97
58.	350	Manufacture of agricultural machinery and equipment	6	35014	50	72	3.01	5.18	1.10	3.13
59.	353	Industrial machinery for food and textiles	6	52489	133	175	7.03	11.82	2.04	10.16
60.	354	Industrial machinery for other than food	11	72387	208	287	8.16	13.60	3.60	43.69
61.	357	Manufacture of machine tools	10	1044649	2464	3459	280.68	438.05	30.65	386.72
62.	359	Manufacture or repair of non-electrical machinery equipments etc.	18	100154	276	340	9.69	15.04	2.43	19.29

(1)	(2)	(3)	(4)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
63.	360	Manufacture of transformers and electricals	11	709008	1733	3894	161.61	279.89	26.87	1261.34
64.	361	Manufacture of insulated wires and cables	5	2931.20	599	1120	55.91	141.78	27.99	1484.26
65.	362	Manufacture of dry and wet batteries	5	371071	866	1228	62.15	118.30	51.80	641.91
66.	366	Manufacture of electronic components	4	124342	297	408	15.97	34.15	2.20	144.73
67.	367	Manufacture of electric and components and accessories	3	108985	282	329	14.97	41.50	3.31	98.85
68.	369	Manufacture of electrical machinery	5	61489	150	206	6.07	10.62	1.04	33.51
69.	70	Shipbuilding and repairing	18	767096	1505	2526	113.68	252.58	32.66	288.24
70.	76	Manufacture of bicycles and cycle rickshaws	14	522850	1514	1794	168.23	205.54	8.85	384.44
71.	80	Manufacture of medical and surgical equipments	8	323934	799	1116	42.03	107.65	4.26	483.08
72.	387	Manufacture of pen and pencils	3	14181	40	54	1.17	1.83	0.35	10.78
73.	389	Manufacture of jewellery articles	5	29722	88	104	1.71	2.40	0.07	5.13
74.	420	Water supply and collection	4	47428	106	130	8.73	11.32	3.66	21.27
75.	973	Repair of motor vehicles	96	1681353	4511	4945	292.87	394.39	41.51	496.55
All Industries			2684	62353416	219477	268869	7720.74	13170.45	4956.02	92611.71

(Rs. in lakhs)

Sl. No. Industry Code	Name of Industry	No. of units	Other input	Total input	Products	Other output	Total output	Depreciation	Value added	
(1)	(2)	(3)	(4)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
1.	40 Generations transmission and distribution of electric energy	7	870.12	1076.68	6895.51	685.78	7581.29	815.58	5689.03	
2.	201 Manufacture of dairy products	7	32.83	574.51	649.16	8.18	657.34	9.23	73.60	
3.	202 Canning and preservation of fruits and vegetables	12	15.68	550.40	582.51	16.33	598.84	2.13	46.31	
4.	203 Canning and processing of fish	57	589.67	2550.80	2213.52	538.98	2752.50	52.33	149.37	
5.	204 Grain mill products	69	59.63	771.40	782.16	38.49	820.65	8.85	40.40	
6.	205 Manufacture of bakery products	7	59.34	503.24	612.21	22.08	634.29	16.08	114.97	
7.	211 Manufacture of other edible oils	33	266.38	2063.71	1881.08	255.22	2136.30	7.14	65.46	
8.	212 Tea processing	84	171.07	4027.55	5472.78	41.76	5514.54	74.59	1412.39	
9.	213 Coffee curing, roasting and grinding	5	9.10	14.66	..	36.99	36.99	1.29	21.04	
10.	214 Cashewnut processing	267	859.60	6734.75	6514.23	955.36	7469.59	30.71	704.13	
11.	215 Manufacture of ice	4	11.81	63.02	67.84	3.53	71.37	2.11	6.24	
12.	217 Manufacture of starch	7	38.83	296.20	522.07	2.73	524.80	8.38	120.22	
13.	219 Manufacture of food products others	10	1042.03	1308.05	308.12	1021.60	1329.72	9.52	12.15	

(1)	(2)	(3)	(4)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
14.	220	Distilling and blending of spirits	4	188.07	505.31	702.11	43.46	745.57	25.50	214.76
15.	226	Manufacture of beedi	341	494.50	1613.10	1916.55	477.24	2393.79	12.28	768.41
16.	231	Cotton spinning and weaving in mills	24	877.37	4291.65	5180.74	688.35	5849.09	128.81	1428.63
17.	235	Weaving and finishing of textiles handloom	98	177.74	1180.20	1303.51	114.10	1417.61	9.62	227.79
18.	236	Weaving and finishing powerlooms	11	12.02	82.92	108.27	1.25	109.52	1.83	24.74
19.	239	Cotton textiles not elsewhere classified	4	1.16	3.59	..	6.18	5.18	0.26	2.33
20.	247	Spinning and weaving of other textiles	4	136.76	1561.36	2069.36	186.00	2255.36	70.22	623.78
21.	260	Knitting mills	4	6.71	85.75	108.54	2.06	110.60	1.76	23.09
22.	264	Manufacture of garments	4	108.87	1596.16	2487.29	188.93	2676.22	24.19	1055.87
23.	264	Manufacture of rain coats and hats	8	0.53	7.00	11.80	0.06	11.86	0.09	4.77
24.	268	Manufacture of coir and coir products	75	149.35	1351.14	1513.03	113.29	1626.32	16.32	268.86
25.	270	Manufacture of veneers and plywood	50	113.98	800.51	1190.80	82.58	1273.38	44.03	428.84
26.	271	Sawing and planing of wood other than plywood	436	152.37	1067.97	1200.21	171.68	1371.89	18.90	285.02
27.	272	Cane and bamboo works	6	0.68	4.42	5.34	0.54	5.88	0.16	1.40
28.	273	Manufacture of wooden doors and windows	4	9.12	54.25	69.62	0.11	70.23	0.56	15.42

29.	274	Manufacture of wooden industrial goods	10	4.58	25.46	29.49	3.92	33.41	0.61	7.34
30.	276	Manufacture of wooden furniture and fixtures	20	11.75	94.34	143.37	1.25	144.63	1.49	48.80
31.	280	Manufacture of paper and paper board	7	166.70	1403.01	2070.40	36.40	2106.87	50.46	653.30
32.	281	Manufacture of containers and boxes of paper	13	24.57	181.78	197.22	9.55	206.77	4.08	20.91
33.	284	Printing and publishing of news-paper	15	102.76	782.28	705.80	322.58	1028.38	17.07	229.03
34.	285	Printing and publishing of books and journals	52	35.08	152.64	267.88	94.28	362.16	13.92	195.60
35.	289	Printing picture and post cards	40	29.31	166.45	190.59	179.45	270.03	7.04	96.54
36.	300	Tyre and tube industries	17	79.06	1148.45	1446.47	116.92	1563.39	46.29	368.65
37.	302	Manufacture of rubber products others	111	508.28	43263.46	45097.18	491.50	45388.68	411.50	1913.72
		plastic products	6	3.78	21.47	26.03	0.73	25.76	2.18	3.11
39.	310	Manufacture of organic and inorganic chemicals	24	317.50	2160.78	3672.58	61.58	3734.16	296.61	1276.77
40.	311	Manufacture of fertilisers and pesticides	20	719.42	5233.70	6354.31	2.70	6357.01	749.28	374.03
41.	313	Manufacture of drugs and medicines	35	116.78	727.99	1060.09	50.75	1110.84	16.75	366.10
42.	314	Manufacture of perfumes and lotions	7	94.83	3216.10	4018.73	30.66	4049.39	38.92	794.37
43.	315	Manufacture of edible oils	3	7.42	241.18	273.15	2.13	275.28	8.37	25.73
44.	316	Manufacture of turpentine	9	81.89	1373.34	1425.26	55.55	1480.81	44.60	62.87

(1)	(2)	(3)	(4)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
45.	317	Manufacture of matches	10	2.29	14.81	17.61	0.23	17.83	0.01	3.01
46.	320	Manufacture of structural clay products	245	114.37	644.74	1362.22	24.91	1387.13	59.84	682.55
47.	323	Manufacture of chinaware and porcelainware	12	48.68	191.86	267.09	7.02	274.11	15.30	66.75
48.	324	Manufacture of cement	3	3.46	175.79	271.00	(-)	270.48	2.50	88.19
49.	329	Manufacture of non-metallic mineral products	6	9.14	70.58	135.96	1.35	137.31	4.78	61.95
50.	330	Iron and steel industries	12	132.84	805.57	856.36	103.19	959.55	22.57	131.41
51.	331	Casting and forging of iron and steel	20	34.42	579.16	681.77	7.11	688.88	11.21	98.51
52.	335	Aluminium manufacturing	9	308.50	2448.24	3487.60	86.22	3573.81	67.77	1057.80
53.	340	Manufacture of metal cane and tin plate	29	49.21	472.02	658.50	11.55	670.05	6.38	191.65
54	341	Manufacture of structural metal products	25	17.60	115.15	89.13	72.95	172.08	1.49	45.44
55.	342	Manufacture of metal furniture and fixtures	10	5.00	37.53	49.87	0.88	50.75	1.48	11.74
56.	343	Manufacture of hand tools and hardware	20	34.26	237.75	338.19	1.84	340.05	6.46	95.82
57.	345	Manufacture of metal utensils and cutlery	18	13.74	212.36	260.10	0.25	260.35	2.80	45.19
58.	350	Manufacture of agricultural machinery and equipment	6	16.83	21.06	3.44	22.37	25.81	0.38	6.37
59.	353	Industrial machinery for food and textiles	6	1.94	14.14	6.33	23.77	30.10	1.00	14.96
60.	354	Industrial machinery for other than food	11	12.76	60.05	73.70	7.64	81.34	1.09	20.20

61.	357	Manufacture of machine tools	10	143.90	561.27	1110.07	4.96	1105.11	65.38	478.46
62.	359	Manufacture or repair of non-electrical machinery equipments etc.	18	7.93	29.65	40.78	18.42	59.20	4.89	24.66
63.	360	Manufacture of transformers and electricals	11	216.18	1504.39	2268.91	(-)-76.93	2191.98	69.29	618.30
64.	361	Manufacture of insulated wires and cables	5	86.37	1598.62	1770.71	(-)-13.40	1757.31	26.06	132.63
65.	362	Manufacture of dry and wet batteries	5	87.97	781.68	1954.93	7.10	1062.04	30.33	250.03
66.	366	Manufacture of electronic components	4	70.75	217.68	253.03	64.06	317.09	9.62	89.77
67.	367	Manufacture of electric and components and accessories	3	21.13	123.29	236.03	1.67	237.70	22.69	91.72
68.	369	Manufacture of electrical machinery	5	8.39	42.94	51.75	9.20	60.94	1.16	16.84
69.	370	Ship building and repairing	18	111.73	432.63	101.75	1316.69	1417.74	166.11	819.00
70.	376	Manufacture of bicycles and cycle rickshaws	14	20.01	413.30	547.98	82.55	630.53	14.08	203.15
71.	380	Manufacture of medical and surgical equipments	8	43.29	530.63	806.84	54.03	860.87	25.62	304.62
72.	387	Manufacture of pen and pencils	3	1.32	12.45	17.05	(-)-0.05	17.09	0.23	4.33
73.	389.	Manufacture of jewellery articles	5	2.18	7.38	10.07	1.09	11.16	0.09	3.69
74.	420	Water supply and collection	4	0.60	25.53	73.38	..	73.38	1.35	46.49
75.	973	Repair of motor vehicles	96	156.99	695.05	0.01	1164.32	1164.33	17.96	451.32
All Industries			2684	10546.33	108114.06	128248.44	10037.86	138286.27	3761.56	26410.43

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