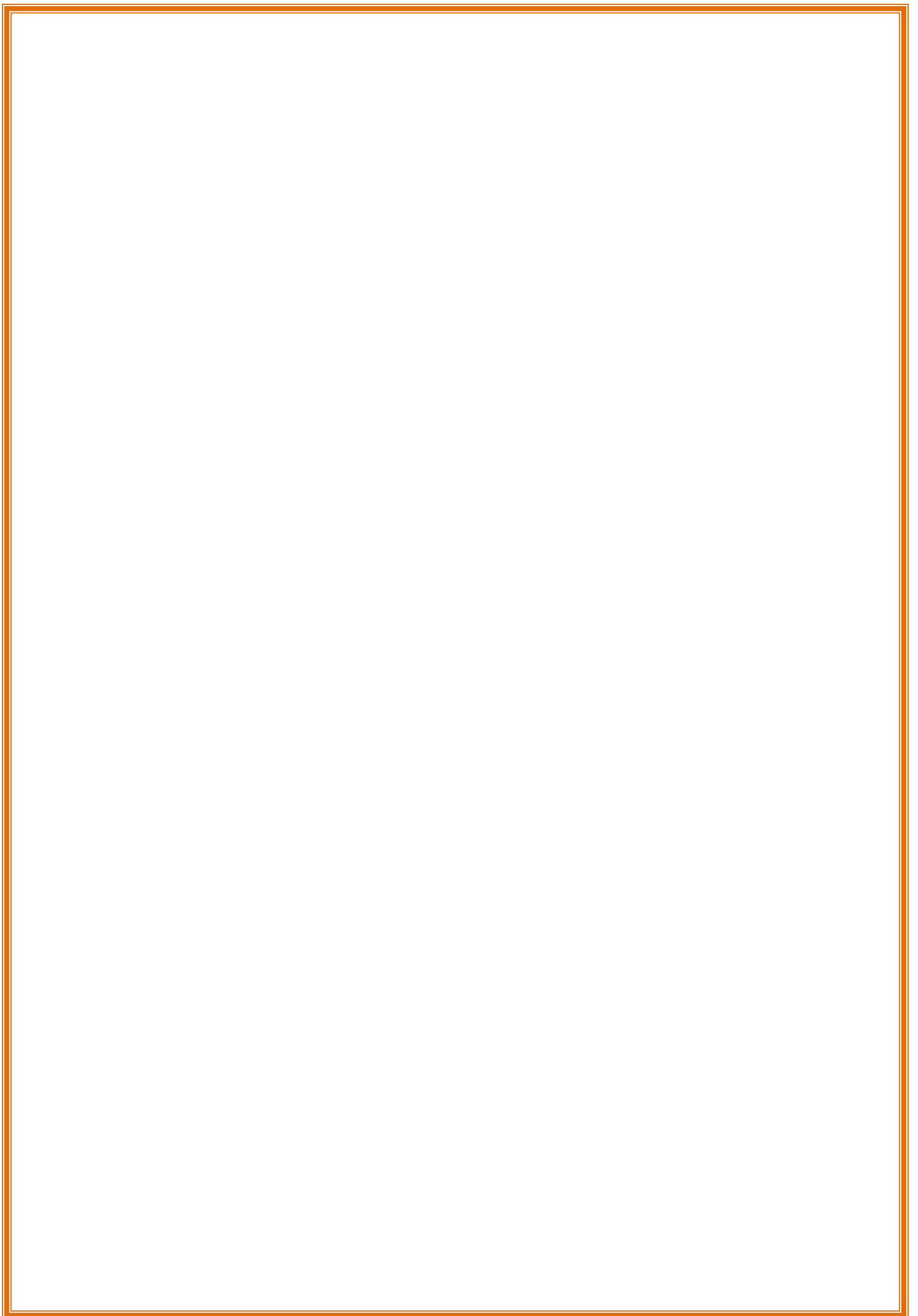




Government of Kerala

**Report on
Annual Survey of Industries 2019-20
Volume I**

**ASI DIVISION
DEPARTMENT OF ECONOMICS AND STATISTICS, KERALA**



PREFACE

One of the important factors that concern the state's economic situation is industrial growth. The manufacturing industry significantly contributes to the state's GDP. Surveys are important for giving planners and policy maker's information so they can create new plans and strategies that can improve the industrial sector. The Department of Economics and Statistics conducts the major survey in Kerala focused on the organized industrial sector is the Annual Survey of Industries (ASI). In accordance with the guidelines set forth in the Collection of Statistics Act of 2008, the survey is carried out each year in collaboration with the Central Statistics Office (IS Wing), Kolkata.

The report on Annual Survey of Industries 2019–20 is published in two volumes. The Volume I highlights the key characteristics of the organized manufacturing sector. An attempt has been made in this volume to analyze the major characteristics based on industrial classification and States/Districts. The characteristics such as fixed capital, working capital, invested capital, employment information, Gross Value Added (GVA), input, output, profit, and income are estimated based on the annual returns of the factory sector for the financial year 2019–20. The Volume II of the publication provides the detailed table of major characteristics at 2/3/4 –digit level industrial classification by State and Districts.

The survey is conducted under the provisions of Collection of Statistics Act 2008 and Collection of Statistics Rules 2011. The Deputy Directors of the District offices are designated as Statistics officers for conducting the survey in their respective jurisdiction. The field work and data entry work are deputed to Statistical Investigators which is further scrutinized by the Research officers. The data entry is done using the MS-Access based e-schedule package provided by Central Statistics Office (IS Wing). Further, processing and tabulation of data is done at the Directorate as per the guidelines of Central Statistics Office (IS Wing), Kolkata. The present report is prepared by combining 783 state sample units (surveyed by DES), 783 Central Sample units and 1994 Census sector units (attended by NSSO, FOD).

The guidance and support extended by Smt. Sunitha Bhaskar, Deputy Director General, NSO, Sri. Rajiv Kumar, SSO (NSO, FOD), Kollam, and Sri. Muraleedharan Nair D, SSO (NSO, FOD), Thiruvananthapuram was incredible. The incessant and dedicated work done by the District level officers, field staffs and Directorate level officers for the success of the survey is highly commendable. I also express my sincere appreciation to the entire team for their extraordinary work and commitment.

The survey's specified industrial units' cooperation and the technical support given by the National Statistical Office (IS Wing) in Kolkata and the NSO (FOD), Thiruvananthapuram are indeed honoured.

I hope this publication will serve as a reference book and research material in Industrial Statistics.

Suggestions for improvement in scope and content of this report are always welcome.



SAJEEVU P.P
Director

Place: Thiruvananthapuram
Date: 31/05/2023

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TECHNICAL ASSISTANCE AND SURVEY PROCESS

Technical Guidance and support

National Statistical Office
Industrial Statistics Wing, Kolkata

ASI Survey Notification

Survey is notified in Kerala Government Gazette

Training programmes

Training programmes conducted for improving the skills of officials engaged in the survey so as to enhance the reliability of survey.

Field work, Data entry and Scrutiny

Collection of data, data entry works and scrutiny are done in District Offices under the supervision of Deputy Directors designated as Statistics Officer

Analysis and Report generation

Data analysis and report generation are done at the Directorate and report is published in department website.

Highlights

- **The survey estimated 7793 factories in the organized manufacturing sector of Kerala.**
- **The estimated invested capital of the factories is ₹ 80, 27,150 lakhs. Out of the total invested capital, fixed capital and Physical working capital accounts to about 73.86 % and 26.14 % respectively.**
- **The estimated input and output from the factories production is ₹ 1, 95, 08,119 lakhs and ₹ 2, 18, 81,862 lakhs.**
- **The estimated profit earned by the factories is ₹6, 40,827 lakhs.**
- **Across the state the factories provide employment to an estimate of 3, 46,449 people. Out of which 76.69% are workers, 22.72% employees other than workers and 0.59% unpaid family member.**
- **Out of 2, 17,356 directly employed workers 1, 20,606 are men and 96,741 are women which accounts to about 55.49 % and 44.51 % respectively.**
- **The Gross Value Added of production of the factories is ₹ 23, 73,743 lakhs which is 12.17 % of total input.**

Top Industries

Rank	Characteristics				
	Total No .of Factories	Fixed Capital	Total Persons Engaged	Output	Gross Value Added (GVA)
1	Food Products (21.4%)	Coke & Refined Petroleum products (53.3%)	Food products (28.5%)	Coke & Refined Petroleum products (31.7%)	Food Products (18.8%)
2	Other Non-metallic mineral products (12.4%)	Food products (9.5%)	Rubber & plastic products (8.5%)	Others (22%)	Chemicals & Chemical products (13.5%)
3	Others (11.14 %)	Others (6.7%)	Others (8.0%)	Food products (15.4%)	Rubber & plastic products (10.7%)
4	Wood & products of wood & cork, except furniture; manufacture of articles of straw & plating materials (10.9%)	Other Non-metallic mineral products (5.1%)	Textiles (6.4%)	Rubber & plastic products (5.5%)	Others (7.6%)
5	Rubber & plastic products (8.3%)	Rubber & plastic products (4.8%)	Other Non-metallic mineral products (6.0%)	Chemicals & Chemical products (4.3%)	Coke & Refined Petroleum products (6.3%)
Aggregate Total (All industries)*	7793	5928546	346449	21881862	2373743

*Estimates of Fixed Capital, Output and GVA are in ₹ lakhs

Top Districts

Rank	Characteristics				
	Total No .of Factories	Fixed Capital	Total Persons Engaged	Output	Gross Value Added (GVA)
1	Ernakulam (19.1%)	Ernakulam (70.5%)	Ernakulam (28.3 %)	Ernakulam (71.4%)	Ernakulam (46.0%)
2	Kollam (14.2%)	Thrissur (5.6 %)	Kollam (15.2%)	Thrissur (4.3%)	Kottayam (9.8%)
3	Thrissur (11.7%)	Alappuzha (4.0%)	Alappuzha (8.9%)	Alappuzha (4.1%)	Thrissur (7.2%)
4	Kannur (9.2%)	Palakkad (3.7%)	Thrissur (8.2%)	Kottayam (3.6%)	Thiruvananthapuram (6.2%)
5	Alappuzha (8.6%)	Kottayam (3.2%)	Thiruvananthapuram (7.6%)	Palakkad (3.5%)	Alappuzha (5.7%)
Aggregate Total(All industries)*	7793	5928546	346449	21881862	2373743
*Estimates of Fixed Capital, Output and GVA are in ₹ lakhs					

Rates & Ratios

Estimates of some important rates and ratios as per ASI 2019-20 are given below:-

➤ Fixed capital per factory in operation	₹ 853 lakhs
➤ No. of persons engaged per factory in operation	50
➤ No. of workers per factory in operation	38
➤ Output per factory in operation	₹ 3147 lakhs
➤ Gross Value Added (GVA) per factory in operation	₹ 341 lakhs
➤ Net Value Added (NVA) per factory in operation	₹ 283 lakhs
➤ Output per person engaged	₹ 63,16,041
➤ Gross Value Added (GVA) per person engaged	₹ 6,85,164
➤ Net Value Added (NVA) per person engaged	₹ 5,67,632
➤ Wages per worker	₹ 1,90,655
➤ Fixed Capital to Net Value Added (NVA)	3.01
➤ Fixed Capital to Output	0.27
➤ Net Value Added(NVA) to Output	0.09
➤ Gross Value Added (GVA) to Fixed Capital	0.04
➤ Output to Input	1.12
➤ Profit to Output	0.03



**CHAPTER 1
INTRODUCTION**

Methodology of Annual Survey of Industries

Methodology of Annual Survey of Industries

Industrial sector occupies an important position in Indian Economy. The Annual Survey of Industries (ASI) is the main source of industrial statistics in Kerala. Till 2009-10, the survey was conducted annually under the statutory provisions of the Collection of Statistics Act 1953 and Rules framed there under in 1959. From 2010-11 onwards, the survey is being conducted annually under the statutory provisions of the Collection of Statistics (COS) Act, 2008 and the rules framed there-under in 2011. The Collection of Statistics Act, 2008 has been amended in 2017 as Collection of Statistics (Amendment) Act, 2017 which extends the coverage to All India. Presently, ASI 2019-20 is being conducted under this amendment.

1.1. Scope and Coverage

1.1.1. The ASI extends to the entire State. It covers all factories registered under Sections 2(m)(i) and 2(m)(ii) of the Factories Act, 1948, wherein a 'Factory', which is the primary statistical unit of enumeration for the ASI, is defined as 'Any premises' including the precincts thereof: -

- i. Wherein ten 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 on with the aid of power or is ordinarily so carried on, or,
- ii. Wherein twenty 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 on without the aid of power or is ordinarily so carried on, but does not include a mine subject to the operation of the Mines Act, 1952, or a railway running shed.

The 'manufacturing process' referred to above has been defined [vide Section 2(k)] in the Factories Act, 1948 as: 'Any process' for:

- I. *making, altering, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or,*

- II. *pumping oil, water or sewage ; or,*
- III. *generating , transforming or transmitting power; or,*
- IV. *composing types for printing by letter press, lithography, photogravure or other similar process or book binding; or,*
- V. *constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels; or,*
- VI. *preserving or storing any article in cold storage.*

1.1.2 In addition to Sections 2(m)(i) & 2(m)(ii) of the Factories Act, 1948, bidi & cigar units, employing 10 or more workers with the aid of power and 20 or more workers without the aid of power and registered under the Bidi & Cigar Workers (Conditions of Employment) Act, 1966 , all the electricity undertakings engaged in generation, transmission and distribution of electricity, not registered with the Central Electricity Authority (CEA), are also covered under ASI.

1.1.3 Starting from ASI 2014-15, the coverage of ASI has been extended beyond the Section 2m (i) and 2m(ii) of the Factories Act, 1948. To start with, the units with 100 or more employees, not registered under Section 2m(i) and 2m(ii) of the Factories Act, 1948 but registered under any of the seven Acts/Board/Authority viz., Companies Act 1956, Factories Act, 1948, Shops and Commercial Establishment Act, Societies Registration Act, Cooperative Societies Act, Khadi and Village Industries Board, Directorate of Industries (District Industries Centre) in the Business Register of Establishments (BRE) as prepared by the State Government and available with National Accounts Division, Central Statistics Office and verified by Field Operations Division (FOD), NSSO are also considered for selection.

1.1.4 Although the scope of the ASI was extended to all registered manufacturing establishments in the country, defence establishments, oil storage and distribution depots, restaurants, hotels, cafe and computer services, departmental units such as railway workshops, RTC workshops, Govt. Mints, sanitary, water supply, gas storage units etc. are excluded from the purview of the Survey.

1.2. Sampling Unit

1.2.1 The primary unit of enumeration in the survey is a factory in the case of manufacturing industries, a workshop in the case of repair services, an undertaking or a licensee in the case of electricity, gas and water supply undertakings and an establishment in the case of Bidi and Cigar industries. The owner of two or more establishments located in the same state and pertaining to the same industry group, is permitted to furnish a single consolidated return, termed as 'Joint Return'. Such consolidated returns are a common feature in case of some of the factories in ASI.

1.3 ASI Frame

1.3.1 The ASI frame is based on the lists of registered factories / units maintained by the Chief Inspector of Factories (CIF) in the State and those maintained by registration authorities in respect of Bidi and Cigar establishments and electricity undertakings. The frame is being revised and updated periodically by the Regional Offices of the Field Operations Division (FOD) of NSSO in consultation with the Chief Inspector of Factories in each State. At the time of revision, the names of the de-registered factories are removed from the ASI frame and those of the newly registered factories are added. While updating the frame, only newly registered units are added to the existing frame. In spite of regular updating of the frame, quite a number of factories selected for the survey are getting deleted during the survey owing to various reasons like non-existence, de-registration, out of coverage etc.

1.3.2 It is to be noted that apart from the factories in operation, the ASI frame comprises factories which are categorised as 'Existing with fixed assets and maintaining staff but not having production' and 'Existing with fixed assets but not maintaining staff and not having production'.

1.4. Reference Period

1.4.1 Reference period for ASI 2019-20 was the accounting year of the factory, ending on any day during the financial year 2019-20. Thus in ASI 2019-20, data collected from establishments relate to their respective accounting years that ended on any day between 1st April 2019 and 31st March 2020.

1.5 Methodology of the survey

1.5.1 The methodology of the survey being followed by the guidelines issued by National Statistical office (NSO), Industrial statistics (IS) wing, Kolkata (Under MOSPI). The instruction manual, the software package and installation procedure will be receivingg from NSO during the survey period. But the unit level data for pooling with state sample being provided by NSO at the end of survey. The following methodology is adopted by the IS wing for the survey.

1.6. Sample Design and Sample Allocation

1.6.1 As per sampling design adopted in ASI 2019-20, ASI sample comprises two parts - Central Sample and State Sample. The Central Sample consists of two schemes: Census and Sample. Under Census scheme, all the units are surveyed.

1.6.2 Census scheme

- a) All industrial units belonging to the seven less industrially developed states/ UT's viz. Arunachal Pradesh, Manipur, Meghalaya, Nagaland, Sikkim, Tripura and Andaman & Nicobar Islands.
- b) For the States/ UTs other than those mentioned in (a), (i) Units having 75 or more employees from Kerala, and (ii). All units covered under 'Joint Return' (JR), where JR is allowed when the two or more units located in the same State/UT belonging to the same industry (3-digit level of NIC) under the same management.
- c) After excluding the Census Sector units, as defined in paragraphs a) and b) above, the strata are formed at **State x District x Sector x 3digit NIC-2008 level**. Here, 'sector' is very broad economic activity group consisting of manufacturing, electricity generation activity and bidi producing activity. Thus, in short, sectors are (i) Bidi, (ii) Manufacturing and (iii) Electricity. All units belonging to the strata (i.e., formed on the basis of units in State by District by Sector by 3-digit of NIC-08) having less than or equal to 4 units are completely enumerated and are thus considered as 'census sector' units
- d) Sample Scheme: All the remaining units in the frame are considered under **Sample Scheme**. For all the states, **strata are formed for each State x District x Sector x 3-digit NIC-2008 factories**. The units in each stratum are arranged in descending order of their number of employees. Samples are drawn as per Circular Systematic Sampling technique.

An even number of units with a minimum of 4 units are selected and distributed in four sub-samples. It may be noted that all the 4 sub-samples from a particular stratum may not have equal number of units.

- e) Out of these 4 sub-samples, two pre-assigned sub-samples are given to NSSO (FOD) and the other two-subsamples are given to State/UT for data collection.
- f) The entire census units *plus* all the units belonging to the two sub-samples given to NSSO (FOD) are treated as the **Central Sample**.
- g) The units belonging to the two sub-samples allocated to State/UTs are to be canvassed by the respective States/UTs. Hence, State/UT has to use the data collected by NSSO (FOD) and processed by IS Wing, DPD, and NSSO along with the state sample data while deriving the district level estimates for their respective State/UT.
- h) The entire census scheme units plus all the units belonging to the two sub-samples given to NSSO (FOD) plus all the units belonging to the two sub-samples given to State / UT are required for pooling of Central and State Samples.

1.7. Estimation Procedure

1.7.1 The procedures for estimation of the characteristics are shown in Annexure-2.

1.7.2 The results presented in the publication are based on the unit level data of central and state samples. The estimated value figures given in this publication are reported in current prices. The value figures are generally rounded off to lakhs of rupees. All Kerala figures are rounded off separately and may not tally with the sum of district figures. Similarly, all-Industry figures may not tally with the sum of individual industry figures. Also the industry-wise totals at lower level may not tally with the next higher level due to merging of industries carried out at different levels.

1.8. Schedule of Enquiry

1.8.1 The schedule for ASI 2019-20 aims to collect data on assets and liabilities, employment and labour cost, receipts, expenses, input items - indigenous and imported, products and by-products, distributive expenses etc.

A copy of the ASI 2019-20 schedule is given as Annexure-3. The different concepts and definitions used in ASI survey are given in Annexure-4.

1.9. Classification of Industries

1.9.1 From ASI 2008-09, NIC- 2008 has been the base of industry classification. It classifies all the factories in the ASI frame in their appropriate industry groups on the basis of the principal product manufactured. This way a unit gets classified in one and only one industry group even though it might be manufacturing products belonging to different industries. The estimates for different aggregates presented in this report at two or three digit level of industry correspond to the NIC-2008 classification.

1.10. Publications and Limitations

1.10.1 The results of ASI 2019-20 are released at 2-digit/3-digit level of NIC-2008 for the State. The list of 2/3-digit level of NIC-2008 codes along with descriptions is given in Annexure 5. This report contains tables related to capitals and value added, employment and labour cost, fuels consumed etc.

1.10.2 The Collection of Statistics Act prohibits disclosure of data relating to individual factories. Therefore, if the number of factories under any industry (2-digit/3-digit level of NIC-2008) in the state is less than three, the data have been combined to a similar industry in order to conceal the identity of all such units belonging to the concerned stratum.

1.10.3 All the estimates, especially for quantity and value figures for any particular item consumed and produced, are subject to Statistical Error as these are estimated on the basis of a selected Sample. The consumptions and productions are not estimated separately for those items for which the number of observations is insufficient. They have been reported under 'others' as the estimates for those items may not be efficient.

1.10.4 As per tabulation policy it has been decided to publish the detailed information corresponding to industry codes 10 to 33, 38 and 58 following NIC-2008. For all other industry codes, the units have been clubbed and shown under a common industry '**Other**' in different tables.

CHAPTER 2

Statewide outlook of the Industrial Statistics



Organized Manufacturing Sector – State Estimates

Statewide outlook of the Industrial Statistics

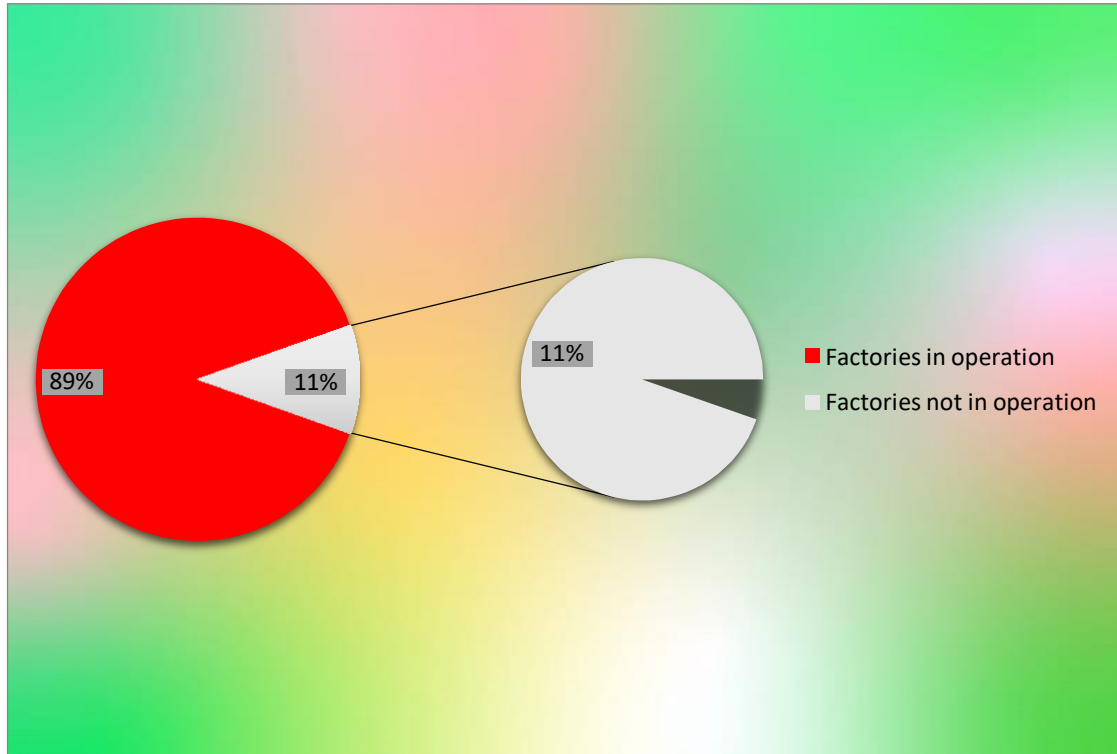


Factories in Kerala's organized/registered manufacturing sector

In Kerala, the Annual Survey of Industries is one of the most important sources of industrial statistics. It is essential to frame industrial policies in order to address the sector's issues and, as a result, achieve a balanced economy. Surveys have an important role at this point. When relevant and correct data is analyzed, the most efficient results are produced, allowing policymakers to design new methods capable of attaining the goal. In this part, we've attempted to summarise the state's manufacturing industry situation. By integrating the Central sample with the State sample, the main features of the organized manufacturing sector for the financial year 2019-20 were estimated. The organized manufacturing sector of the state is defined by registered industries that produce goods. Kerala's manufacturing sector has 7793 factories, according to the 2019-20 annual survey of industries. 6953 factories are operational, whereas 840 are not. The number of factories that are not in operation makes up roughly 10.78% of the total. In comparison to the previous

financial year, estimated value reveals a slight increase of roughly 1.3 % in the number of factories in the current year.

Figure 1: Distribution of factories in operation and not in operation Kerala



Significant characteristics of organized manufacturing sector of Kerala

Financial statement analysis is an important tool for developing effective industrial policies. Annual survey of Industries helps to a large extent for this. One facet of the industrial sector is the organized manufacturing sector. The profit and loss account, balance sheet, and employment statistics of the factories in this sector give a framework within which the economic status of the sector can be analyzed and further planning for improved development can be done. These remarks serve as the survey's data source. According to the survey, there are 27 primary features of the industrial sector that can be estimated. The number of factories, the capital of the industries, total input, total output, Gross Value Added (GVA), Gross Fixed Capital Formation (GFCF), net income, profit, and so on is some of the important features. The survey also calculates the

employment data of workers in the factories of manufacturing sector and details of the worker engaged in the factories of the manufacturing sector.

Table 1: Estimate of selected characteristics of factories of Kerala for the year 2019-20

Sl. No.	Characteristics (All Industries)	Values in ₹ lakh unless otherwise mentioned
1	Number of factories	7793
2	Factories in operation	6953
3	Fixed Capital	5928546
4	Physical Working Capital	2098604
5	Working Capital	1908718
6	Invested Capital	8027150
7	Gross Value of Additions to Fixed Capital	1228473
8	Rent Paid	4475
9	Outstanding Loan	1629117
10	Interest paid	235015
11	Rent received	757
12	Interest received	54090
13	Gross Value of P & M	3268810
14	Value of Products & By-products'	20169889
15	Total Output	21881862
16	Fuel Consumed	849833
17	Materials Consumed for Manufacturing	16753877
18	Total Input	19508119
19	Gross Value Added(GVA)	2373743
20	Depreciation	407187
21	Net Value Added(NVA)	1966556
22	Net Fixed Capital Formation(NFCF)	737411
23	Gross Fixed Capital Formation (GFCF)	1144598
	Addition in stock of:	
24	(a) Materials, Fuels etc.	-73456
	(b) Semi-Finished Goods	-22208
	(c) Finished Goods	40910
	(d) Total	-54754
25	Gross Capital Formation	1089844
26	Net Income	1727064
27	Profit	640827

Employment and emoluments paid in the manufacturing industries

Production is significantly influenced by the amount of labour that the manufacturing industries need. The number of man-days worked or the number of hours worked should be considered when analyzing the change in productivity.

The survey makes some important employment-related estimation, like the number of people employed, wages or salaries paid, etc. According to the data, 3, 46,449 people are employed by the state's organized manufacturing sector in its factories. Out of these employees, 76.7% are workers, 22.72 % are employees other than workers, and 0.6 % are unpaid family members or the owner. The estimated total man-days employed in the factories is 98,196 (in thousands) Employer's wages and Salaries including bonus, are estimated to be ₹ 932069 lakhs, while the employer's contribution is ₹154170 lakhs.

Table 2: Distribution of employment, man-days worked and emoluments paid to employees in manufacturing sector of Kerala

A. No. of Persons Engaged (no.)	346449
1. Workers	265685
1.1 Directly employed	217347
1.1.1 Men	120606
1.1.2 Women	96741
1.2 Employed Through Contractors	48338
2. Employees Other Than Workers	78715
2.1 Supervisory and Managerial Staff	37186
2.2 Other Employees	41529
3. Unpaid family members/proprietor etc.	2046
B. Total Man-days employed (in '000)	98196
C. Wages and Salaries including Employer's Contribution (₹ lakhs)	1086239
1 Wages and Salary including Bonus	932069
1.1 Wages and Salary	887725
1.1.1 Worker	506560
1.1.2 Supervisory & Managerial Staff	246174
1.1.3 Other Employees	134993
1.2 Bonus to all Staff	44344
2. Employer's Contribution	154170

CHAPTER 3

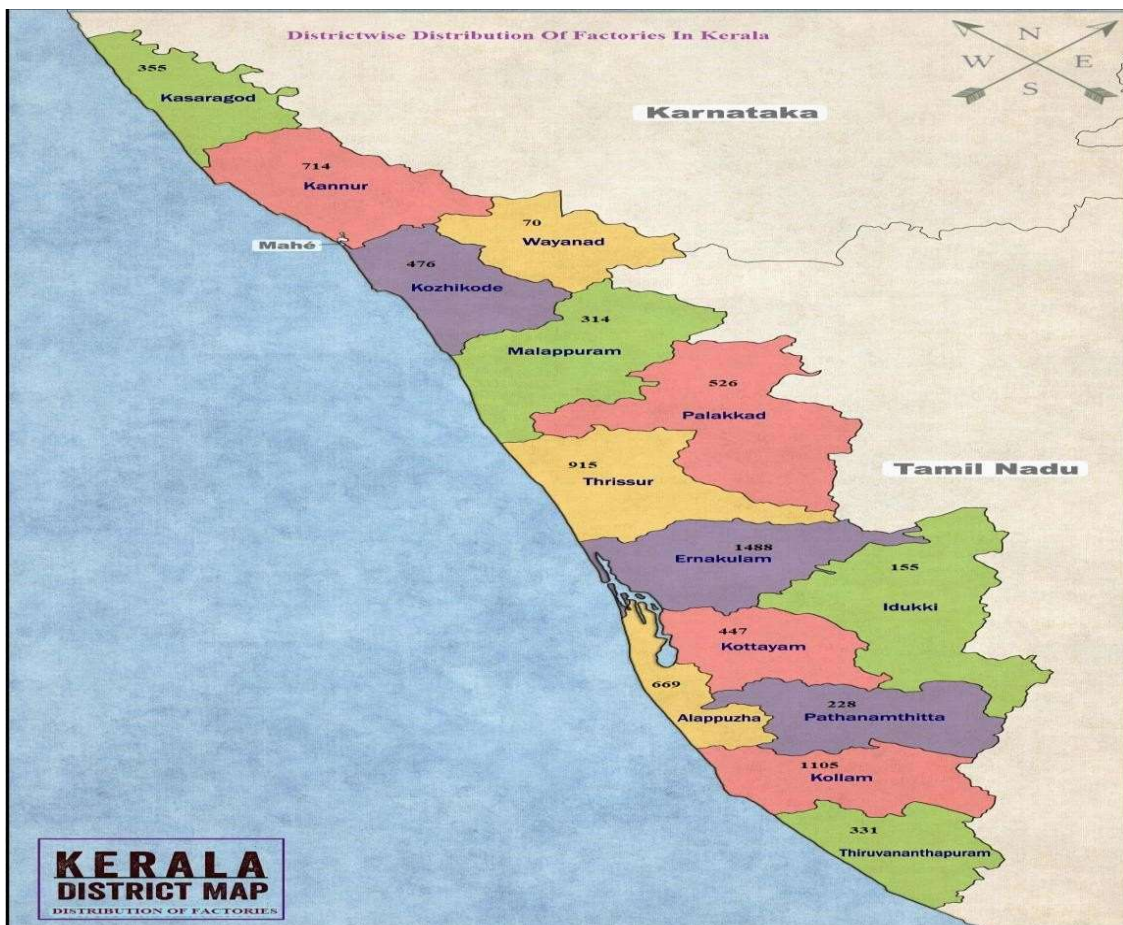
DISTRICT-WISE ESTIMATES



District-wise view of principal characteristics of organized manufacturing sector

Disparities between the state's different districts on a regional and geographic level could be reflected in their industrial statistics. Planning at the local level is necessary for sustainable development plans that are supportive of success in this sector while taking into account the geographical peculiarities. Decentralized planning, which is essential for industrial development, is made possible by surveys and research at this level. The industrial industry in Kerala's 14 districts is vividly depicted in this section. The survey's results are crucial in determining which areas need to be addressed for greater development.

With 1488 factories, or nearly 19.1% of all estimated factories in Kerala, the Ernakulam district tops the list. Wayanad district has the fewest factories, with only 70,(approx. 1% of state value) (see Figure 5)

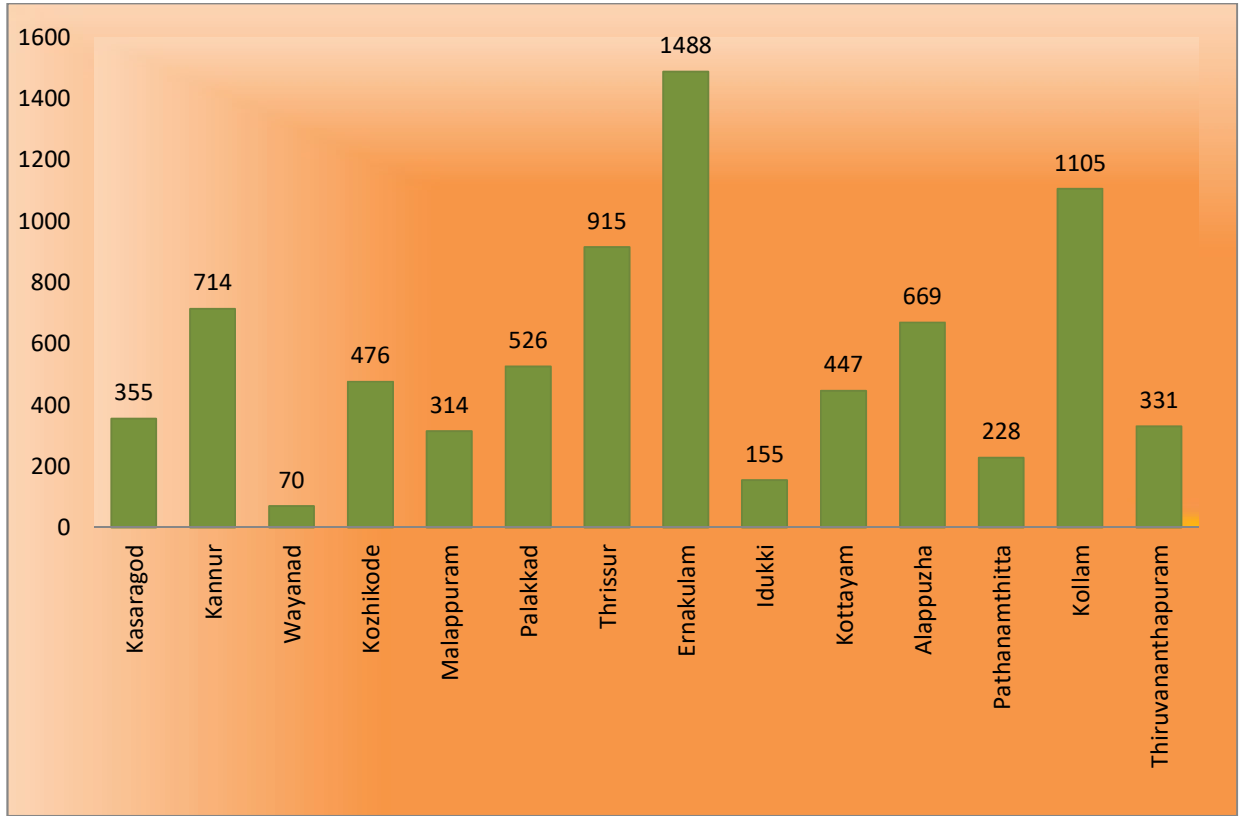


Ernakulam district leads the other 14 districts in Kerala (19.1% of state value). The district of Ernakulam has consistently recorded the highest percentage of factories for at least 8 years. Kollam district, which is estimated to have 1105 factories, has the second-highest number. Third place (11.74 % of state value), with 915 factories, goes to the Thrissur district. With an estimated 70 factories, the Wayanad district is the one with the fewest (approximately 1 % of state value). (see Table 3).

Table 3: District wise distribution of Factories of Kerala, 2019-20

Districts	Number of factories	Percentage of factories
Kasaragod	355	4.6
Kannur	714	9.2
Wayanad	70	0.9
Kozhikode	476	6.1
Malappuram	314	4.0
Palakkad	526	6.7
Thrissur	915	11.7
Ernakulam	1488	19.1
Idukki	155	2.0
Kottayam	447	5.7
Alappuzha	669	8.5
Pathanamthitta	228	2.9
Kollam	1105	14.2
Thiruvananthapuram	331	4.2
Total	7793	100

Figure 6: District wise distribution of factories in organized manufacturing sector

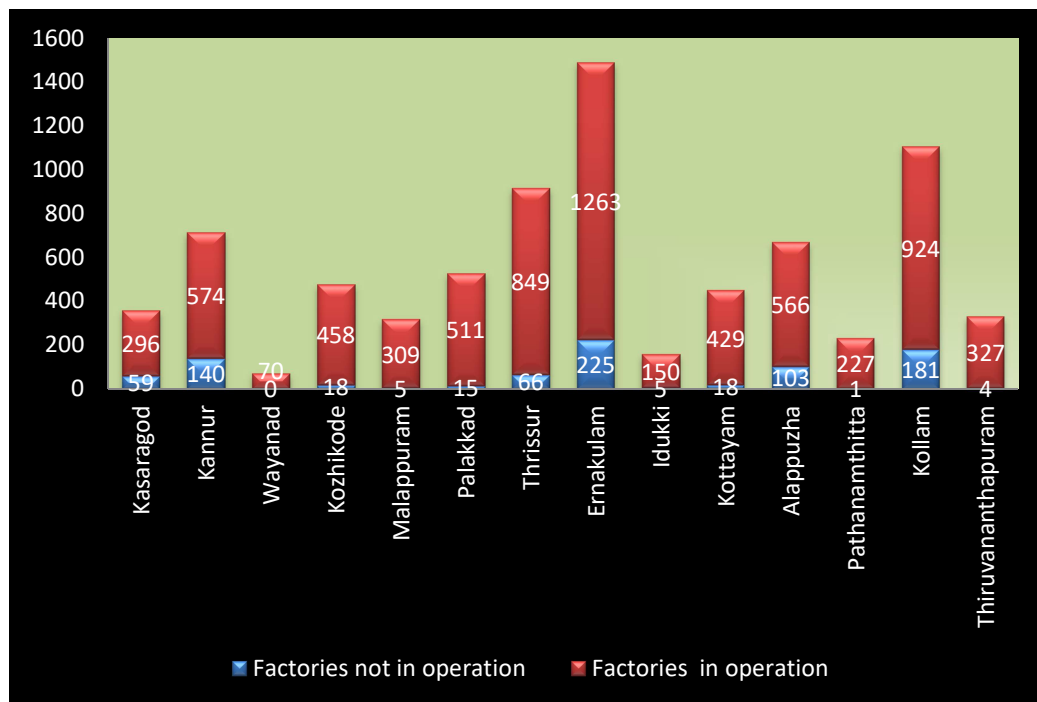


It's interesting to note that the estimated number of factories inactive in the state has reduced from 855 (11.11%) in 2018–19 to 840 (10.78%) in 2019-20. The majority of idle factories(225 out of 840) are located in the Ernakulam district, accounting for 26.8% of the state's value. Kollam and Kannur are the districts with the second- and third-highest numbers of factories that aren't in operation (21.5% and 16.7% of state value respectively). Table 4 and Figure 7 provide a full depiction of the same.

Table 4: District wise distribution of factories in operation and not in operation

Districts	Factories in operation	Factories not in operation
Kasaragod	296	59
Kannur	574	140
Wayanad	70	0
Kozhikode	458	18
Malappuram	309	5
Palakkad	511	15
Thrissur	849	66
Ernakulam	1263	225
Idukki	150	5
Kottayam	429	18
Alappuzha	566	103
Pathanamthitta	227	1
Kollam	924	181
Thiruvananthapuram	327	4
Total	6953	840

Figure 7: District wise distribution of factories in operation and not in operation



Capital of manufacturing sector

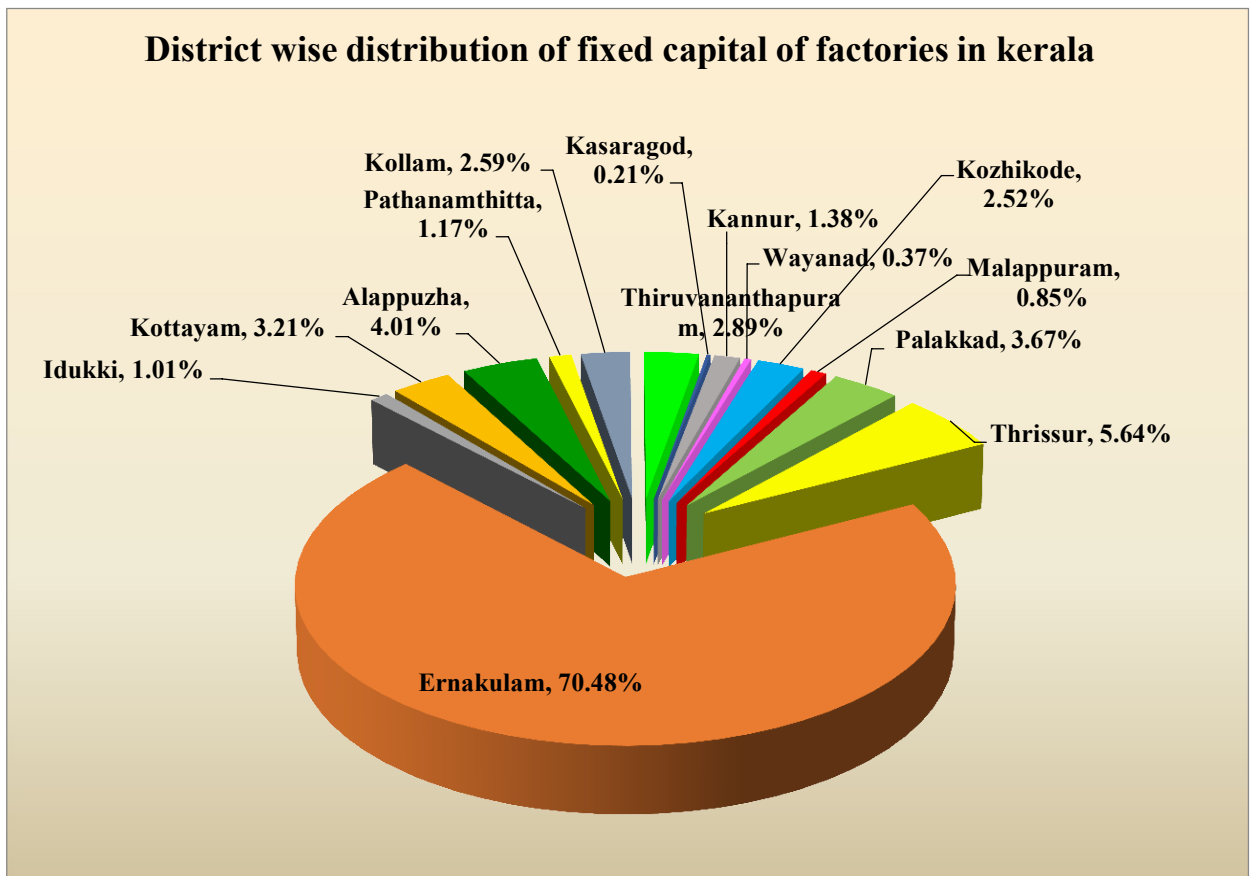
A manufacturing company's capital investment is one of the elements that adds value to the finished product. Working capital is the capital that is used in the day-to-day operations of production, whereas fixed capital is the capital that the factory owns in the form of land, buildings, plant and machinery, transportation equipments, and other equipment. The invested capital of the industry is the total of the fixed capital and physical working capital. According to survey findings, the manufacturing sector in the Ernakulam district has the largest fixed capital, invested capital, and physical functioning, with estimates of ₹ 4178219 lakhs (70.5%), ₹ 5259744 lakhs (65.5%), and ₹ 1081525 lakhs (51.5%), respectively. While Kasargod district has the least fixed capital at ₹12238 lakhs (0.21% of state value), invested and physical working capital at ₹ 25202 lakhs (0.31%) and ₹ 12964 lakhs (0.62%), respectively.

Table 5: District wise estimate of Fixed Capital, Physical working Capital and Invested Capital.

Districts	Fixed Capital (Value in ₹ lakhs)	Physical Working Capital (Value in ₹ lakhs)	Invested Capital (Value in ₹ lakhs)
Kasaragod	12238	12964	25202
Kannur	81656	37582	119238
Wayanad	21803	5497	27300
Kozhikode	149375	74384	223759
Malappuram	50669	46347	97016
Palakkad	217627	157688	375315
Thrissur	334261	133086	467347
Ernakulam	4178219	1081525	5259744

Idukki	60084	34052	94136
Kottayam	190392	66038	256430
Alappuzha	237750	143173	380923
Pathanamthitta	69579	25248	94827
Kollam	153818	124299	278117
Thiruvananthapuram	171075	156721	327796
Total	5928546	2098604	8027150

Figure 8: District wise distribution of fixed capital of factories in Kerala



Input and Output

Any policy that seeks to employ available resources in a way that could increase output is likely to succeed in its objective. The input and output of the manufacturing sector have been estimated. The cost of the fuels used, the materials used in manufacturing, and other costs are included in the production process' input. Gross output is defined as the value of goods and by products ex-factory produced during the accounting year, as well as the net value of unfinished goods or work-in-progress, receipts for commercial and non-commercial services provided to others, the value of semi-finished goods sold in the current year from the previous year, the sale value of goods sold in the same condition as purchased, and the value of electricity generated and sold. Ernakulam district has the highest input and output, estimated at ₹1, 45, 31,979 lakhs and ₹1, 56, 25,057 lakhs, respectively (74.5%) and (71.4% of the state value). Table 6, Figure 9, and Figure 10 show the same estimate.

Table 6: District wise estimate of Input and output of the factories of Kerala, 2019-20

Districts	Total Input (in ₹ lakhs)	Percentage of input	Total Output (in ₹ lakhs)	Percentage of output
Kasaragod	41132	0.21	53186	0.24
Kannur	190103	0.97	259354	1.19
Wayanad	56081	0.29	65274	0.30
Kozhikode	404638	2.07	513365	2.35
Malappuram	299448	1.53	351599	1.60
Palakkad	672680	3.45	774369	3.54
Thrissur	765309	3.92	936914	4.28
Ernakulam	14531979	74.5	15625057	71.41
Idukki	164510	0.84	226755	1.04
Kottayam	558039	2.86	791404	3.62

Alappuzha	751954	3.85	887962	4.06
Pathanamthitta	163461	0.84	225092	1.03
Kollam	582497	2.99	697089	3.19
Thiruvananthapuram	326288	1.67	474442	2.17
Total	19508119	100	21881862	100

Figure 9: District wise distribution of input (in ₹ lakhs) of the factories in Kerala

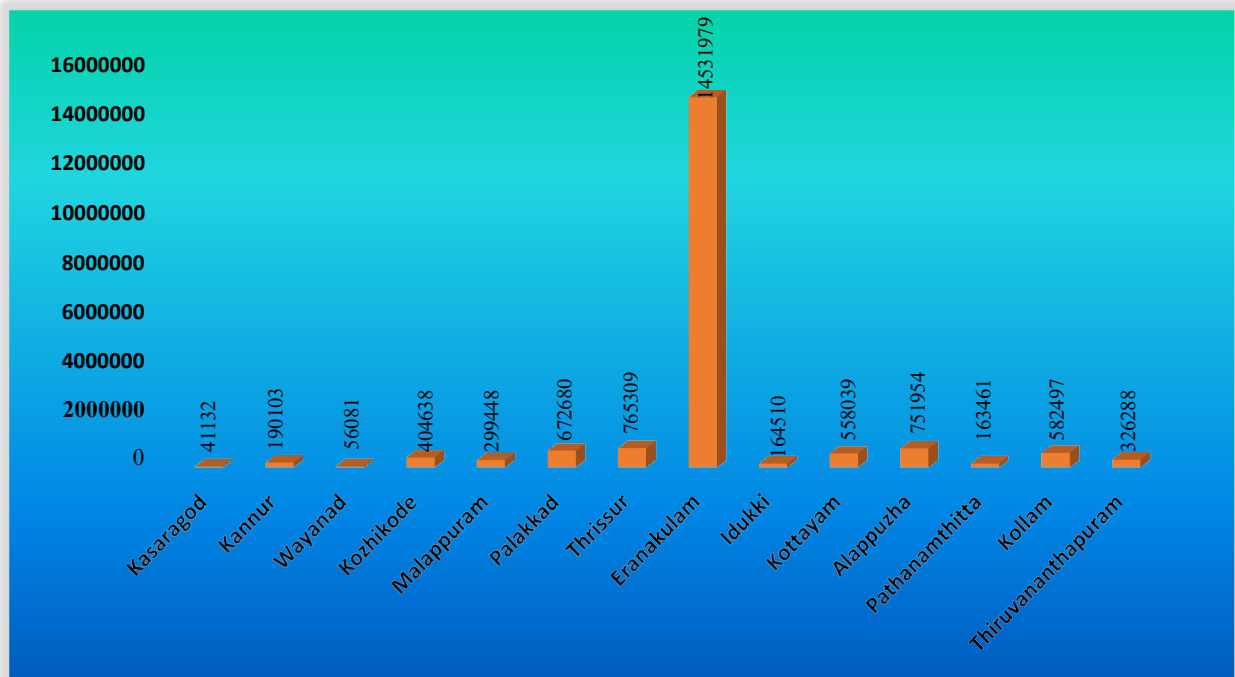
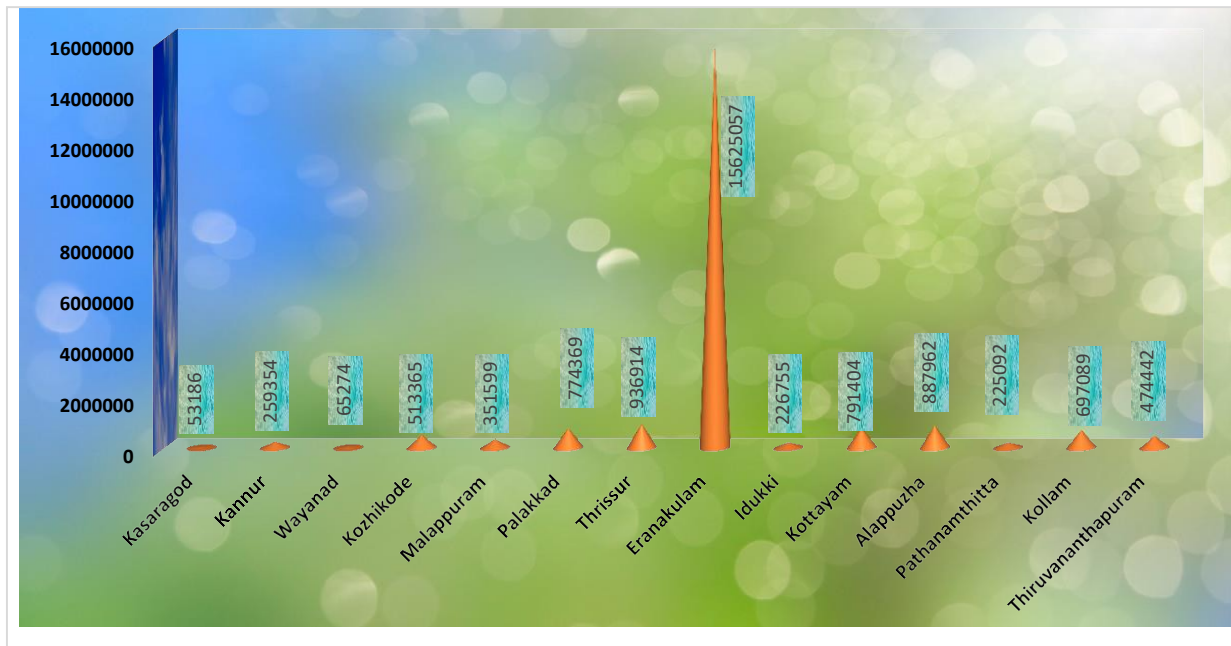


Figure 10: District wise distribution of output (in ₹ lakhs) of the factories in Kerala

Profit

Total emoluments and supplements to emoluments are subtracted from net income to determine profit. The biggest profit was recorded in the Ernakulam district at around ₹ 286083 lakhs (44.6% of state value). With only roughly ₹ 676 lakhs, the Kasargod district has the least profit. Table 7 shows the profit made by the organized manufacturing sector in 14 districts of state.

Table 7: District wise distribution of Profit earned by organised manufacturing sector of Kerala.

Districts	Profit (in ₹ lakhs)	Percentage of profit
Kasaragod	676	0.1
Kannur	20626	3.2
Wayanad	1947	0.3
Kozhikode	31065	4.8
Malappuram	14981	2.3
Palakkad	12495	2.0
Thirissur	54532	8.5

Ernakulam	286083	44.6
Idukki	25327	4.0
Kottayam	111625	17.4
Alappuzha	30356	4.7
Pathanamthitta	17958	2.8
Kollam	1996	0.3
Thiruvananthapuram	31160	4.9
Total	640827	100

Gross Value Added (GVA)

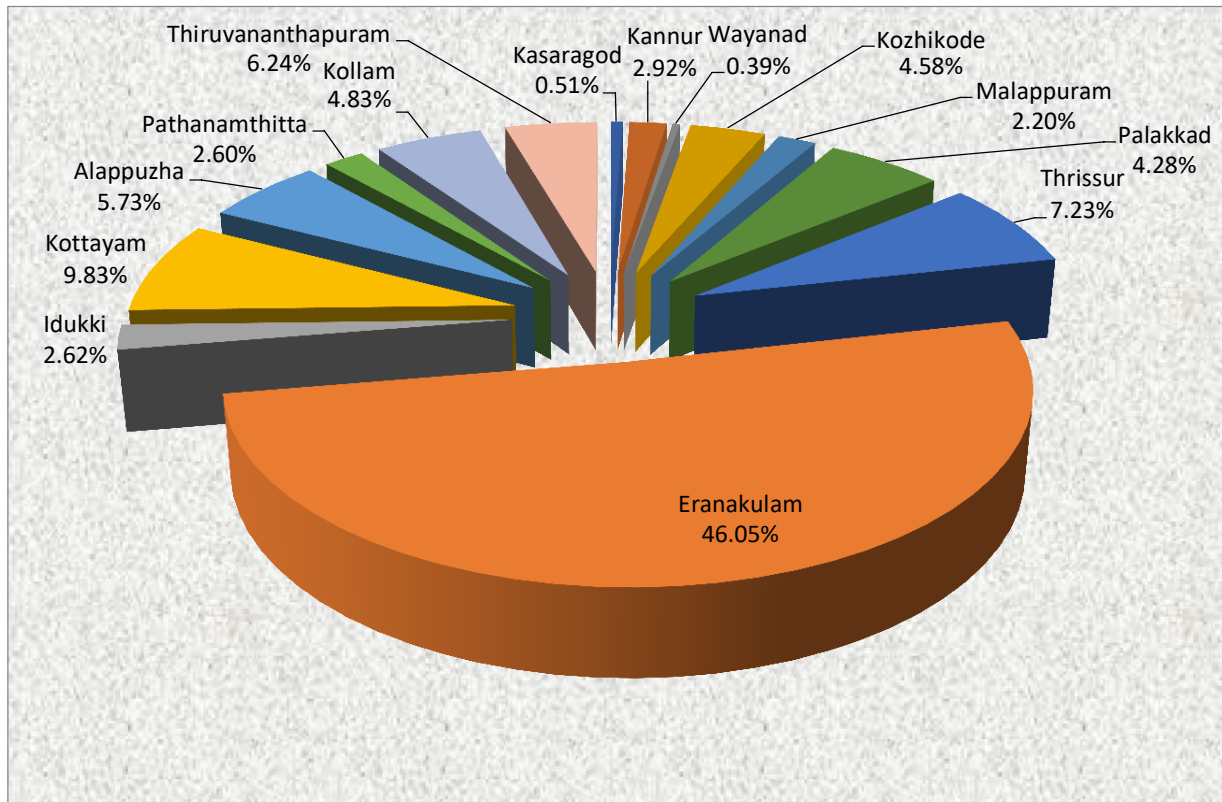
A key indicator of a state's GDP contribution is the value added by each industry. By subtracting the value of all input from all output, the factory's contribution to the value of the goods and services is increased, and this is known as Gross Value Added. The manufacturing sector of the Ernakulam district is estimated to contribute the most ₹10,93,078 lakhs, (46.05%, to the state's GVA). The remaining districts make up between 0 and 10% of the total. (View Table 8)

Table 8: District wise distribution of Gross Value Added (GVA) of organised manufacturing sector of Kerala.

Districts	Gross Value Added (GVA) (Value in ₹ Lakhs)	Percentage of GVA
Kasaragod	12054	0.51
Kannur	69251	2.92
Wayanad	9193	0.39
Kozhikode	108727	4.58
Malappuram	52151	2.20
Palakkad	101689	4.28
Thrissur	171605	7.23

Ernakulam	1093078	46.05
Idukki	62245	2.62
Kottayam	233365	9.83
Alappuzha	136008	5.73
Pathanamthitta	61631	2.60
Kollam	114592	4.83
Thiruvananthapuram	148154	6.24
Total	2373743	100

Figure 11: District wise distribution of Gross Value Added (GVA) of manufacturing sector in Kerala.



Employment and Emoluments paid

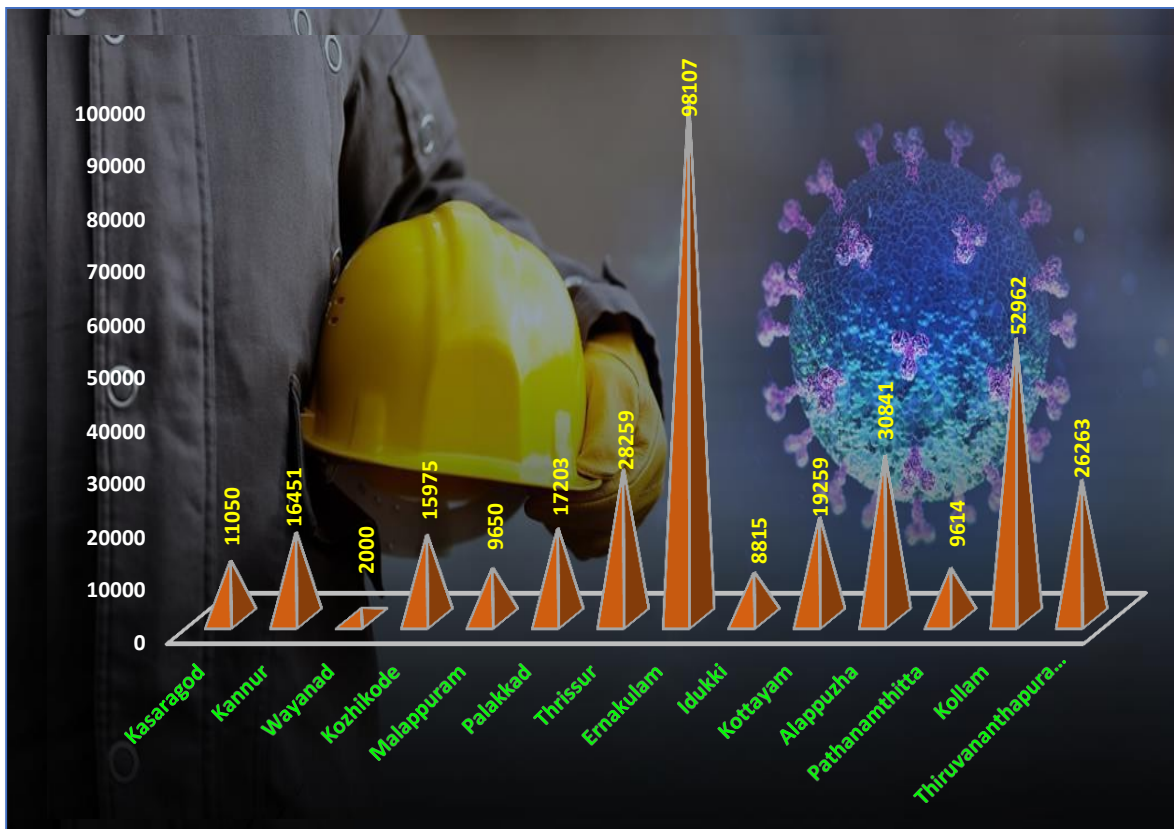
The work force that is available, the amount of time spent engaging in productive activity, the representation of women, the compensation received, etc. are some of the key elements that drive this sector's economic development. With an estimate of roughly 98107 people (or 28.3 % of the state value), the Ernakulam district has the biggest number of people working in the manufacturing sector in the state. The Kollam area comes in second with an estimated 52962 workers providing 15.3% of the state's worth. The range of the percentage contribution from other districts ranges from 0 to 10. (refer Table 9 and Figure 12).

Table 9: District wise distribution of number of persons engaged in manufacturing sector of Kerala.

Districts	Number of persons Engaged	Percentage of persons engaged
<i>Kasargod</i>	11050	3.2
Kannur	16451	4.7
Wayanad	2000	0.6
Kozhikode	15975	4.6
Malappuram	9650	2.8
Palakkad	17203	5.0
Thrissur	28259	8.2
Ernakulam	98107	28.3
Idukki	8815	2.5
Kottayam	19259	5.6
Alappuzha	30841	8.9
Pathanamthitta	9614	2.8

Kollam	52962	15.3
Thiruvananthapuram	26263	7.6
Total	346449	100

Figure 12: Distribution of number of persons engaged in factories of Kerala

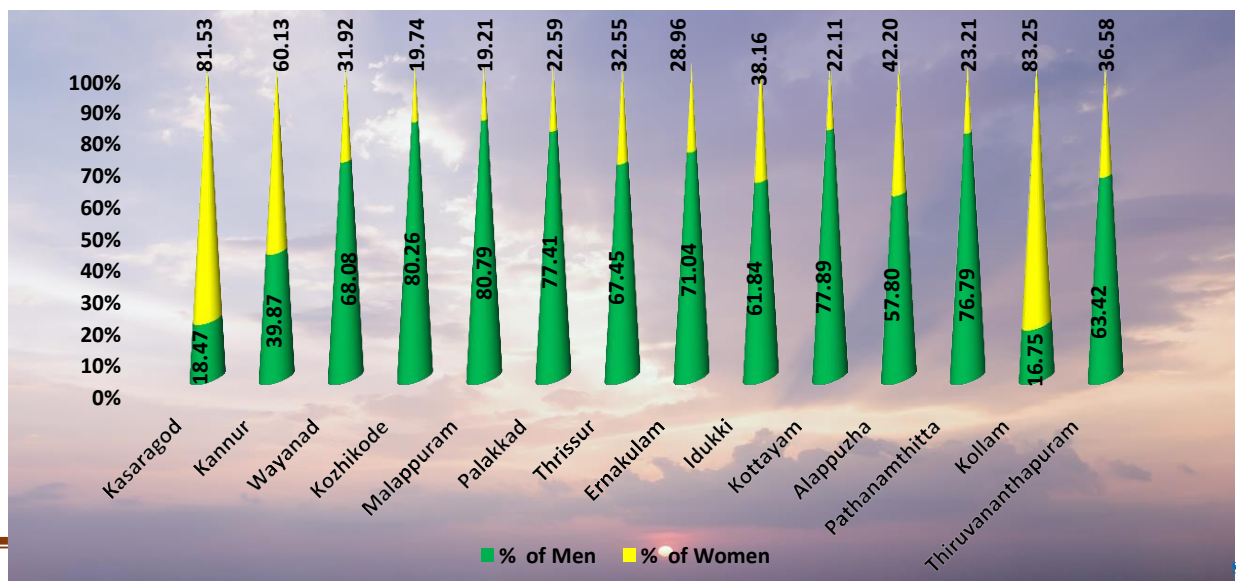


The survey divides the respondents into three categories: workers, employees other than workers, and unpaid family members/proprietors, among others. Workers can also be classified as directly employed or employed via contractors. The Ernakulam district's manufacturing industry has the most directly employed workers (22.2 % of state value). Out of these 29% of them are women and 71% of them are men. With a share of 21.6 % of state value, Kollam district ranks second highest, with a proportion of 83% for women and 17% for men (refer Table 10 and Figure 13).

Table 10: District wise gender based distribution directly employed workers in manufacturing sector of Kerala.

Districts	Men	Women	Total
Kasargod	762	3363	4125
Kannur	5341	8054	13395
Wayanad	802	376	1178
Kozhikode	8331	2049	10380
Malappuram	5236	1245	6481
Palakkad	6888	2010	8898
Thrissur	11638	5616	17254
Ernakulam	34332	13994	48326
Idukki	3090	1907	4997
Kottayam	8585	2437	11022
Alappuzha	13368	9762	23130
Pathanamthitta	5408	1635	7043
Kollam	7872	39128	47000
Thiruvananthapuram	8953	5165	14118
Total	120606	96741	217347

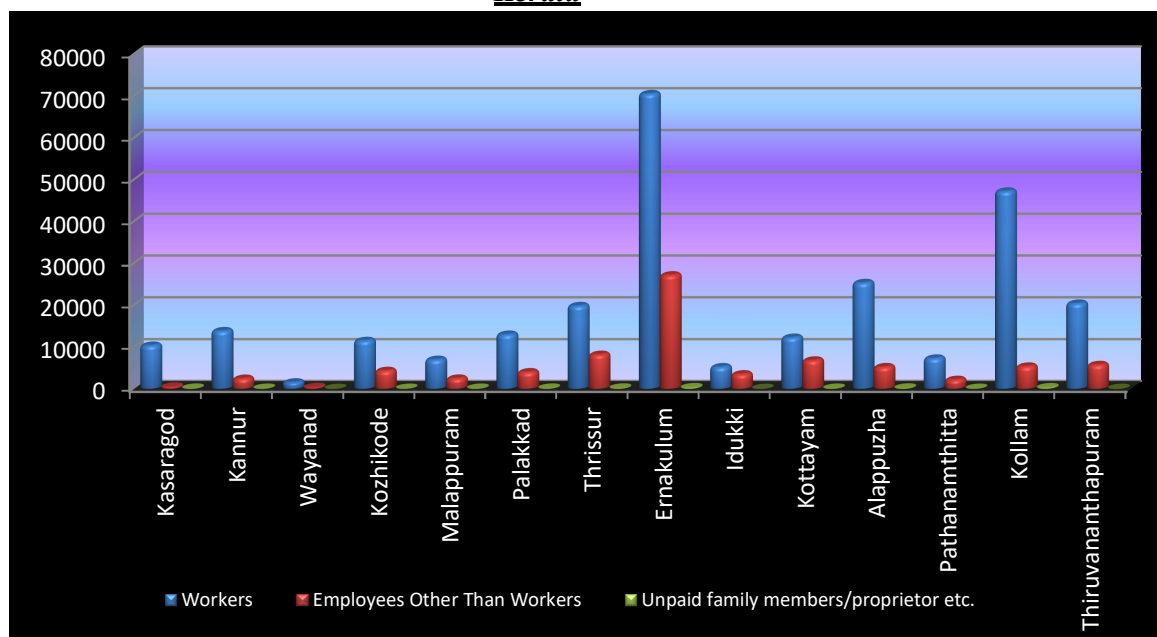
Figure 13: District wise distribution of directly employed Men- women workers



The categorical distribution of employees working in manufacturing sector of 14 districts of the state is illustrated in the *Table 11*.

Table 11: Categorical distribution of persons engaged in manufacturing sector of districts of Kerala

Districts	Workers	Employees Other Than Workers	Unpaid family members/proprietor etc.
Kasaragod	10381	515	158
Kannur	13864	2483	116
Wayanad	1584	389	30
Kozhikode	11524	4353	98
Malappuram	7004	2513	122
Palakkad	13011	4035	153
Thrissur	19860	8210	189
Ernakulum	70561	27204	332
Idukki	5242	3537	32
Kottayam	12285	6841	130
Alappuzha	25374	5262	205
Pathanamthitta	7309	2210	97
Kollam	47258	5389	321
Thiruvananthapuram	20428	5774	63
Total	265685	78715	2046

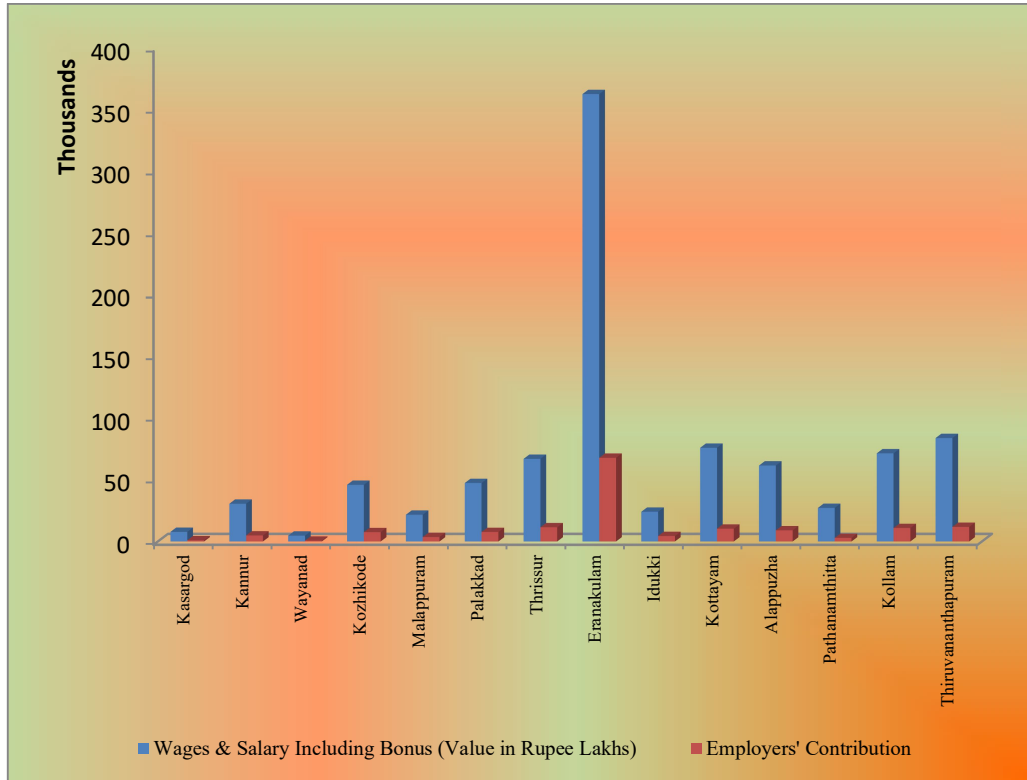
Figure 14: Categorical distribution of persons engaged in manufacturing sector of districts of Kerala

In addition, the study makes an estimate of the wages paid to workers in the manufacturing sector. According to statistics, the earnings and salaries of employees in the Ernakulam district, including bonus, amount to about ₹ 3,62,695 lakhs, while the employers' contribution comes to about 67,851. Table 12 and Figure 15 provide a full depiction of the same.

Table 12: District wise Distribution of emoluments paid to employees in manufacturing sector of Kerala.

Districts	Wages & Salary Including Bonus (Value in ₹ Lakhs)	Employers' Contribution
Kasargod	7804	931
Kannur	30618	4886
Wayanad	4752	664
Kozhikode	45939	7555
Malappuram	21684	3621
Palakkad	47405	7685
Thrissur	66997	11515
Ernakulam	362695	67851
Idukki	24113	4421
Kottayam	75961	10376
Alappuzha	61575	9026
Pathanamthitta	27218	2879
Kollam	71452	10914
Thiruvananthapuram	83856	11846
Total	932069	154170

Figure 15: District wise distribution of emoluments (in ₹ lakhs) paid to the employees in manufacturing sector of Kerala.



CHAPTER 4

INDUSTRIAL STATISTICS BASED ON NATIONAL INDUSTRIAL CLASSIFICATION (NIC 2008)



Estimation of principle characteristics of factory sector by economic activity of the industries



National Industrial Classification (NIC), 2008 is a Statistical Standard used to group industries according to the economic activity they involve and to make comparisons easier. The NIC code is assigned based on the primary product's maximal ex-factory value out of all the other goods and by-products that the unit produces. It's a system of standard industrial classification that was created to make it easier to compare with international standards and to provide a foundation for analysing a wide range of industries based on the economic activity involved. In this survey, an effort has been made to present industrial statistics based on NIC classification. It helps decision-makers determine how much each economic activity contributes to the state's economy and develop strategies that will advance the sector.

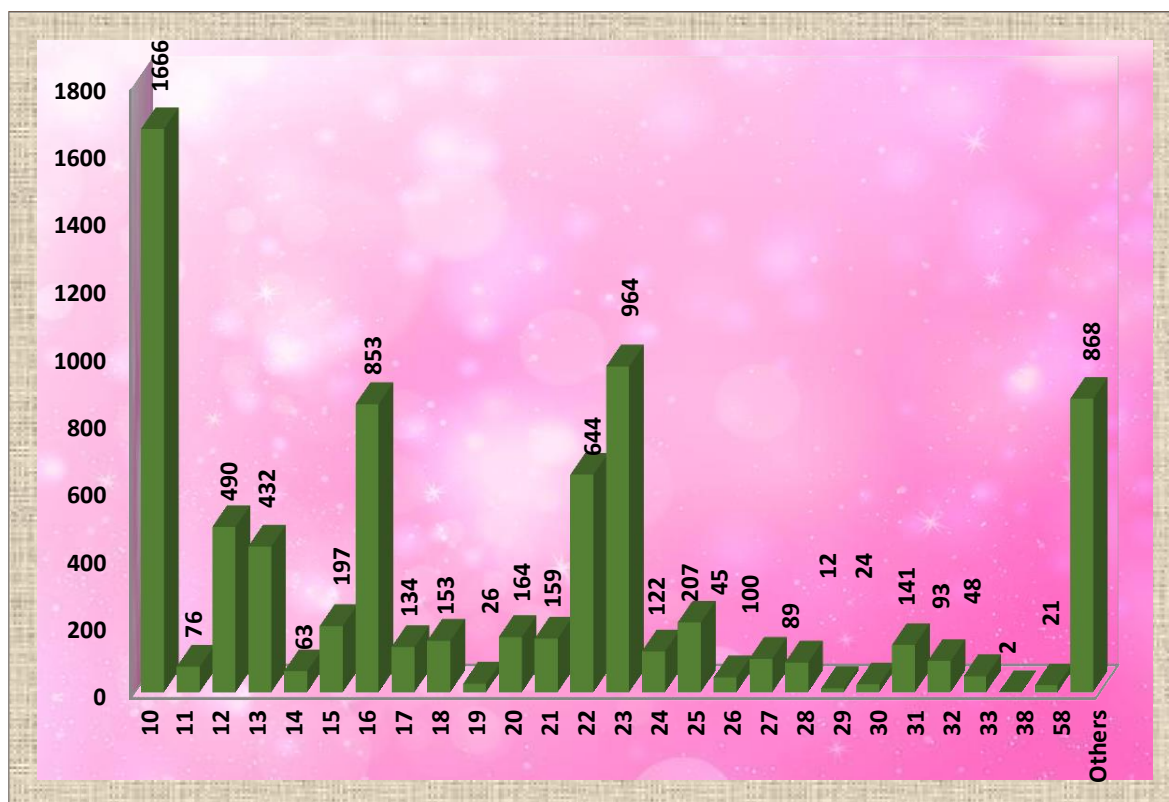
Manufacturing industries by 2-digit NIC, 2008

The production of food products stands for the biggest percentage of factories in Kerala's organized manufacturing sector (21.4%) and the lowest percentage (0.03%) of companies that produce Waste collection, treatment and disposal activities; materials recovery. Non-metallic mineral products (12.4%) and wood and items made of wood and cork, excluding furniture (10.9%) respectively, rank second and third in terms of manufacturing output (refer Table 13 and Figure16).

Table 13: Distribution of factories by major factory group at 2-digit NIC 2008

NIC Code	Description	Number of factories	Percentage of Factories
10	Manufacture of food products	1666	21.4
11	Manufacture of beverages	76	1.0
12	Manufacture of tobacco products	490	6.3
13	Manufacture of textiles	432	5.5
14	Manufacture of wearing apparel	63	0.8
15	Manufacture of leather and related products	197	2.5
16	Manufacture of wood and products of wood and cork, except furniture ;manufacture of articles of straw and plating materials	853	10.9
17	Manufacture of paper and paper products	134	1.7
18	Printing and reproduction of recorded media	153	2.0
19	Manufacture of coke and refined petroleum products	26	0.3
20	Manufacture of chemicals and chemical products	164	2.1
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	159	2.0
22	Manufacture of rubber and plastic products	644	8.3
23	Manufacture of other non-metallic mineral products	964	12.4
24	Manufacture of basic metals	122	1.6
25	Manufacture of fabricated metal products, except machinery and equipment	207	2.7
26	Manufacture of computer, electronic and optical products	45	0.6
27	Manufacture of electrical equipment	100	1.3
28	Manufacture of machinery and equipment n.e.c	89	1.1
29	Manufacture of motor vehicles, trailers and semitrailers	12	0.2
30	Manufacture of other transport equipment	24	0.3
31	Manufacture of furniture	141	1.8
32	Other manufacturing	93	1.2
33	Repair and installation of machinery and equipment	48	0.6
38	Waste collection, treatment and disposal activities; materials recovery	2	0.03
58	Publishing activities	21	0.3
	Others	868	11.1
	Total	7793	100.0

Figure 16: Distribution of number of factories of major factory group at 2-digit NIC, 2008.



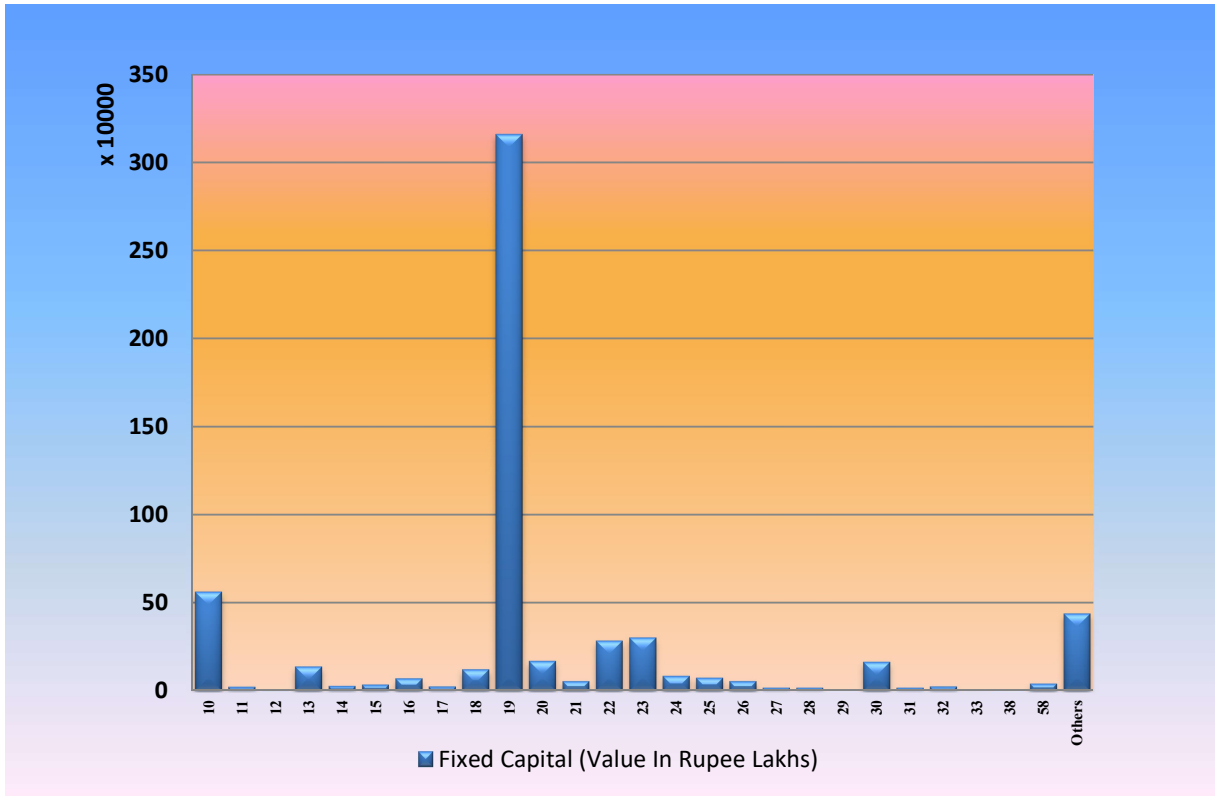
Capital of industries by 2-digit NIC, 2008

The highest fixed asset investments in 2019-20 were made by the coke and refined petroleum product production industries. Fixed capital is expected to be worth ₹ 31,60,976 lakhs, or approximately 53.3 % of the state value. The remaining industries fixed capital is between 0 and 10 % of state value (refer Table 14 and Figure17).

Table 14: Distribution of fixed capital by major factory group at 2-digit NIC 2008

NIC 2 digit Code	Description	Fixed Capital (Value In ₹ Lakhs)	Percentage of Fixed Capital
10	Manufacture of food products	563873	9.51
11	Manufacture of beverages	22534	0.38
12	Manufacture of tobacco products	2368	0.04
13	Manufacture of textiles	138710	2.34
14	Manufacture of wearing apparel	27309	0.46
15	Manufacture of leather and related products	34714	0.59
16	Manufacture of wood and products of wood and cork, except furniture ;manufacture of articles of straw and plating materials	69939	1.18
17	Manufacture of paper and paper products	24677	0.42
18	Printing and reproduction of recorded media	121226	2.04
19	Manufacture of coke and refined petroleum products	3160976	53.3
20	Manufacture of chemicals and chemical products	170317	2.87
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	55573	0.94
22	Manufacture of rubber and plastic products	285536	4.82
23	Manufacture of other non-metallic mineral products	303455	5.12
24	Manufacture of basic metals	84815	1.43
25	Manufacture of fabricated metal products, except machinery and equipments	74067	1.25
26	Manufacture of computer, electronic and optical products	54591	0.92
27	Manufacture of electrical equipment	18246	0.31
28	Manufacture of machinery and equipment n.e.c	17991	0.30
29	Manufacture of motor vehicles, trailers and semitrailers	970	0.02
30	Manufacture of other transport equipment	164471	2.77
31	Manufacture of furniture	17727	0.30
32	Other manufacturing	24944	0.42
33	Repair and installation of machinery and equipment	6082	0.10
38	Waste collection, treatment and disposal activities; materials recovery	2790	0.47
58	Publishing activities	41101	0.69
	Others	439544	7.41
	Total	5928546	100.00

Figure 17: Distribution of fixed capital (in ₹ lakh) in the factory sector by 2-digit NIC, 2008

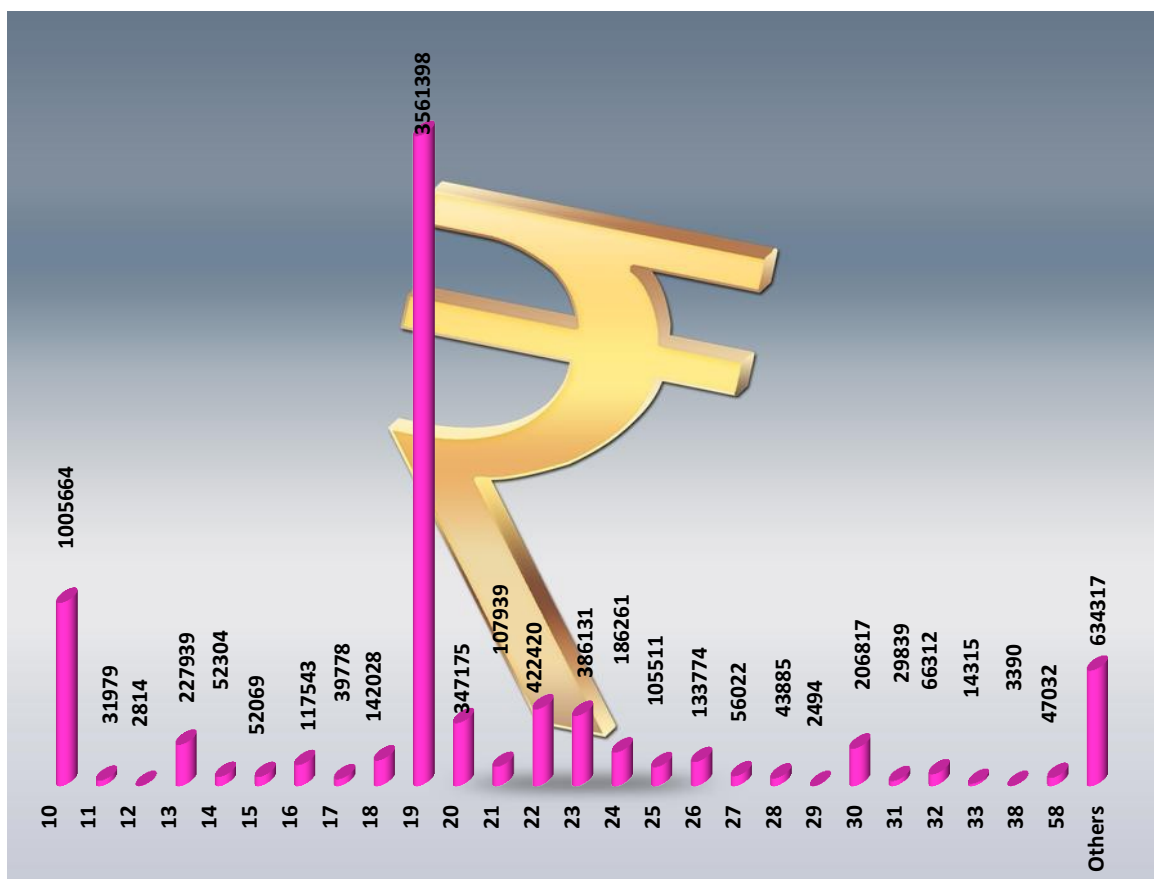


According to survey results, the manufacturing of coke and refined petroleum products has the greatest invested capital at ₹ 35,61,398 lakhs (44.33 % of state value). With an estimated worth of ₹ 10,05,664 lakhs, or roughly 12.53 % of state value, the food manufacturing industries are estimated to be in second place. Table 15 and Figure 18 demonstrate the contribution of the remaining industries.

Table 15: Distribution of invested capital by major factory group at 2-digit NIC 2008

NIC 2 digit Code	Description	Invested Capital (Value In ₹ Lakhs)	Percentage of Invested Capital
10	Manufacture of food products	1005664	12.53
11	Manufacture of beverages	31979	0.40
12	Manufacture of tobacco products	2814	0.04
13	Manufacture of textiles	227939	2.84
14	Manufacture of wearing apparel	52304	0.65
15	Manufacture of leather and related products	52069	0.65
16	Manufacture of wood and products of wood and cork, except furniture ; manufacture of articles of straw and plaiting materials	117543	1.46
17	Manufacture of paper and paper products	39778	0.50
18	Printing and reproduction of recorded media	142028	1.77
19	Manufacture of coke and refined petroleum products	3561398	44.37
20	Manufacture of chemicals and chemical products	347175	4.33
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	107939	1.34
22	Manufacture of rubber and plastic products	422420	5.26
23	Manufacture of other non-metallic mineral products	386131	4.81
24	Manufacture of basic metals	186261	2.32
25	Manufacture of fabricated metal products, except machinery and equipments	105511	1.31
26	Manufacture of computer, electronic and optical products	133774	1.67
27	Manufacture of electrical equipment	56022	0.70
28	Manufacture of machinery and equipment n.e.c	43885	0.55
29	Manufacture of motor vehicles, trailers and semitrailers	2494	0.03
30	Manufacture of other transport equipment	206817	2.58
31	Manufacture of furniture	29839	0.37
32	Other manufacturing	66312	0.83
33	Repair and installation of machinery and equipment	14315	0.18
38	Waste collection, treatment and disposal activities; materials recovery	3390	0.04
58	Publishing activities	47032	0.59
	Others	634317	7.90
	Total	8027150	100.00

Figure 18: Distribution of invested capital (in ₹ lakh) in the factory sector by 2-digit NIC, 2008



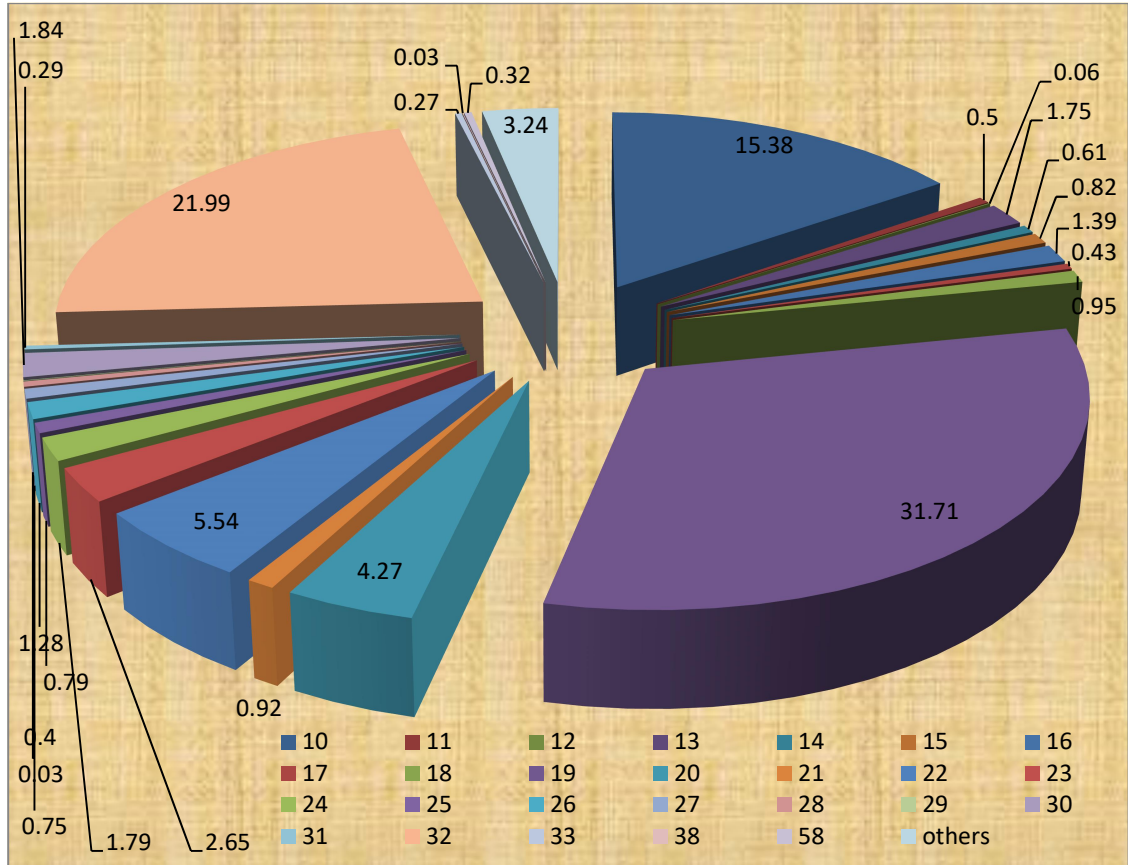
Output of factory sector by 2-digit NIC 2008

The industry producing coke and refined petroleum products has produced at the highest estimate of ₹ 69,39,832 lakhs (31.71 % of state value), followed by the other manufacturing products estimated at ₹ 48,11,142 lakhs (21.99 % of state value) (refer Table 16 and Figure 19).

Table 16: Distribution of output of factories by major factory group at 2-digit NIC 2008

NIC 2 digit Code	Description	Total Output (Value in ₹ Lakhs)	Percentage of Output
10	Manufacture of food products	3364491	15.38
11	Manufacture of beverages	110242	0.50
12	Manufacture of tobacco products	13736	0.06
13	Manufacture of textiles	383538	1.75
14	Manufacture of wearing apparel	132621	0.61
15	Manufacture of leather and related products	179591	0.82
16	Manufacture of wood and products of wood and cork, except furniture ;manufacture of articles of straw and plaiting materials	304084	1.39
17	Manufacture of paper and paper products	93201	0.43
18	Printing and reproduction of recorded media	208957	0.95
19	Manufacture of coke and refined petroleum products	6939832	31.71
20	Manufacture of chemicals and chemical products	934541	4.27
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	202350	0.92
22	Manufacture of rubber and plastic products	1213150	5.54
23	Manufacture of other non-metallic mineral products	579232	2.65
24	Manufacture of basic metals	390761	1.79
25	Manufacture of fabricated metal products, except machinery and equipments	172594	0.79
26	Manufacture of computer, electronic and optical products	280044	1.28
27	Manufacture of electrical equipment	163590	0.75
28	Manufacture of machinery and equipment n.e.c	88358	0.40
29	Manufacture of motor vehicles, trailers and semitrailers	5661	0.03
30	Manufacture of other transport equipment	402707	1.84
31	Manufacture of furniture	62803	0.29
32	Other manufacturing	4811142	21.99
33	Repair and installation of machinery and equipment	59135	0.27
38	Waste collection, treatment and disposal activities; materials recovery	5597	0.03
58	Publishing activities	69968	0.32
	Others	709936	3.24
	Total	21881862	100.00

Figure 19: Distribution of output of factory sector by 2-digit NIC, 2008



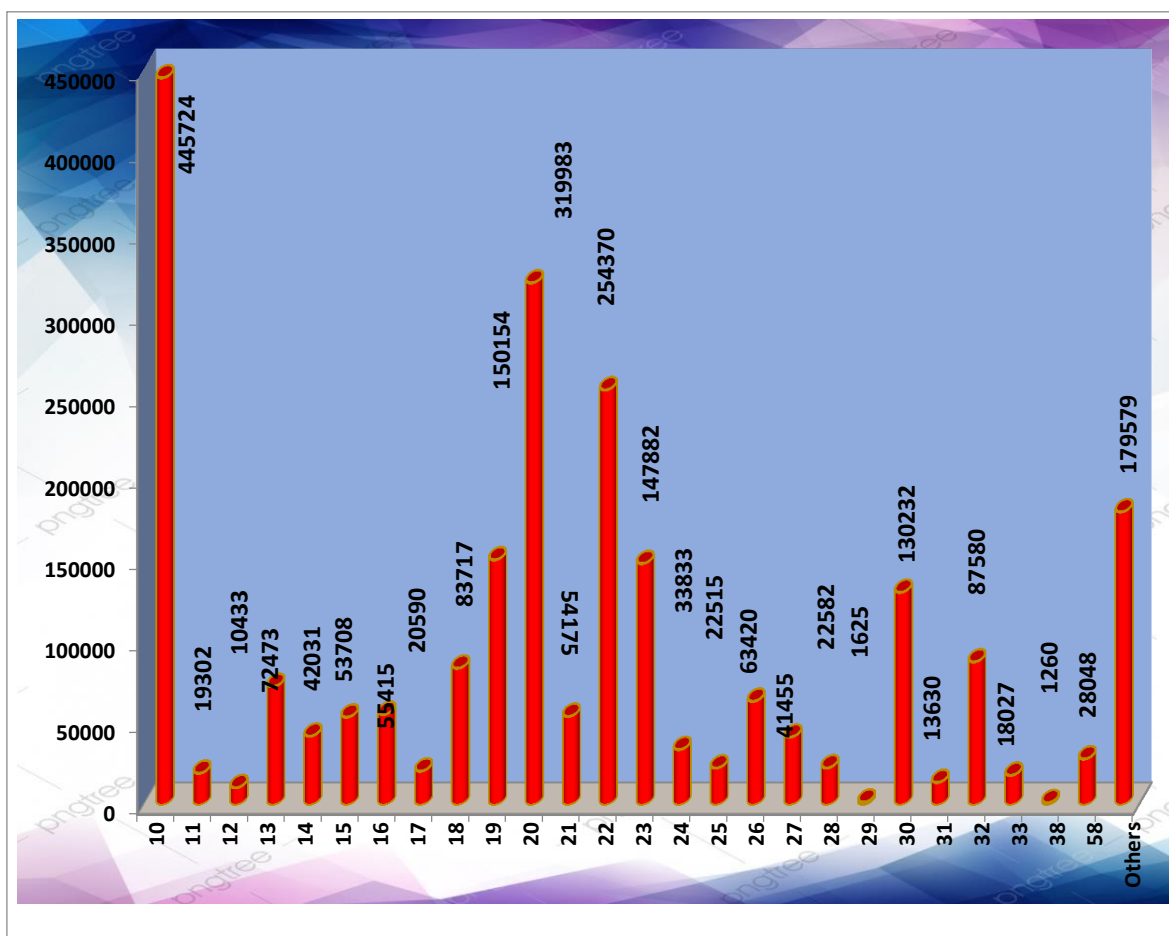
Gross Value Added (GVA)

The industries producing Manufacture of food products contributed the most to the state's manufacturing sector's Gross Value Added. According to the report, this industry contributes about 18.8% of the total GVA. Manufacturing of chemicals and chemical products (13.5%) and Manufacture of rubber and plastic products (10.7%) are the two industries with the second and third highest GVA, respectively. Table 17 and Figure 20 provide a detailed depiction of the remaining industries.

Table 17: Distribution of Gross Value Added (GVA) of factories by major factory group at 2-digit NIC 2008

NIC 2 digit Code	Description	GVA (Value In ₹ Lakhs)	Percentage of GVA
10	Manufacture of food products	445724	18.8
11	Manufacture of beverages	19302	0.8
12	Manufacture of tobacco products	10433	0.4
13	Manufacture of textiles	72473	3.1
14	Manufacture of wearing apparel	42031	1.8
15	Manufacture of leather and related products	53708	2.3
16	Manufacture of wood and products of wood and cork, except furniture ;manufacture of articles of straw and plating materials	55415	2.3
17	Manufacture of paper and paper products	20590	0.9
18	Printing and reproduction of recorded media	83717	3.5
19	Manufacture of coke and refined petroleum products	150154	6.3
20	Manufacture of chemicals and chemical products	319983	13.5
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	54175	2.3
22	Manufacture of rubber and plastic products	254370	10.7
23	Manufacture of other non-metallic mineral products	147882	6.2
24	Manufacture of basic metals	33833	1.4
25	Manufacture of fabricated metal products, except machinery and equipments	22515	0.9
26	Manufacture of computer, electronic and optical products	63420	2.7
27	Manufacture of electrical equipment	41455	1.7
28	Manufacture of machinery and equipment n.e.c	22582	1.0
29	Manufacture of motor vehicles, trailers and semitrailers	1625	0.1
30	Manufacture of other transport equipment	130232	5.5
31	Manufacture of furniture	13630	0.6
32	Other manufacturing	87580	3.7
33	Repair and installation of machinery and equipment	18027	0.8
38	Waste collection, treatment and disposal activities; materials recovery	1260	0.1
58	Publishing activities	28048	1.2
	Others	179579	7.6
	Total	2373743	100

Figure 20: Distribution of GVA (in ₹ lakh) in the factory sector by 2-digit NIC, 2008



Income generated by the industries

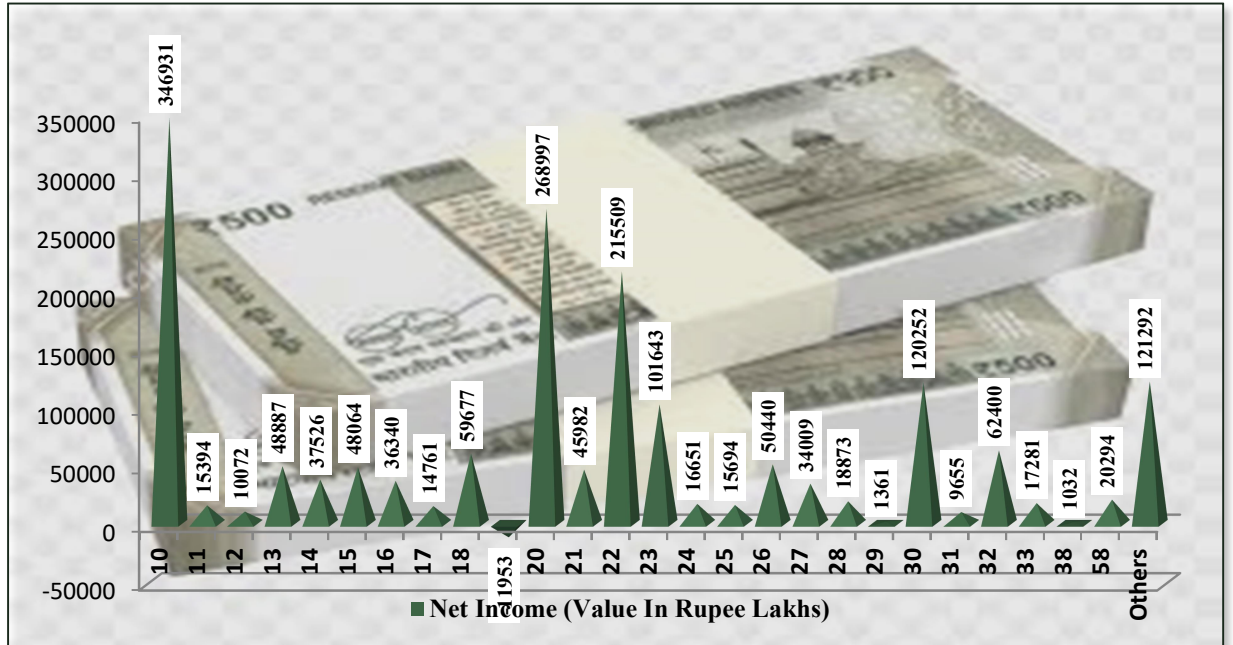
According to survey results, the biggest income are produced by, Manufacture of food products which make it up around 20.1% of the state's total value. The manufacturing of chemicals and chemical products is ranked second, while the manufacturing of rubber and plastic products is ranked third, contributing approximately 15.6% and 12.5% respectively (Refer Figure 21 and Table18).

Table 18: Distribution of Net Income of factories by major factory group at 2-digit NIC 2008.

NIC 2 digit Code	Description	Net Income (Value In ₹ Lakhs)	Percentage of Income
10	Manufacture of food products	346931	20.1
11	Manufacture of beverages	15394	0.9
12	Manufacture of tobacco products	10072	0.6
13	Manufacture of textiles	48887	2.8
14	Manufacture of wearing apparel	37526	2.2
15	Manufacture of leather and related products	48064	2.8
16	Manufacture of wood and products of wood and cork, except furniture ; manufacture of articles of straw and plaiting materials	36340	2.1
17	Manufacture of paper and paper products	14761	0.9
18	Printing and reproduction of recorded media	59677	3.5
19	Manufacture of coke and refined petroleum products	-11953	* -0.7
20	Manufacture of chemicals and chemical products	268997	15.6
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	45982	2.7
22	Manufacture of rubber and plastic products	215509	12.5
23	Manufacture of other non-metallic mineral products	101643	5.9
24	Manufacture of basic metals	16651	1.0
25	Manufacture of fabricated metal products, except machinery and equipments	15694	0.9
26	Manufacture of computer, electronic and optical products	50440	2.9
27	Manufacture of electrical equipment	34009	2.0
28	Manufacture of machinery and equipment n.e.c	18873	1.1
29	Manufacture of motor vehicles, trailers and semitrailers	1361	0.1
30	Manufacture of other transport equipment	120252	7.0
31	Manufacture of furniture	9655	0.6
32	Other manufacturing	62400	3.6
33	Repair and installation of machinery and equipment	17281	1.0
38	Waste collection, treatment and disposal activities; materials recovery	1032	0.1
58	Publishing activities	20294	1.2
	Others	121292	7.0
	Total	1727064	100

Remarks: * Negative percentage is not valid

Figure 21: Distribution of Income (in ₹ lakh) in the factory sector by 2-digit NIC, 2008



Gross Fixed Capital Formation (GFCF)

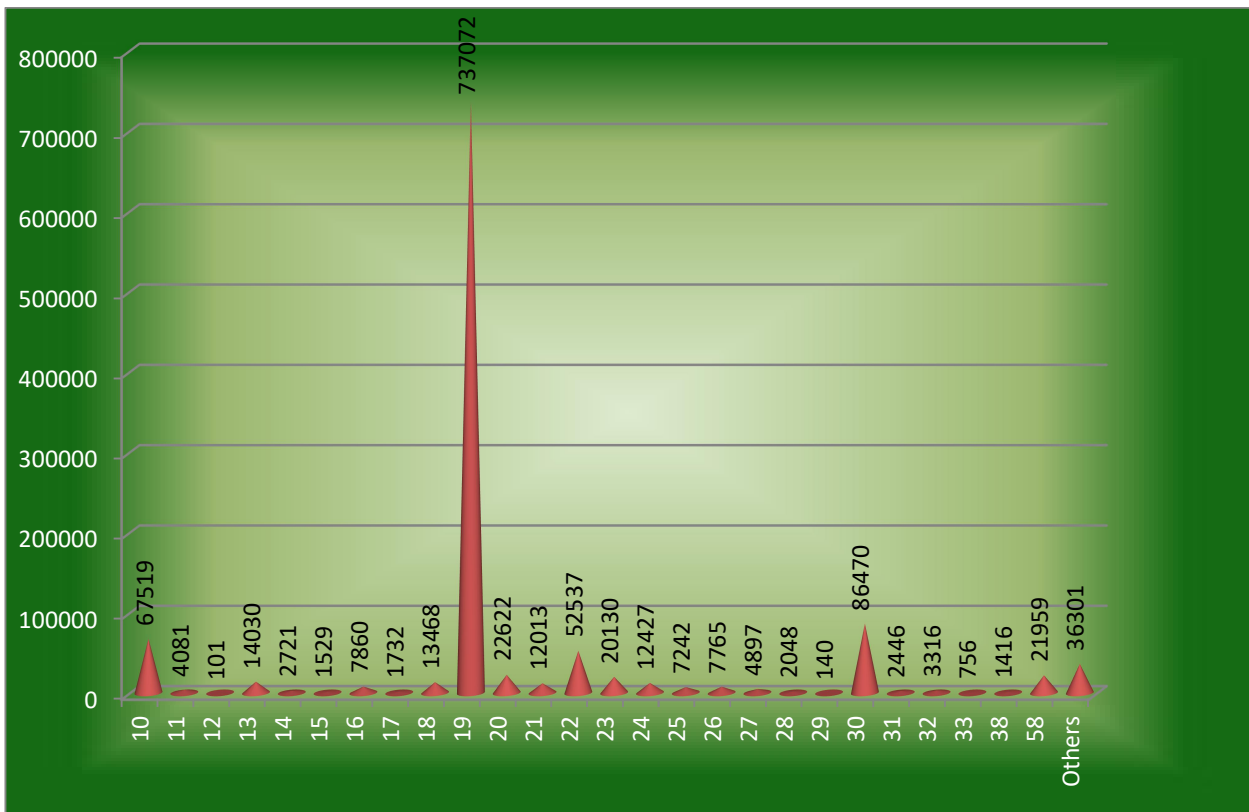
Gross Fixed Capital Formation is computed as the total of a producer's acquisitions of fixed assets over the accounting period, less disposals of those assets, plus a specific amount for services that increase the value of non-produced assets. The industries that produce coke and refined petroleum products have the largest GFCF, accounting for 64.3% of the state's value, followed by the food manufacturing sector at 5.9% (refer Figure 22 and Table 19).

**Table 19: Distribution of Gross Fixed Capital Formation of factories by major factory group by 2-
by 2-digit NIC 2008**

NIC 2 digit Code	Description	GFCF (Value In ₹ Lakhs)	Percentage of GFCF
10	Manufacture of food products	67519	5.9
11	Manufacture of beverages	4081	0.4
12	Manufacture of tobacco products	101	0.0
13	Manufacture of textiles	14030	1.2
14	Manufacture of wearing apparel	2721	0.2
15	Manufacture of leather and related products	1529	0.1
16	Manufacture of wood and products of wood and cork, except furniture ;manufacture of articles of straw and plating materials	7860	0.7
17	Manufacture of paper and paper products	1732	0.2
18	Printing and reproduction of recorded media	13468	1.2
19	Manufacture of coke and refined petroleum products	737072	64.3
20	Manufacture of chemicals and chemical products	22622	2.0
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	12013	1.0
22	Manufacture of rubber and plastic products	52537	4.6
23	Manufacture of other non-metallic mineral products	20130	1.8
24	Manufacture of basic metals	12427	1.1
25	Manufacture of fabricated metal products, except machinery and equipments	7242	0.6
26	Manufacture of computer, electronic and optical products	7765	0.7
27	Manufacture of electrical equipment	4897	0.4
28	Manufacture of machinery and equipment n.e.c	2048	0.2
29	Manufacture of motor vehicles, trailers and semitrailers	140	0.0
30	Manufacture of other transport equipment	86470	7.6
31	Manufacture of furniture	2446	0.2
32	Other manufacturing	3316	0.3
33	Repair and installation of machinery and equipment	756	0.1

38	Waste collection, treatment and disposal activities; materials recovery	1416	0.1
58	Publishing activities	21959	1.9
	Others	36301	3.2
	Total	1144598	100

Figure 22: Distribution of GFCF (in ₹ lakh) of the factory sector by 2-digit NIC, 2008



Number of persons engaged

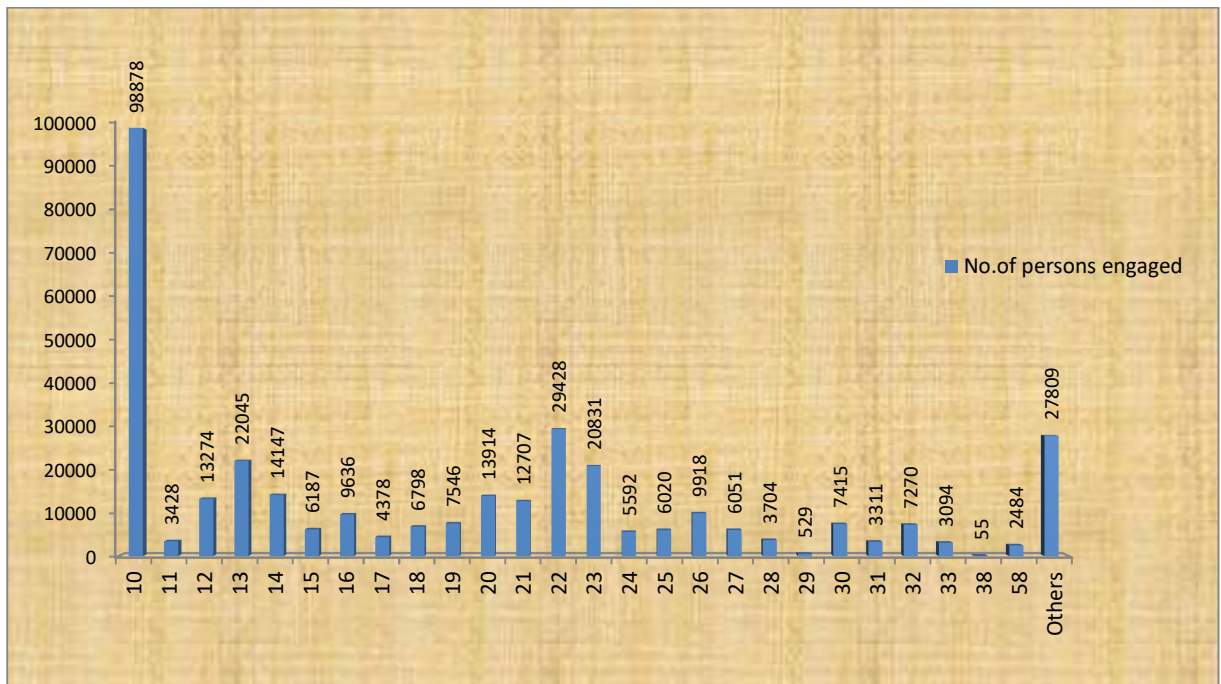
The term "people engaged" refers to all workers the factory employs, whether or not they are paid, and who are involved in some way in the manufacturing process. This includes all administrative, technical, and clerical staff members as well as labourers who produce capital assets for the factory's own use. The highest number of employees is recorded by manufacturing food products, about 98,878 (28.5% of state value). The number of people employed in the state's various manufacturing industry groups is shown in Table 20 and Figure 23

Table 20: Distribution of Number of persons engaged in factories by major factory group by 2-digit NIC 2008

NIC 2 digit Code	Description	No.of persons engaged	percentage of persons engaged
10	Manufacture of food products	98878	28.5
11	Manufacture of beverages	3428	1.0
12	Manufacture of tobacco products	13274	3.8
13	Manufacture of textiles	22045	6.4
14	Manufacture of wearing apparel	14147	4.1
15	Manufacture of leather and related products	6187	1.8
16	Manufacture of wood and products of wood and cork, except furniture ;manufacture of articles of straw and plating materials	9636	2.8
17	Manufacture of paper and paper products	4378	1.3
18	Printing and reproduction of recorded media	6798	2.0
19	Manufacture of coke and refined petroleum products	7546	2.2
20	Manufacture of chemicals and chemical products	13914	4.0
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	12707	3.7
22	Manufacture of rubber and plastic products	29428	8.5
23	Manufacture of other non-metallic mineral products	20831	6.0
24	Manufacture of basic metals	5592	1.6
25	Manufacture of fabricated metal products, except machinery and equipments	6020	1.7
26	Manufacture of computer, electronic and optical products	9918	2.9
27	Manufacture of electrical equipment	6051	1.7
28	Manufacture of machinery and equipment n.e.c	3704	1.1

29	Manufacture of motor vehicles, trailers and semitrailers	529	0.2
30	Manufacture of other transport equipment	7415	2.1
31	Manufacture of furniture	3311	1.0
32	Other manufacturing	7270	2.1
33	Repair and installation of machinery and equipment	3094	0.9
38	Waste collection, treatment and disposal activities; materials recovery	55	0.0
58	Publishing activities	2484	0.7
	Others	27809	8.0
	Total	346449	100

Figure 23: Distribution of number of persons engaged in factory sector by 2-digit NIC, 2008



CHAPTER 5

ANNUAL TRENDS IN INDUSTRIAL STATISTICS



**A Comparative Study of Principal Characteristics of Survey Estimates
over a period of 8 years.**

A Comparative Study of Principal Characteristics of Survey Estimates over a period of 8 years.



For the manufacturing sector to be promoted, it is crucial to analyze and follow the annual trend in the industrial data over time. Surveys are essential for determining the causes of statistical fluctuations, aiding in estimation and establishing a development strategy for future advancement. This section aims to present the annual trends in various key manufacturing sector features from 2012–13 to 2019–20.

Table 21: Distribution of significant characteristics of organized manufacturing sector of state from 2012-13 to 2019-20

Sl. No.	Characteristics	FINANCIAL YEAR							
		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
1	Number of Factories	7129	7132	7295	7584	7982	7596	7695	7793
2	Fixed Capital	1793601	2454515	3312566	4069375	4784549	4369284	4907497	5928546
3	Invested Capital	3254204	4042414	4804167	5717150	6547340	6194820	7031597	8027150
4	Total Output	12064788	13573186	14237493	12052212	13942718	16556578	22651833	21881862
5	Total Input	10774729	12014395	12680764	10237768	11643987	14256475	20185943	19508119
6	Gross Value Added (GVA)	1290059	1558791	1556729	1814445	2298731	2279897	2465890	2373743
7	Gross Fixed Capital Formation (GFCF)	294297	802434	662239	947818	1154951	485582	696533	1144598
8	Net Value Added (NVA)	1128481	1370155	1315095	1568912	2047964	1987576	2104452	1966556
9	Net Income	1009353	1235082	1092333	1377101	1863677	1799319	1861860	1727064
10	Profit	381847	573135	319992	509639	1043683	884010	824389	640827

According to the survey results, the estimated number of factories increased from 2012–13 to 2016–17; however it declined by 386 in 2017–18 and increased by next two years (see Figure 24). From 2012-13 to 2016–17, the fixed capital and invested capital both exhibit a growing tendency; however, the year 2017–18 marks a decline in these capitals and increases in 2018-19 and 2019-20 (refer Figure25).

Figure 24: Year wise distribution of number of factories in organized manufacturing sector

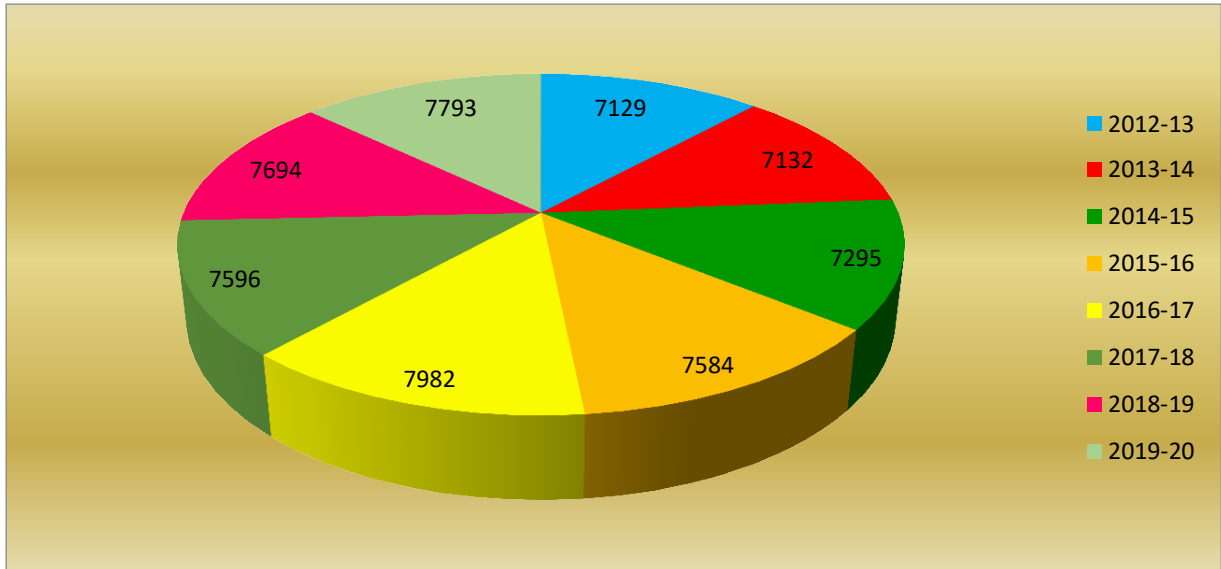
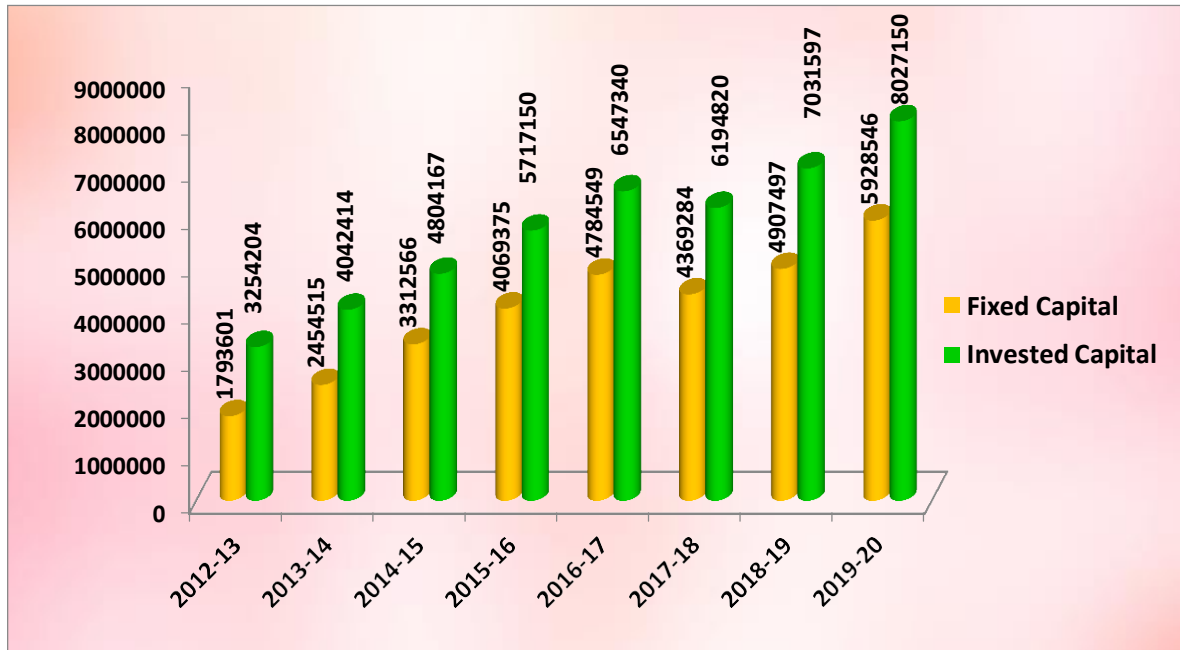
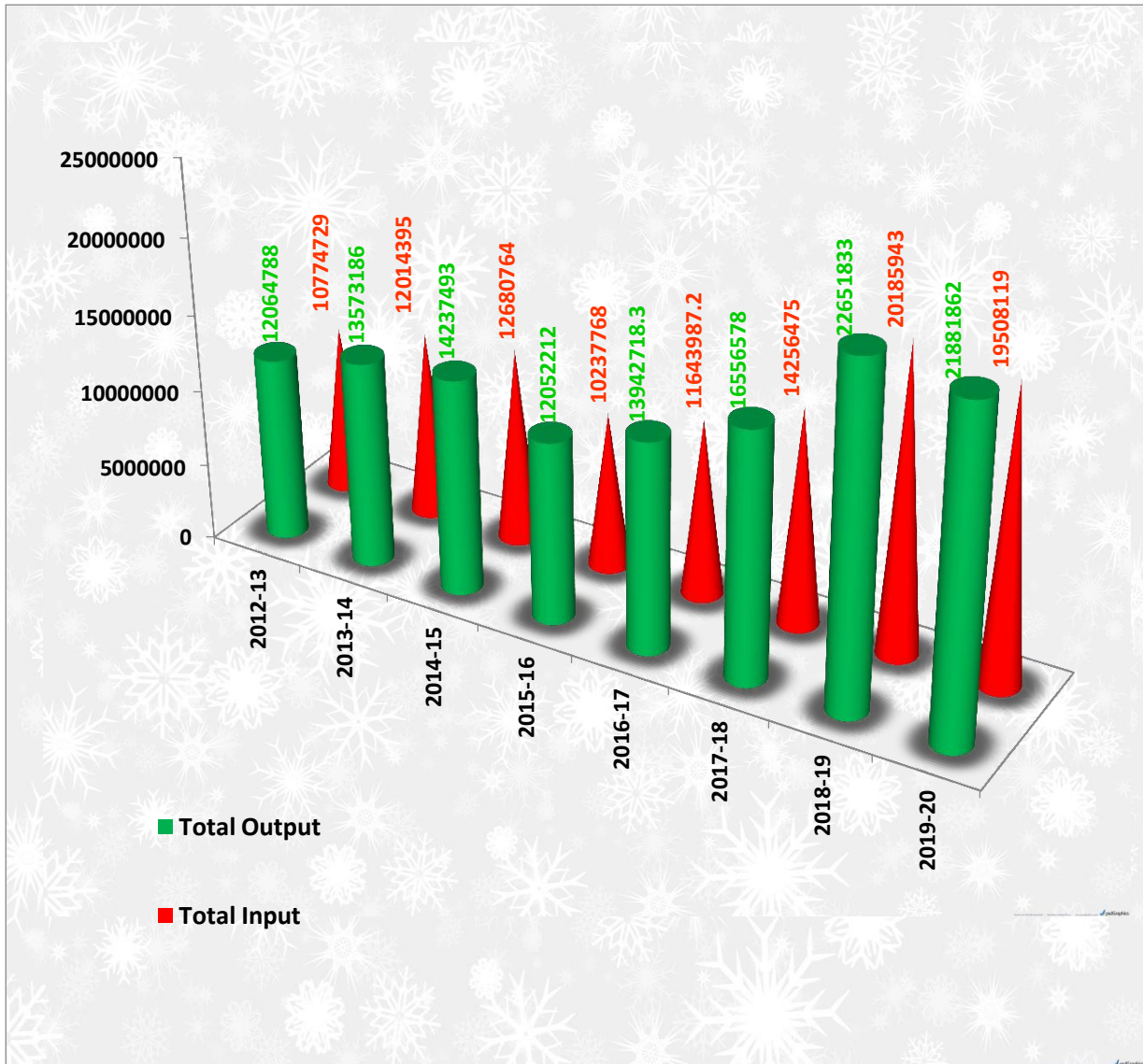


Figure 25 : Year wise distribution of fixed capital and invested capital (in ₹ lakh)



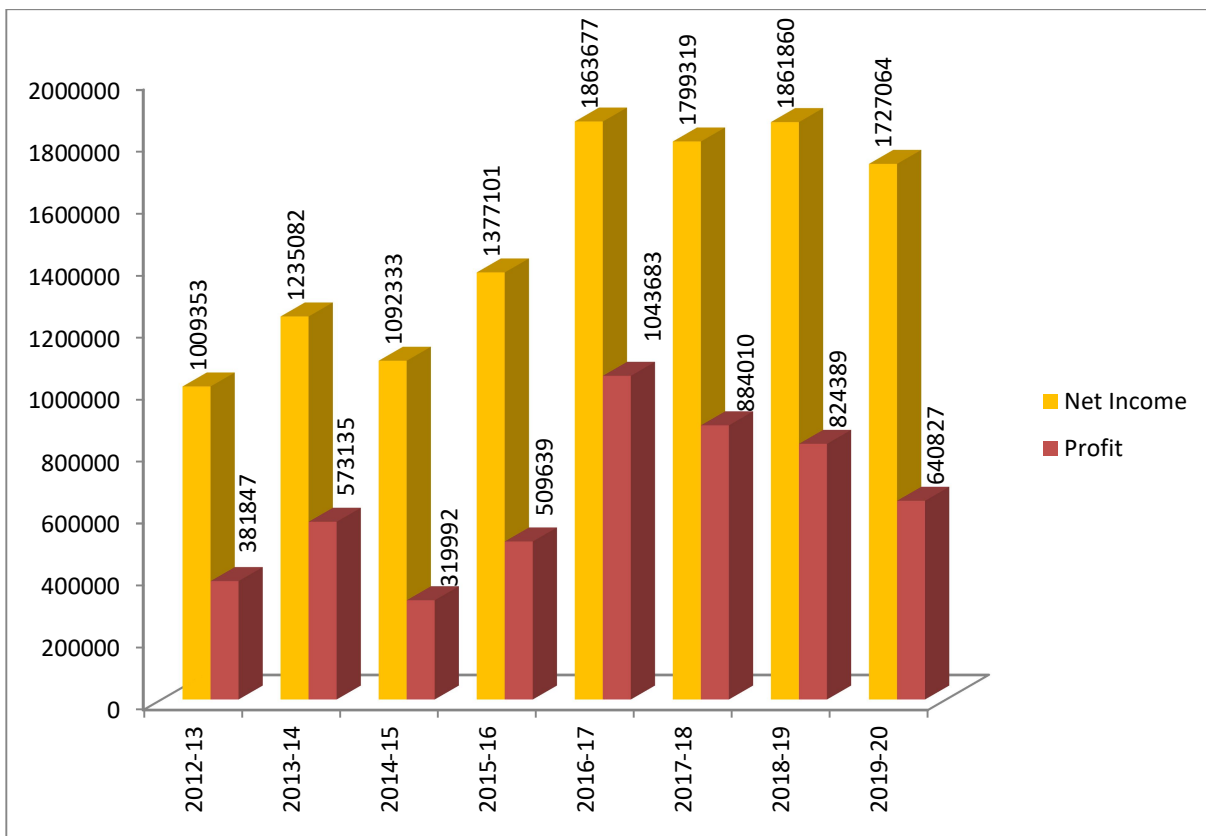
Furthermore, this data shows a rising tendency in the input and output of the manufacturing sector from 2012-13 to 2014-15, a declining trend in 2015-16, and a rising trend for the following three financial years and again a declining trend in 2019-20.

Figure 26: Year wise distribution of input and output (in ₹ lakh) of manufacturing sector



The net income and profit shows an increasing trend during first two years which dropped in 2014-15 and again an increasing trend is noticed during 2015-16 to 2016-2017. There is a slight decrease of net income in 2017-18, increase in 2018-19 and decrease in 2019-20. Figure 27 shows the trend of the same.

Figure 27: Year wise distribution of net income and profit (in ₹ lakh) of organized manufacturing sector



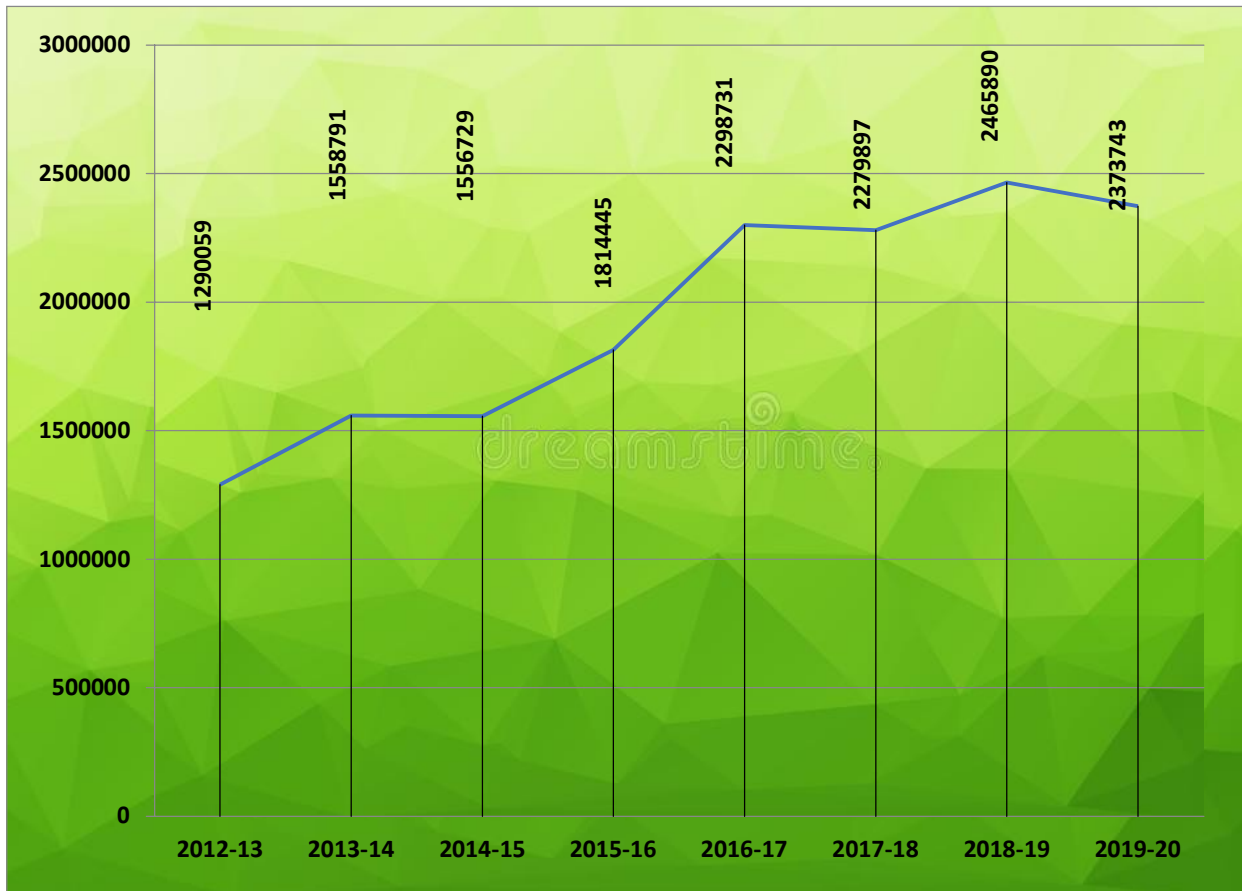
Gross Fixed Capital Formation (GFCF) noticeably increased for first two years, but then sharply decreased in 2014–15 and increased in 2015-16 and 2016-17 and again a sharp decline is seen in 2017-18. After 2018 -19 an increasing trend is noticed. Figure 28 provides an illustration of the GFCF trend.

Figure 28: Annual trend of GFCF (in ₹ lakh)



Gross Value Added (GVA) in production is seen to be somewhat declining in the years 2014–15, 2017–18 and 2019-20. In 2018–19, the GVA increased from ₹ 22,79,897 lakhs to 24,65,890 lakhs and in 2019-20 it decreases as 23,73,743 lakhs. The trend in GVA over a period of 8 years is depicted in Figure 29.

Figure 29: GVA (in ₹ lakh) of organized manufacturing sector of Kerala for 8 consecutive years



Two consecutive financial years, 2018-19 and 2019–20, were used to analyze the growth rate of several features. According to the data, the number of factories, fixed capital, invested capital, GFCF shows an increasing trend. The growth rate of profit (-22.27 %) shows negative growth. In 2019–20, production's Gross Value Added (GVA) is -3.74% According to data, the estimates show a growth rate of 1.30 % in number of factories, 17.22 % in fixed capital, 12.4 % in invested capital, and 39.15 % in GFCF of the manufacturing sector.

Table 22: Growth rate of significant characteristics of organized manufacturing sector in two successive years

Sl.No.	Characteristics	2018-19	2019-20	percentage growth rate over 2019-20
1	Number of Factories	7695	7793	1.26
2	Fixed Capital	4907497	5928546	17.22
3	Invested Capital	7031597	8027150	12.4
4	Gross Fixed Capital Formation (GFCF)	696533	1144598	39.15

For the manufacturing sector to be more gender equal, the employment structure must be updated, new wage regulations must be developed, and the size of the workforce, wage trends, and gender-based participation of the workforce must all be examined. The number of persons engaged in the factories reflects the employment status in the manufacturing sector. The fluctuations in the number of workers, employees other than worker and unpaid family member/proprietor for 8 consecutive years have been depicted in the Table 23.

The estimated figures shows that number of workers in the factories for the year 2018-19 has recorded the highest, compared to the previous 2 years. Although there was a

little increase in employees other than workers and unpaid family members from 2017–18 to 2018–19.

Table 23: Distribution of workers engaged in factories in the state

Persons Engaged	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Workers	302971	287071	294750	317472	259160	256090	271485	265685
Employees other than workers	54175	58514	82641	61857	65021	67045	68838	78715
Unpaid Family Members/ Proprietor etc.	786	1774	1943	1573	2463	1638	2143	2046
Total	357932	347359	379334	380901	326644	324773	342465	346446

The workers engaged in the factories are categorized as directly employed and employed through contractors. Among the directly employed workers male and female categorization was done. Analytic view of the estimated figures of directly employed male and female workers in 8 consecutive fiscal years shows a decreasing trend of 62.3% in 2012-13 to 44.5% in 2019-20 in the female participation in the manufacturing sector. whereas the male participation has increased from 37.2% to 55.5%.

Table 24: Gender based distribution of directly employed workers

Directly employed workers	percentage of workers in 8 consecutive years							
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Men	37.7	39.5	40.9	50	52.1	54.0	57.0	55.5
Women	62.3	60.5	59.1	50	47.9	46.0	43.0	44.5

Table 25: Emoluments paid to the employees in organised manufacturing sector.

Financial year	Wages and salaries including employees contribution (value in ₹ lakhs)
2012-13	627506
2013-14	661948
2014-15	781658
2015-16	867462
2016-17	819994
2017-18	915447
2018-19	1037471
2019-20	1086239

CHAPTER 6

RURAL AND URBAN STATISTICS OF MANUFACTURING SECTOR



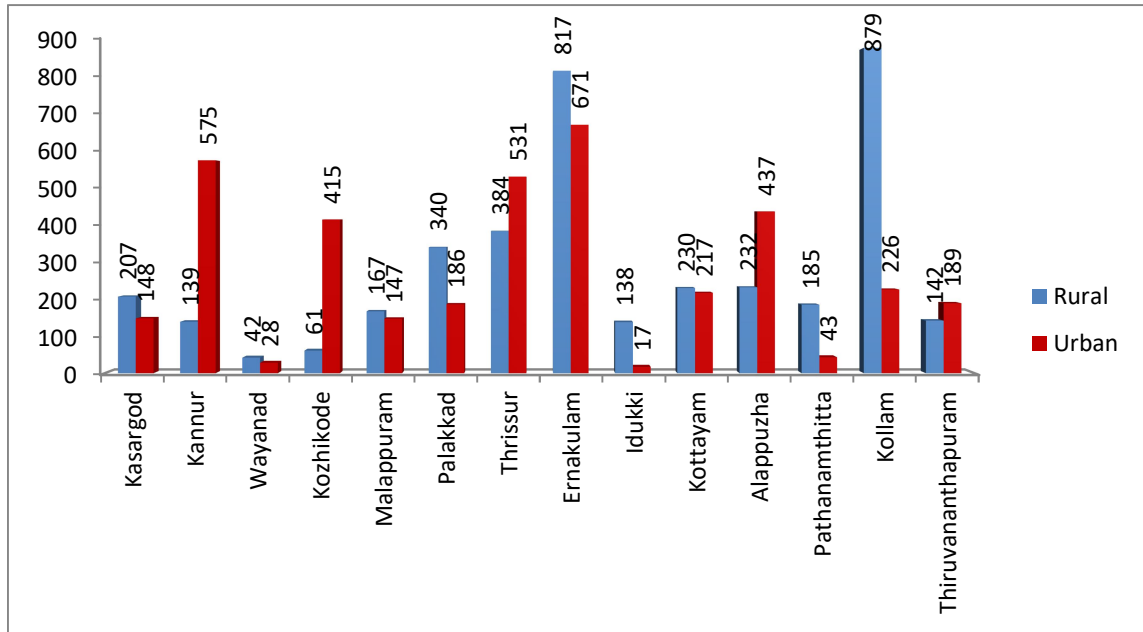
An Overview of Principal Characteristics of Manufacturing Sector in the Rural & Urban areas



Location of industries is one of the key elements that can have both positive and negative effects on the industrial sector. The necessity for an industrial policy that supports the growth of the sector in underdeveloped areas may be revealed by field studies of various industries in rural and urban areas. In both the state's urban and rural areas, efforts have been made to highlight the key characteristics of the manufacturing sector. According to the Annual Survey of Industries, urban areas are about 49.1% of industries, while rural areas are 50.9%. Estimates by district reveal that Ernakulam has the highest concentration of industries, with 54.9% located in rural and 45.1% in urban areas. Table 26 shows the district wise estimates of factories.

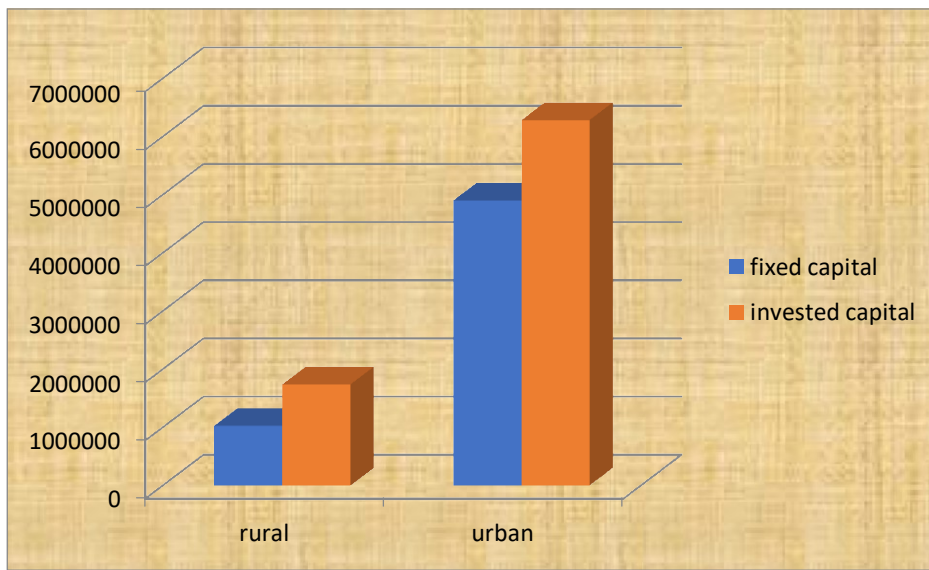
Table 26: District wise Distribution of factories in rural and urban areas

Districts	Number of factories	
	Rural	Urban
Kasargod	207	148
Kannur	139	575
Wayanad	42	28
Kozhikode	61	415
Malappuram	167	147
Palakkad	340	186
Thrissur	384	531
Ernakulam	817	671
Idukki	138	17
Kottayam	230	217
Alappuzha	232	437
Pathanamthitta	185	43
Kollam	879	226
Thiruvananthapuram	142	189

Figure 30: District wise Distribution of factories in rural and urban areas

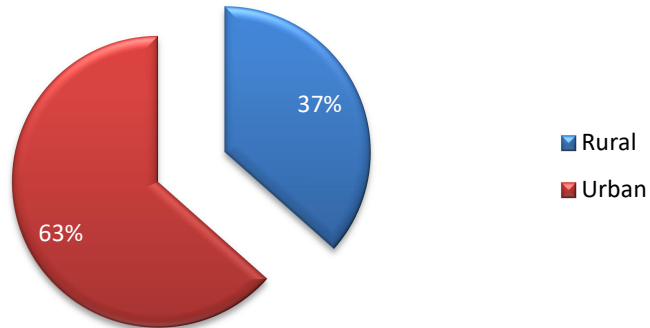
In addition, fixed capital for the factory sector in rural and urban areas are ₹ 10,27,046 lakhs and ₹49,01,500 lakhs, while invested capital comes out to be ₹ 17,42,611 lakhs and ₹ 62,84,539 lakhs respectively. The factory sector's input in urban and rural areas are ₹32,45,027 lakhs and ₹1,62,63,092 lakhs, while its output is estimated to be ₹ 41,12,811 lakhs and ₹ 1,77,69,051 lakhs respectively.

Figure 31: Distribution of fixed and invested capital of manufacturing sector in rural and urban areas



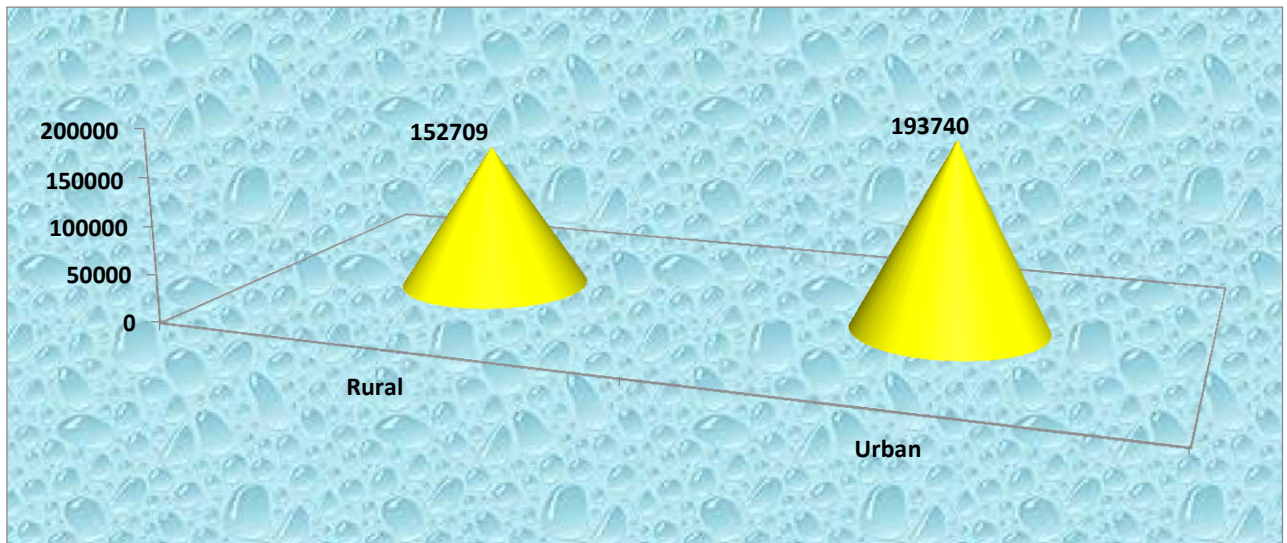
Gross Fixed Capital Formation (GFCF) is estimated to be ₹ 1, 37,296 lakhs in rural factories and ₹ 10,07,302 lakhs in urban factories respectively. According to survey findings, the manufacturing sector's Gross Value Added is contributed by 63.4 % of industries in urban and 36.6 % of industries in rural areas.

Figure 32: Distribution of GVA of manufacturing sector in rural and urban Areas



According to the estimates, number of persons engaged in factories in rural and urban areas are 152709 (44.1 % of the state value) and 193740 (55.9 % of the state value) respectively.

Figure 33: Number of persons engaged in factories in rural and urban areas



Annexures



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II — खण्ड 1

PART II — Section 1

प्राधिकार से प्रकाशित

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NEW DELHI, FRIDAY, JANUARY 9, 2009 / PAUSA 19, 1930

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।
Separate paging is given to this Part in order that it may be filed as a separate compilation.

MINISTRY OF LAW AND JUSTICE

(Legislative Department)

New Delhi, the 9th January, 2009/Pausa 19, 1930 (Saka)

The following Act of Parliament received the assent of the President on the 7th January, 2009, and is hereby published for general information:—

THE COLLECTION OF STATISTICS ACT, 2008

No. 7 OF 2009

[7th January, 2009.]

An Act to facilitate the collection of statistics on economic, demographic, social, scientific and environmental aspects, and for matters connected therewith or incidental thereto.

BE it enacted by Parliament in the Fifty-ninth Year of the Republic of India as follows:—

CHAPTER I

PRELIMINARY

1. (1) This Act may be called the Collection of Statistics Act, 2008.
- (2) It extends to the whole of India except the State of Jammu and Kashmir.
- (3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

Short title,
extent and
commence-
ment.

2. In this Act, unless the context otherwise requires,—

Definitions

(a) “agency” includes a person or persons engaged by the appropriate Government, directly or by outsourcing, for collection of statistics;

(b) “appropriate Government” means—

(i) any Ministry or Department in the Central Government; or

(ii) any Ministry or Department in a State Government or Union territory Administration; or

(iii) any local government that is to say, Panchayats or Municipalities, as the case may be,

in relation to the collection of statistics under a direction issued by it under section 3;

(c) "informant" means any person, who supplies or is required to supply statistical information and includes a owner or occupier or person in-charge or his authorised representative in respect of persons or a firm registered under the Indian Partnership Act, 1932 or a co-operative society registered under any Co-operative Societies Act or a company registered under the Companies Act, 1956 or a society registered under the Societies Registration Act, 1860 or any association recognised or registered under any law for the time being in force;

9 of 1932.
1 of 1956.
21 of 1860.

(d) "information schedule" means any book, document, form, card, tape, disc or any storage media on which information required is entered or recorded or is required to be entered or recorded for statistical purposes under this Act;

(e) "prescribed" means prescribed by rules made under this Act;

(f) "sampling" means a statistical procedure by which information relating to a particular field of inquiry is derived by applying statistical techniques to information obtained in respect of a proportion of the total number of persons or units concerned relevant to the field of inquiry;

(g) "statistical survey" means a census or a survey, whereby information is collected from all the informants in the field of inquiry or from a sample thereof, by an appropriate Government under this Act or any other relevant Act, wholly or primarily for the purposes of processing and summarising by appropriate statistical procedures;

(h) "statistics" means statistics derived by collecting, classifying and using statistics, specially in or for large quantities or numbers by appropriate Government from statistical surveys, administrative and registration records, and other forms and papers, the statistical analysis of which are, whether in a published or unpublished form;

(i) "statistics officer" means any officer appointed under section 4 for the purposes of any direction issued under section 3 of this Act.

CHAPTER II

COLLECTION OF STATISTICS

Collection of statistics.

3. The appropriate Government may, by notification in the Official Gazette, direct that the statistics on economic, demographic, social, scientific and environmental aspects shall be collected through a statistical survey or otherwise, and thereupon the provisions of this Act shall apply in relation to those statistics:

Provided that—

(a) nothing contained in this section shall be deemed to authorise a State Government or Union territory Administration or any local government to issue any direction with respect to the collection of statistics relating to any matter falling under any of the entries specified in List I (Union List) in the Seventh Schedule to the Constitution; or

(b) where the Central Government has issued any direction under this section for the collection of statistics relating to any matter, no State Government or Union territory Administration or any local government shall, except with the previous approval of the Central Government, issue any similar direction for so long as the collection of such statistics by the Central Government remain to be completed; or

(c) where a State Government or Union territory Administration or any local government has issued a direction under this section for the collection of statistics relating to any matter, the Central Government shall not issue any similar direction for so long as the collection of such statistics by the State Government remain to be completed, except in cases where such statistics have to be collected with reference to two or more States or Union territories.

4. (1) The appropriate Government may appoint or cause to appoint an officer to be the statistics officer for any geographical unit for the purpose of collecting any statistics directed by it.

Powers of appropriate Government to appoint statistics officer, etc.

(2) The appropriate Government may appoint any agency or persons working in such agencies to take, or aid in, or supervise the collection of the statistics within any specified geographical unit and such agencies or persons, when so appointed, shall be bound to serve accordingly.

(3) The appropriate Government may employ on contract basis any agency or company or organisation or association or person, on such terms and conditions and on such safeguards as may be prescribed, for the purpose of collecting the statistics directed by it.

(4) The appropriate Government may delegate to any statistics officer, as it thinks fit, the power of appointing agencies or persons working in such agencies or employing on contract basis any agency or company or organisation or association of persons, conferred on it by sub-sections (2) and (3) within the geographical unit for which such statistics officer is appointed.

(5) The appropriate Government may, by order specify the form, the particulars required or the interval within which, and the statistics officer to whom, the statistical information by the informants shall be furnished.

(6) The appropriate Government may, by order published in the Official Gazette, delegate to any statistics officer, as it thinks fit, any power conferred under sub-section (5) for the purpose of the collection of statistics under a direction issued by it under section 3.

5. The statistics officer may, for the purpose of collection of statistics on any specified subject in any geographical unit for which the said officer was appointed—

Power of statistics officer to call for information.

(a) serve or cause to be served on any informant a notice in writing asking him to furnish the information specified under sub-section (5) of section 4 or cause a information schedule to be given to any informant for the purpose of its being filled up; or

(b) cause all questions relating to the subject to be asked from any informant; or

(c) seek information through tele fax or telephone or e-mail or in any other electronic mode or in a combination of different modes for different sets of information so specified.

6. The informants who are asked to furnish any information under the provisions of this Act shall be bound to furnish the information so asked in the prescribed manner to the best of knowledge or belief; and in cases where only a portion of a particular class or group of persons or units is asked to furnish information because of any sampling procedure, it shall not be a defence in failure on the part of any informant to furnish that information, if so asked.

Duty of informants.

7. Every agency shall render such help and assistance and furnish such information to the statistics officer or a person or an agency authorised by him in writing, as he may require for the discharge of his functions, and shall make available for inspection and examination of such records, plans and other documents, as may be necessary.

All agencies to assist.

Right of access to records or documents.

8. The statistics officer or any person authorised by him in writing in this behalf shall, for the purposes of collection of any statistics under this Act, have access to any relevant record or document in the possession of any informant required to furnish any information under this Act, and may enter at any reasonable time any premises where he believes such record or document is kept and may inspect or take copies of relevant records or documents or ask any question necessary for obtaining any information required to be furnished under this Act.

CHAPTER III

DISCLOSURE OF INFORMATION IN CERTAIN CASES AND RESTRICTIONS OF THEIR USE

Security of information.

9. (1) Any information furnished to the statistics officer or to any person or agencies authorised under this Act shall only be used for statistical purposes.

(2) No person other than a person engaged in the work of collection of statistics under this Act or preparation of statistics resultant to such collection shall be permitted to see any information schedule or any answer to a question asked, except for the purposes of a prosecution under this Act.

(3) No information contained in any information schedule and no answer to any question asked shall, except for the purposes of a prosecution under this Act, be separately published, or disclosed without suppressing the identification of informants to any agency.

(4) All statistical information published by any agency shall be arranged in such a manner so as to prevent any particulars becoming identifiable by any person (other than the informant by whom those particulars were supplied) as the particulars relating to the informant who supplied it, even through the process of elimination, unless—

(a) that informant has consented to their publication in that manner; or

(b) their publication in that manner could not reasonably have been foreseen by the concerned agency or any employee thereof.

(5) For the purposes of sub-section (4), the Central Government may make such rules or make such arrangement, as it may consider necessary.

Appropriate Government authorised to disclose certain information.

10. Notwithstanding the provisions contained in section 9 of this Act, the appropriate Government may disclose the following information, namely:—

(a) information supplied by informant in respect of which disclosure is consented to in writing by the informant or by any person authorised by the said informant;

(b) information otherwise available to the public under any Act or as a public document;

(c) information in the form of an index or list of the names and addresses of informants together with the classification, if any, allotted to them and the number of persons engaged.

Disclosure of information schedules for *bona fide* research or statistical purposes.

11. (1) Notwithstanding the provisions contained in section 9 of this Act, the appropriate Government may disclose individual returns or formats or information schedules to other agency or person or institutions or universities solely for *bona fide* research or statistical purposes pursuant to their functions and duties.

(2) No individual return or information schedule shall be disclosed pursuant to this section unless —

(a) the name and address of the informant by whom the schedule or related information was supplied is deleted;

(b) every agency or person or institutions or Universities involved in the research or statistical project makes a declaration to use the schedules disclosed to them only for *bona fide* research or statistical purposes; and

(c) the appropriate Government, making such disclosure is satisfied that the security of the schedules and any information contained therein shall not be impaired.

(3) The published results of any research or statistical project shall not divulge any more information than what the agency authorised for collection of statistics could publish under this Act.

(4) Every agency or person or institutions or universities to whom any individual return or information schedule is disclosed under this section shall comply with directions given by the agency authorised for collection of statistics making the disclosure relating to the schedules and any information contained therein.

12. Notwithstanding anything contained in section 9 of this Act, the appropriate Government may release such documents relating to information schedules, which in its opinion have attained historical importance.

Disclosure of historical documents.

13. The statistics officer or any person or agency authorised for collection of statistics shall, while copying or recording any statistical information collected pursuant to this Act from individual returns, information schedules, worksheets or any other confidential source by means of cards, tapes, discs, film or any other method, whether using encoded or plain language symbols for processing, storage or reproduction of particulars, take and cause to take such steps as are necessary to ensure that the security provisions of this Act are complied with.

Security of recorded information.

14. Save as otherwise provided under this Act,—

(a) no information obtained pursuant to this Act and no copy of the information in the possession of any informant shall be disclosed or used as evidence in any proceedings whatsoever; and

Restrictions on use of information.

(b) no person who has access to any information because of his official position in the collection of any statistics shall be compelled in any proceedings whatsoever to give oral testimony regarding the information or to produce any schedule, document, or record with respect to any information obtained in the course of administering this Act,

except in the manner provided under this Act.

CHAPTER IV

OFFENCES AND PENALTIES

15. (1) Whoever, fails to produce any books of accounts, vouchers, documents or other business records or whoever neglects or refuses to fill in and supply the particulars required in any information schedule or return given or sent to him or whoever neglects or refuses to answer any question or inquiry addressed to him as may be required under or for the purposes of any provision of this Act and the rules made thereunder, shall be punishable with a fine which may extend to one thousand rupees or, in the case of a company, with a fine which may extend to five thousand rupees.

Penalty for neglect or refusal to supply particulars.

(2) The conviction of a person or company for an offence shall not relieve him or it of the obligations under sub-section (1) and if after the expiry of fourteen days from the date of conviction, he or it still fails to give the required particulars or continues to neglect or refuses to fill in and supply the particulars or to answer the question or inquiry, then he or it shall be punishable with a further fine which may extend to one thousand rupees or, in the case of a

company, with a fine which may extend to five thousand rupees, for each day after the first during which the failure continues.

Penalty for making false statement.

16. Whoever, wilfully makes any false or misleading statement or material omission in any information schedule or return filled in or supplied, or in answer to any question asked to him under this Act or the rules made thereunder, shall be punishable with simple imprisonment for a term which may extend to six months or with a fine which may extend to one thousand rupees or, in the case of a company, with a fine which may extend to five thousand rupees or with both.

Penalty for mutilation or defacement of information schedule.

17. Whoever, destroys, defaces, removes, or mutilates any information schedule, form, or other document containing particulars collected under this Act or requesting any such particulars, shall be punishable with simple imprisonment for a term which may extend to six months or with a fine which may extend to two thousand rupees or, in the case of a company with a fine which may extend to ten thousand rupees or with both.

Penalty for obstruction of employees.

18. Whoever, interferes with, hinders, or obstructs any employee in the exercise of any power or duty conferred by this Act, shall be punishable with simple imprisonment for a term which may extend to six months or with a fine which may extend to two thousand rupees or, in the case of a company with a fine which may extend to ten thousand rupees or with both.

Penalty for other offences.

19. Whoever—

(a) acts in contravention of or fails to comply with any provision of this Act or any requirement imposed under this Act; or

(b) wilfully deceives or attempts to deceive any statistics officer or any agency or any employee thereof,

shall be punishable with simple imprisonment for a term which may extend to six months or with a fine which may extend to two thousand rupees or, in the case of a company, with a fine which may extend to ten thousand rupees or with both.

Penalty for failure to carry out duties and functions by employees.

20. If any person employed in the execution of any duty or functions under this Act,—

(a) omits without lawful excuse to carry out his duty, or knowingly makes any false declaration, statement or return; or

(b) pretends performance of his duties or obtains or seeks to obtain information which he is not authorised to obtain; or

(c) fails to keep inviolate the secrecy of the information gathered or entered in the information schedules collected pursuant to this Act and, except as permitted under this Act, divulges the contents of any schedule filled in or any information furnished by any informant under this Act,

shall be punishable with simple imprisonment for a term which may extend to six months or with a fine which may extend to two thousand rupees or, in the case of a company, with a fine which may extend to ten thousand rupees or with both.

Penalty for impersonation of employee.

21. Whoever, not being authorised to collect statistics under the provisions of this Act, by words, conduct or demeanor pretends that he is authorised to do so, shall be punishable with simple imprisonment for a term which may extend to six months or with a fine which may extend to two thousand rupees or, in the case of a company, with a fine which may extend to ten thousand rupees or with both.

General penalty.

22. Whoever, commits an offence under this Act for which no penalty is prescribed elsewhere than in this section, shall be punishable with simple imprisonment for a term which may extend to six months or with a fine which may extend to two thousand rupees or, in the case of a company, with a fine which may extend to ten thousand rupees or with both.

23. (1) Where an offence under this Act has been committed by a company, every person who at the time the offence was committed was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Offences by companies.

Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to, any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly.

Explanation.—For the purpose of this section—

(a) “company” means any body corporate and includes a firm or other association of individuals; and

(b) “Director”, in relation to a firm, means a partner in the firm.

24. No court shall take cognizance of any offence under this Act except on a complaint made by the appropriate Government or an officer authorised in this behalf by such appropriate Government or, as the case may be, the statistics officer, and no court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence punishable under this Act.

Cognizance of offences.

25. No prosecution for an offence committed by any informant shall be instituted except by or with the sanction of the statistics officer, and no prosecution for an offence committed by persons other than informants shall be instituted except by or with the consent of the appropriate Government.

Sanction for prosecution for offence.

2 of 1974.

26. Notwithstanding anything contained in the Code of Criminal Procedure, 1973, all offences under this Act shall be tried in a summary way by a Judicial Magistrate of the first class or by a Metropolitan Magistrate and the provisions of sections 262 to 265 (both inclusive) of the said Code shall, as far as may be, apply to such trial:

Power of court to try cases summarily.

Provided that when in the course of, a summary trial under this section it appears to the Magistrate that the nature of the case is such that it is, for any reason, undesirable to try the case summarily, the Magistrate shall after hearing the parties, record an order to that effect and thereafter recall any witness who may have been examined and proceed to hear or rehear the case in the manner provided by the said Code.

CHAPTER V

POWER IN RESPECT OF CORE STATISTICS

27. Without prejudice to the provisions contained in this Act, the Central Government may, by notification in the Official Gazette, declare from time to time any subject for the collection of statistics of national importance as ‘core statistics’ and make such arrangement, as it may consider necessary, for regulating the collection and dissemination of statistics on the subject so declared.

Power in respect of core statistics.

CHAPTER VI

MISCELLANEOUS

28. The Central Government may give directions to any State Government or Union territory Administration or to any local government that is to say Panchayats or Municipalities, as to the carrying into execution of this Act in the State or Union territory or Panchayats or Municipalities, as the case may be.

Power to give directions.

29. Any statistics officer and any person authorised for the collection of statistics or preparation of official statistics under the provisions of this Act shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal Code, 1860.

Public servants.

45 of 1860.

Bar of jurisdiction.

30. No civil court shall have jurisdiction to entertain any suit or proceeding in respect of any matter which the appropriate Government or the statistics officer or the agency is empowered by or under this Act to determine, and no injunction shall be granted by any court or other authority in respect of any action taken or to be taken in pursuance of any power conferred by or under this Act.

Protection of action taken in good faith.

31. No suit or other legal proceedings shall lie against the appropriate Government or agency or any statistics officer or other officers or employees in respect of anything which is in good faith done or intended to be done in pursuance of this Act or the rules or directions issued thereunder.

Overriding effect.

32. The provisions of this Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force except in relation to the conduct of human population census as per the directions, if any, issued under the Census Act, 1948.

37 of 1948.

Power to make rules.

33. (1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the provisions of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, the Central Government may make rules under this section for all or any of the following matters, namely:—

(a) principles for coordinating as effectively as possible to achieve the objectives of section 3 including nomination and registration of statistics officers by the Central Government and also to avoid unnecessary duplication in the collection of statistics;

(b) the terms, conditions and safeguards under which any person or agency or company or organisation or association may be engaged by the appropriate Government for the purpose of collection of statistics under sub-section (3) of section 4;

(c) principles for prescribing the form and manner in which the information may be required to be furnished;

(d) principles for prescribing the manner in which the right of access to documents and the right of entry conferred by section 8 may be exercised; and

(e) any other matter which is to be or may be prescribed under this Act.

(3) Every rule made by the Central Government under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

Repeal and savings.

34. (1) The Collection of Statistics Act, 1953 is hereby repealed.

32 of 1953.

(2) Notwithstanding such repeal, anything done or any action taken under the said Act shall be deemed to have been done or taken under the corresponding provisions of this Act.

(3) All rules made under the said Act shall continue to be in force and operate till new rules are made under this Act.

T. K. VISWANATHAN,
Secy. to the Govt. of India.

MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION**NOTIFICATION**

New Delhi, the 16th May, 2011

G.S.R. 387(E).— In exercise of the powers conferred by section 33 of the Collection of Statistics Act, 2008 (7 of 2009), the Central Government hereby makes the following rules, namely:—

COLLECTION OF STATISTICS RULES, 2011

1. Short title and commencement: (1) These rules may be called the Collection of Statistics Rules, 2011.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions: (1) In these rules, unless the context otherwise requires —

- (a) 'Act' means the Collection of Statistics Act, 2008;
- (b) "Form" means a form appended to these rules;
- (c) 'nodal officer' means an officer designated as nodal officer under rule 3 of these rules;
- (d) "personal information" means any information, whether true or not, and whether recorded in a material form or not, about an informant whose identity can reasonably be ascertained from such information;
- (e) "reference period" means the time period over which the data collected reflects the characteristics of the units of enumeration;
- (f) "State Government", in relation to a Union territory, means the Administration thereof; and
- (g) "outsourcing" means making use of the services of a private service provider for the purposes of these rules.

(2) Words and expressions used but not defined herein shall have the meanings respectively assigned to them in the Act.

3. Nodal officer. — (1) The Central Government shall designate an officer not below the rank of a Joint Secretary to the Government of India in a nodal Department dealing with statistical matters, as the nodal officer for exercising powers and performing duties under these rules.

(2) Every State Government shall designate an officer not below the rank of a Deputy Secretary to the State Government in a nodal Department dealing with statistical matters, as the nodal officer for exercising powers and performing duties under these rules.

4. Powers and duties of nodal officer. - (1) The nodal officer designated by the Central Government under sub-rule (1) of rule 3 shall –

- (a) maintain and update register of statistics officers appointed by the Central Government;
- (b) obtain and maintain, from time to time, information on availability of statistics including unit-level data, whether collected under the provisions of the Act or not, with different Departments of the Central Government and nodal officers in the States;
- (c) advise the Departments of the Central Government and the nodal officers in the States on steps to improve the statistical potential of administrative records to avoid conducting separate statistical surveys to collect statistics contained or purported to be contained in such administrative records;
- (d) issue instructions from time to time on promoting the sharing of statistical information including unit-level data among different Departments of the Central Government and States to avoid unnecessary duplication of programmes of collection of statistics and resolve disputes or differences of opinion, if any, among them on the issue; and
- (e) submit annual report to the Central Government on the working.

(2) The nodal officer designated by the State Government under sub-rule (2) of rule 3 shall –

- (a) maintain and update a register of statistics officers appointed from time to time in the State;
- (b) obtain and maintain from time to time information on availability of statistics including unit-level data, whether collected under the provisions of the Act or not, with different Government Departments and local governments in the State;
- (c) advise the Departments of the State Government and local governments in the State on steps to improve the statistical potential of administrative records to avoid conducting separate statistical surveys to collect statistics contained or purported to be contained in such administrative records;

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- (d) issue instructions from time to time on promoting the sharing of statistical information including unit-level data among Departments of the State Government and local governments in the State to avoid unnecessary duplication of programmes of collection of statistics and resolve disputes or differences of opinion, if any, among them on the issue; and
- (e) obtain reports, as may be required, on the working of this Act from Government Departments and local governments in the State and submit annual reports on the working of this Act in the State to the nodal officer appointed by the Central Government.

5. Direction on collection of statistics.- (1) Any Department in a State Government or any local government in a State shall, before making a direction under section 3 of the Act for collection of statistics on any subject for any reference period in any geographical unit under its jurisdiction, consult the nodal officer in the State to avoid unnecessary duplication in collection of statistics.

(2) Any Department of the Central Government shall, before making a direction under section 3 of the Act for collection of statistics on any subject for any reference period in any geographical unit under its jurisdiction, consult the nodal officer of the Central Government to avoid unnecessary duplication in collection of statistics.

(3) The nodal officer shall, on receipt of any request under sub-rule (1) or sub-rule (2), as the case may be, within a period of one month render such advice as may be necessary to the concerned office to avoid unnecessary duplication in collection of statistics.

(4) The appropriate Government on receipt of advice under sub-rule (3) shall communicate to the nodal officer, the reasons in all cases of disagreement with such advice, at least fifteen days prior to issuing notification under section 3 of the Act.

(5) Every notification under section 3 of the Act shall contain the following particulars, namely: -

- (a) subject and purpose for collection of statistics;
- (b) geographical area for collection of statistics;
- (c) method of data collection;
- (d) nature of informants from whom data may be collected;
- (e) period during which collection of statistics may be completed;
- (f) reference period;
- (g) nature of information to be collected;
- (h) language in which information is to be furnished by informant;
- (i) obligation of informant;

- (j) nature of business records and other records which may be inspected; and
- (k) the manner of inspection.

(6) A copy of every notification referred in sub-rule (5) shall be forwarded to the nodal officer of the Central Government and the nodal officer of the State concerned.

6. Principles for prescribing information schedules. - In respect of prescribing any information schedule for collection of statistics on any subject, the appropriate Government or a statistics officer, as the case may be, shall satisfy itself that -

- (i) it has authority to direct collection of statistics on the subject under the Act subject to the restrictions given in the proviso to section 3 of the Act;
- (ii) it has, for the purpose of finalising items on which information is to be collected, consulted the nodal officer to include the requirements of other Government Departments;
- (iii) excessive demands would not be placed on the informants by making the direction and for the purpose field testing of information schedules has been carried out where necessary;
- (iv) the range and detail in the information schedules specified for collection of statistics on any subject shall be limited to what is absolutely necessary;
- (v) the reporting burden shall be spread as widely as possible over informant populations through appropriate sampling;
- (vi) the information sought from business shall, as far as possible, be readily available from their accounts and electronic means are used where possible to facilitate their collection;
- (vii) best estimates and approximations on any item of information sought shall be accepted when exact details are not readily available with any informant;
- (viii) each information schedule used for collecting statistics from any informant has, where necessary, a provision for particulars on which information may be furnished at the discretion of the informant;
- (ix) provision is made in each information schedule for filling up the details and appending the signature of the person concerned who would be engaged in the collection of statistics;
- (x) indicate in each information schedule, for general information of informants prior to collection of statistics from them under the Act, its plan, if any, to disclose any information collected from them which in the opinion of the appropriate Government is otherwise available to the public under any other Act or as a public document or which is in the form of an index or list of the names and addresses of informants together with the classification, if any, allotted to them and the number of persons engaged; and

- (xi) make a provision in each information schedule to obtain written consent from each informant whose information other than the information covered in clause (x), it proposes to disclose.

7. Appointment of statistics officers. - (1) Every notification under section 4 of the Act appointing the statistics officer shall contain the following particulars, namely: -

- (a) name, designation and address of the officer appointed as statistics officer for each geographical unit for collection of statistics;
- (b) details of any agency or company or organisation or association or person engaged for collection of statistics, and, terms and conditions of engagement and safeguards laid down for the purpose;
- (c) the form and the particulars required or the interval within which, and the statistics officer to whom, the statistical information by the informants shall be furnished; and
- (d) the powers, if any, delegated under sub-sections (4) or (6) of section 4 the Act to any statistics officer.

(2) Every statistics officer, immediately on his appointment, shall submit an undertaking in Form-I to the appropriate Government.

8. Registration of statistics officers. - The appropriate Government shall maintain a record of statistics officers in respect of their appointment, their terms and geographical areas for which they have been appointed, in Form-II.

9. Powers and functions of a statistics officer. - A statistics officer, appointed for the purposes of collection of statistics on any subject in any geographical unit, shall -

- (i) take, aid in and supervise the collection of statistics;
- (ii) cause agencies to be appointed or engaged for collection of statistics;
- (iii) obtain undertaking from all the persons engaged in the collection of statistics in Form-I and forward them to the appropriate Government or to an officer authorised for the purpose by that Government;
- (iv) devise or cause to devise relevant information schedules and the mode or modes of collection of statistics;
- (v) allot or cause to allot work of collection of statistics in his jurisdiction to different persons and agencies engaged for the purpose;
- (vi) provide all the relevant material to be distributed to agencies engaged and arrange for their training for facilitating collection of statistics;
- (vii) cause to provide necessary publicity for collection of statistics at an appropriate time;
- (viii) coordinate the work of all agencies during the period of collection of statistics and maintain liaison with local authorities for smooth conduct of the collection of statistics;

- (ix) cause notices to informants for furnishing information issued under his signature, where necessary and cause acknowledgements received from such informants, to be kept in safe custody;
- (x) take steps, in case of statistical surveys having the same set of informants with different reference periods, to issue only one notice to each informant indicating therein the information required to be furnished and the reference periods for which the information is required;
- (xi) cause entry of persons authorised by him in writing and carrying a photo-identity card issued by him into any premises of any informant for collection of statistics;
- (xii) cause necessary assistance provided to informants requiring such assistance for furnishing the information sought;
- (xiii) cause access to any informant to the information collected from that informant for facilitating intimation of corrections or amendments on any inaccurate information;
- (xiv) cause verification of information furnished by any informant;
- (xv) based on complaints or otherwise, take action against erring persons and others in accordance with the provisions of the Act and these rules;
- (xvi) obtain from the agencies engaged in the collection of statistics, all the information schedules, all the undertakings obtained from persons engaged in collection of statistics, all other relevant records and documents on completion of their work and forward them with a certificate to that effect to the appropriate Government or to any officer authorised by that Government;
- (xvii) carry out such other tasks as may be necessary for the successful collection of statistics; and
- (xviii) submit periodical reports as may be specified by the appropriate Government.

10. Assistance in collection of statistics. - (1) Every Department of the Central Government or the State Government or the local governments shall furnish within such time and in such form as required, the list of informants and other information which is available with them, relevant for conducting any statistical survey under these rules to a statistics officer or any agency or person authorised by the appropriate Government upon receipt of a notice to that effect.

(2) The appropriate Government or a statistics officer, as the case may be, may write to any Department of the Central Government or the State Government or any local government specifying the nature of assistance required for collection of statistics under the Act and upon receipt of such communication, the latter shall comply with the requirement to the extent feasible.

(3) In cases of collection of statistics in disturbed areas, the police, the para-military and the armed forces shall provide such assistance as would be required by the concerned statistics officer.

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11. Duty to furnish information. - Subject to the provisions of section 6 of the Act,

(1) every informant shall, on demand, produce or give a copy of any books of accounts, vouchers, documents, or other business records or personal records or documents in his possession relevant to collection of statistics under the Act to any statistics officer or any person authorised by him in writing and carrying a photo-identity card issued by him, and the statistics officer or the authorised person, as the case may be, may take a copy or extract of such record or document; and

(2) the head of every family shall be responsible to furnish or cause to furnish the correct details of name and number of members, other particulars, records and documents, as may be required, of the family of which he is the head including dependants:

provided that in so far as inmates of institutions, such as orphanages, old age homes, and mental asylums are concerned, the responsibility for providing or causing to provide the requisite details, records and documents shall lie with the head of the Institution.

12. General terms, conditions and safeguards for outsourcing. - Every contract or arrangement for collection of statistics under the Act by any person or agency or company or organisation or association shall be subject to the following terms, conditions, and safeguards, namely: -

- (a) outsourcing arrangements shall be subject to a formal and comprehensive written contract;
- (b) functions which are to be decided and enforced by the appropriate government under the Act shall not be outsourced;
- (c) appropriate Government or a statistics officer authorised for the purpose by that Government shall have a right, of information and conduct or order on-site inspections in an outsourcing service provider's premises or place of work and right to cancel contract in case of unsatisfactory performance;
- (d) every agency, engaged in collection of statistics, shall render such help and assistance and furnish such information to the statistics officer or a person or an agency authorised by him in writing, as he may require for the discharge of his functions, and shall make available for inspection and examination such records, plans and other documents, as may be necessary;
- (e) persons engaged by any agency for collection of statistics, are made aware of the agency's obligations, and they shall submit a written undertaking in Form-I to the concerned statistics officer not to access, use, disclose or retain personal information except in performing their duties of employment or contractual obligations; and are informed that failure to comply with the provisions of the Act and these rules may be an offence rendering themselves for punishment as per the provisions of the Act;

- (f) each person engaged in any activity relating to the collection of statistics shall be bound by the provisions of the Act and these rules, the violation of which shall render him punishable as per the provisions of the Act;
- (g) provisions relating to disclosure of information and restrictions of their use under sections 9, 10, 11, 12, 13 and 14 of the Act and these rules shall have effect during the period of collection of statistics provided in the contract and shall continue to have effect even after the termination or completion of the contract, as the case may be;
- (h) the appropriate Government or any statistics officer on receipt of any complaint shall immediately communicate the agency engaged in collection of statistics of only those details of the complaint, as may be necessary to minimize any breach or prevent further breaches of the agreement or failure to comply with any of the provisions of the Act or these rules;
- (i) if any agency engaged in collection of statistics receives any complaint from any informant, it shall immediately communicate the complaint to the appropriate Government or the concerned statistics officer, as may be required;
- (j) the appropriate Government or the statistics officer may, on receipt of any communication under clauses (h) or (i), give directions, as may be necessary, to the agency; and
- (k) the statistics officer and every person engaged in the collection of statistics shall, on completion of their work, handover all the records and documents and furnish a certificate to that effect to the appropriate Government or to an officer authorised for the purpose by that Government.

13. Restrictions on use of personal information. - Each agency engaged in collection of statistics shall take all reasonable measures to ensure that -

- (a) personal information is protected against unauthorised access, disclosure or other misuse;
- (b) the agency uses personal information only for the purpose of fulfilling its obligations under a specified contract;
- (c) in case of repetitive statistical surveys with a common set of informants, the agency uses the personal information earlier collected only for the purpose of setting up interviews with or otherwise contacting informants; and
- (d) the agency uses personal information for data processing only with adequate security checks.

14. Right of entry into any premises of informants. - A statistics officer or any person authorised by him in writing and carrying a photo-identity card issued by the statistics officer, shall, during the period of collection of statistics for the purpose of collection of statistics under the Act or for inspection and examination of records, and documents in connection with it, during 10.00 hrs to 17.00 hrs on any day or at a time mutually convenient to both the parties have the right to enter the premises of any informant in the portion of the premises normally entered by visitors or guests or as suggested by the informant.

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15. Processing of complaints - (1) In cases of alleged offences committed by any informant as per provisions of the Act, any statistics officer, after making such inquiries as deemed fit, may cause a notice issued to the informant in writing to show cause within a reasonable period to be specified in the notice as to why prosecution under the Act shall not be sanctioned for committing the alleged offence.

(2) A statistics officer shall consider the explanation, if any, furnished by the informant in pursuance to the notice issued under sub-rule (1), and after satisfying himself, for reasons to be recorded in writing, sanction for institution of prosecution of the informant.

(3) In case of any alleged offences committed by any person other than an informant, the appropriate Government may, after making such inquiries as deemed fit, cause a notice issued to the person in writing to show cause within a reasonable period to be specified in the notice as to why prosecution under the Act shall not be sanctioned for committing the alleged offence.

(4) The appropriate Government may, if it considers necessary, send a copy of the show-cause notice issued under sub-rule (3) of this rule and the explanation, if any, received from the alleged offender to the concerned statistics officer and obtain his recommendation on it, and after considering the explanation of the alleged offender and recommendation of statistics.

16. Storage of data and records. - Subject to the provisions of section 13 of the Act, the appropriate Government or an officer authorised by that Government shall, provide details by which any informant could access his own information for facilitating intimation of corrections or amendments on any inaccurate information, store the statistics collected under the provisions of the Act in such a manner as would facilitate easy retrieval of information collected from any informant so as to provide access to the informant, if necessary and keep all the undertakings and other material obtained from the statistics officers and other persons or agencies engaged in collection of statistics in safe custody.

Form-I

[See rules 7 (2), 9 (iii), 12 (e)]

Undertaking by statistics officer and other persons to be engaged in any capacity for collection of statistics under the provisions of the Collection of Statistics Act, 2008 (7 of 2009)

I, _____ (Full Name), born on ____ (Date of birth), son/ daughter/ wife of _____ (Name of person) resident of _____ (address) do hereby solemnly affirm, that I accept the responsibility _____ (nature of work) assigned to me for collection of statistics in respect of _____ (direction under section 3 of the Act) under the Collection of Statistics Act, 2008 (7 of 2009) and the Collection of Statistics Rules, 2011, that I shall not access, use, disclose or retain personal information of any informant except in performing my duties of employment or contractual obligations in respect of collection of statistics, and that in case of any violation on my part to comply with the provisions of the Act and the rules made thereunder, and I shall render myself punishable as per the provisions of the Act.

Place: ____

Date: ____

Signature of statistics officer or the person engaged in any capacity for collection of statistics

Form-II
(See rule 8)

Register of statistics officers to be maintained by the appropriate Government

1. Details of the direction issued under section 3 of the Collection of Statistics Act, 2008:
2. Name and address of the appropriate Government making direction:
3. Details of statistics officers appointed for collection of statistics under the aforesaid direction:

S. No.	Name of statistics officer	Permanent address	Educational qualifications and experience, if any, in collection of statistics	Geographical unit for which appointed and period of appointment	Powers, if any, delegated under section 4 (4) and (6) of the Act
(1)	(2)	(3)	(4)	(5)	(6)

Date of appointment	Date of termination of appointment
(7)	(8)

Place: _____
Date: _____

Signature with office seal of the officer
responsible for maintaining
the record of statistics officers

[F. No. M-15011/1/2007-Admn. III]
Prof. T.C.A. ANANT, Secy.

रजिस्ट्री सं० डी० एल०—(एन)04/0007/2003—17

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PART II — Section 1

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इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।

Separate paging is given to this Part in order that it may be filed as a separate compilation.

MINISTRY OF LAW AND JUSTICE

(Legislative Department)

New Delhi, the 5th August, 2017/Shravana 14, 1939 (Saka)

The following Act of Parliament received the assent of the President on the 4th August, 2017 and is hereby published for general information :—

THE COLLECTION OF STATISTICS (AMENDMENT) ACT, 2017

No. 21 OF 2017

[4th August, 2017.]

An Act to amend the Collection of Statistics Act, 2008.

BE it enacted by Parliament in the Sixty-eighth Year of the Republic of India as follows:—

1. (1) This Act may be called the Collection of Statistics (Amendment) Act, 2017.

Short title and commencement.

(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

7 of 2009.

2. In the Collection of Statistics Act, 2008 (hereinafter referred to as the principal Act), in section 1, for sub-section (2), the following sub-section shall be substituted, namely:—

Amendment of section 1.

"(2) It extends to the whole of India :

Provided that it shall apply to the State of Jammu and Kashmir in so far as it relates to statistics pertaining to matters falling under any of the entries specified in List I (Union List) or List III (Concurrent List) in the Seventh Schedule to the Constitution as applicable to that State."

Amendment
of section 2.

3. In the principal Act, in section 2, after clause (d), the following clause shall be inserted, namely:—

'(da) "nodal officer" means the officer designated as a nodal officer under sub-section (1) of section 3A;'

Insertion of
new section
3A.

4. In the principal Act, after section 3, the following section shall be inserted, namely:—

Nodal officer.

"3A. (1) The Central Government or a State Government or Union territory Administration shall designate one of its officers as a nodal officer for the purposes of statistics under this Act.

(2) The nodal officer shall coordinate and supervise such statistical activities in the Central Government or the State Government or Union territory Administration, as the case may be, in which he is designated, and shall exercise such other powers and perform such other duties, as may be prescribed."

Amendment
of section 9.

5. In the principal Act, in section 9, for sub-section (1), the following sub-section shall be substituted, namely:—

"(1) The statistics officer or any person or agencies authorised under this Act shall, for statistical purposes, use any information furnished under section 6 in such manner as may be prescribed."

Amendment
of section 33.

6. In the principal Act, in section 33,—

(i) in sub-section (1), after the words "The Central Government may", the words "subject to the condition of previous publication" shall be inserted;

(ii) in sub-section (2),—

(A) after clause (a), the following clause shall be inserted, namely:—

"(aa) the coordination and supervision of statistical activities by the nodal officer and the powers and duties of the nodal officer under sub-section (2) of section 3A;"

(B) after clause (d), the following clause shall be inserted, namely:—

"(da) the manner of use of information under sub-section (1) of section 9;"

DR. G. NARAYANA RAJU,
Secretary to the Govt. of India.

Estimation Procedure

1. Notations:

i = subscript for i-th state.

s = subscript for s-th stratum in the i-th state.

m = subscript for sub-sample (m =1, 2, 3, 4) [m=1 and 3 for central and 2 and 4 for state].

k = subscript for k-th sample enterprise under a particular stratum.

E = total number of factories **in the sample sector** in a stratum.

e = number of factories surveyed out of total number of factories **in the sample sector** in a stratum.

x, y = observed value of characteristics x, y under estimation.

\hat{X} , \hat{Y} = estimate of population total X, Y for the characteristics x, y.

Under the above symbols,

Y_{ismk} = observed value of the characteristic y for the k-th unit belonging to the m-th sub-sample for the s-th stratum in the i-th state.

(a) Formulae for estimation of aggregates for a state based on central sample:

The central sample consists of two parts: i) **Census Sector** where complete enumeration of units was done and ii) **Sample Sector** where units are selected from two sub-samples (sub-sample numbers being '1' and '3') from each stratum. Please note that the sub-samples '2' and '4' in each stratum are to be surveyed by State governments and those are considered as **State Sample**.

The estimation formula for any characteristic of the unit **in the sample sector** for m-th sub-sample in s-th strata of the i-th state is:

$${}^s\hat{Y}'_{ism} = \frac{E_{is}}{e_{ism}} \sum_{k=1}^{e_{ism}} y_{ismk}, \quad m= 1,3. \quad \dots\dots\dots (1.1)$$

Now the estimate of the parameter pertaining to sample sector of s-th stratum in the i-th State (${}^s\hat{Y}'_{is}$) is the simple average of sub-sample estimates of the s-th stratum in the i-th State, ${}^s\hat{Y}'_{ism}$, m=1,3 i.e.,

$${}^s\hat{Y}'_{is} = \frac{1}{2} \sum_{m=1,3} {}^s\hat{Y}'_{ism} .$$

Thus, the estimator for any characteristic of the unit **in the sample sector** of the ith state is:

$${}^s\hat{Y}'_i = \sum_s {}^s\hat{Y}'_{is} \quad \dots\dots\dots(1.2)$$

Now, if ${}^c\hat{Y}''_i$ be the corresponding estimator for that characteristic of the unit **for the census sector** of the i-th state, then the estimate for the census sector, ${}^c\hat{Y}''_i$, will be simple addition of value of the characteristic y under the domain since the multiplier associated with each unit of the census sector is equal to 1. Thus, the estimate for that characteristic of the unit for ith State **as a whole** based on the central sample is given by:

$${}^{Central}\hat{Y}_i = {}^s\hat{Y}'_i + {}^c\hat{Y}''_i \quad \dots\dots\dots (2)$$

The estimate of the characteristic of the unit for all-India will be:

$$Central \hat{Y} = \sum_i Central \hat{Y}_i \dots\dots\dots (3)$$

(b) Formulae for estimation of aggregates for a state based on state sample:

As mentioned before the sub-samples ‘2’ and ‘4’ pertain to State Sample. The estimation formula for any characteristics of the unit **in the sample sector of the State sample**¹ for m-th sub-sample of the i-th state is:

$$State \hat{Y}_{ism} = \frac{E_{is}}{e_{ism}} \sum_{k=1}^{e_{ism}} y_{ismk}, \quad m=2,4. \dots\dots\dots (4.1)$$

where superscript ‘State’ in $State \hat{Y}_{ism}$ indicates that the estimate of Characteristic Y generated from state sample for mth sub-sample of sth stratum in ith State. Now, the Estimation formula for a characteristic y of the unit **for the sample sector** in s-th stratum of the i-th state **based on state sample** is the simple average of sub-sample estimates of the s-th stratum in the i-th State, $State \hat{Y}_{ism}$, m=2,4 i.e., $State \hat{Y}'_i = \frac{1}{2} \sum_{m=2,4} State \hat{Y}'_{ism}$, where $State \hat{Y}'_{is}$ is the state sample estimate of the s-th stratum for the sample sector.

Thus, the estimator for any characteristic of the unit **in the sample sector** of the ith state is based on **the state sample** is:

$$State \hat{Y}'_i = \sum_s State \hat{Y}'_{is} \dots\dots\dots (4.2)$$

Using ${}^c \hat{Y}''_i$ as the corresponding estimate for that characteristic of the unit **for the census sector** of the i-th state, then the estimate for that characteristic of the unit for the i-th state **as a whole** based on the **state sample** is given by:

$$State \hat{Y}_i = State \hat{Y}'_i + {}^c \hat{Y}''_i \dots\dots\dots (5)$$

(c) Formulae for estimation of aggregates for a state based on pooled sample:

Estimation formula for any characteristic of the unit **for the sample sector** of the i-th state **based on pooled sample (i.e., central and state combined)** will be as follows:

Let sub-sample estimate of a characteristic Y for m-th sub-sample in s-th stratum in i-th State is ${}^s \hat{Y}'_{ism}$. Then

$${}^s \hat{Y}'_{ism} = \frac{E_{is}}{e_{ism}} \sum_{k=1}^{e_{ism}} y_{ismk}, \quad m=1,2,3,4 \dots\dots\dots (6.1)$$

¹ The State sample comprises of two sub-samples, viz., sub-samples 2 and 4 and census sector is covered in central sample. Hence, the state sample has only the sample sector.

The stratum level estimate for the pooled sample will be the simple average of the sub-sample estimate of Y in that stratum. Mathematically, if \hat{Y}'_{is} be the stratum-level estimate for s-th stratum for i-th State, then ${}^{Pooled}\hat{Y}'_{is} = \frac{1}{4} \sum_{m=1}^4 {}^S\hat{Y}'_{ism}$. In some cases, in a particular stratum one or more sub-samples may be void. Then stratum-level estimate will be generated from the simple average of the non-void sub-samples in that stratum. Thus, general form of stratum-level estimate may be ${}^{Pooled}\hat{Y}'_{is} = \frac{1}{t} \sum_{m=1}^t {}^S\hat{Y}'_{ism}$, where t (≤ 4) is the number of non-void sub-sample available with the stratum s.

Thus, the estimator for any characteristic Y of the unit **the sample sector** of the ith state based on **pooled sample** is:

$${}^{Pooled}\hat{Y}'_i = \sum_s {}^{Pooled}\hat{Y}'_{is} \dots\dots\dots(6.2)$$

Using ${}^c\hat{Y}''_i$ as the corresponding estimate for that characteristic of the unit **for the census sector** of the i-th state, then the estimate for that characteristic of the enterprise for the i-th state **as a whole** based on the pooled sample is given by:

$${}^{Pooled}\hat{Y}_i = {}^{Pooled}\hat{Y}'_i + {}^c\hat{Y}''_i \dots\dots\dots (7)$$

The above equations are given for generating the estimates for the State. However, similar treatment may be given or same equations may be used in generating the estimates at district level.

2. Estimates of Ratios:

Let \hat{Y} and \hat{X} be the overall estimate of the aggregates Y and X for two characteristics y and x, respectively at the State/ UT/ all-India level.

Then the combined ratio estimate (\hat{R}) of the ratio ($R = \frac{Y}{X}$) will be obtained as

$$\hat{R} = \frac{\hat{Y}}{\hat{X}}.$$

3. Estimates of Error for Aggregate \hat{Y} : The variance is to be obtained for the sample sector units only. The estimated variances of the estimates at state level will be as follows:

$$V\hat{a}r(\hat{Y}_i) = \sum_s V\hat{a}r(\hat{Y}'_{is}) \dots\dots\dots (8)$$

The sampling variance based on central Samples is:

$$V\hat{a}r(\hat{Y}_i) = \sum_s \{(\hat{Y}_{is1} - \hat{Y}_{is3}) / 2\}^2 \dots\dots\dots (9.1)$$

The sampling variance based on state Samples is:

$$V\hat{a}r(\hat{Y}_i) = \sum_s \{(\hat{Y}_{is2} - \hat{Y}_{is4}) / 2\}^2 \dots\dots\dots (9.2)$$

In case only one sub-sample is available in a stratum out of two sub-samples 1 and 3 in central sample, the estimate of variance of central sample estimate in that stratum needs to be adjusted. The adjustment may be made by considering all the surveyed units in the non-void sub-sample as SRSWOR samples provided number of surveyed units in the sub-sample is greater than one. Similar treatment may be given in case only one sub-sample is available in a stratum out of two sub-samples 2 and 4 in state sample as well as in a stratum out of four sub-samples in pooled data.

For generating estimates of variance for the pooled sample is:

$$V\hat{a}r(\hat{Y}_i) = \frac{1}{t(t-1)} \sum_s \sum_{m=1}^t (\hat{Y}_{ism} - \hat{Y}_{is})^2 \dots\dots\dots (9.3)$$

where $\hat{Y}_{is} = \frac{1}{t} \sum_{m=1}^t \hat{Y}_{ism}$ and t is the number of non-void sub-samples in s-th stratum. Note that equations (9.1) and (9.2) are special cases of equation (9.3) when t=2.

For all-India, the estimated variances of the estimates of different types will be as follows:

$$V\hat{a}r(\hat{Y}) = \sum_i V\hat{a}r(\hat{Y}_i) \dots\dots\dots (10)$$

4. For ratio \hat{R} :

The ratio estimators are biased estimators. Thus, instead of variance, we'll try to estimate Mean Square Error (MSE). The general formula of estimate of MSE of \hat{R} is

$$M\hat{S}E(\hat{R}) = \frac{1}{\hat{X}^2} \left[\hat{V}(\hat{Y}) - 2\hat{R}Co\hat{v}(\hat{X}, \hat{Y}) + \hat{R}^2\hat{V}(\hat{X}) \right] \dots\dots\dots (11)$$

Now, the MSE of \hat{R} at all-India level based on central sample (i.e. sub-samples 1 and 3) is,

$$M\hat{S}E(\hat{R}) = \frac{1}{2} \times \frac{1}{\text{Central } \hat{X}^2} \sum_s \left[\sum_{m=1,3} (\hat{Y}_{sm} - {}^c\hat{Y}_s)^2 - 2\hat{R} \sum_{m=1,3} (\hat{Y}_{sm} - {}^c\hat{Y}_s)(\hat{X}_{sm} - {}^c\hat{X}_s) + \hat{R}^2 \sum_{m=1,3} (\hat{X}_{sm} - {}^c\hat{X}_s)^2 \right] \dots (11.1)$$

where ${}^c\hat{Y}_s = \frac{1}{2} \sum_{m=1,3} \hat{Y}_{sm}$, ${}^c\hat{X}_s = \frac{1}{2} \sum_{m=1,3} \hat{X}_{sm}$, $\hat{R} = \text{Central } \hat{Y} / \text{Central } \hat{X}$, and \hat{Y}_{sm} and \hat{X}_{sm} are estimates of characteristics x and y based on m-th sub-sample of s-th stratum from the sample sector of central sample, and $\text{Central } \hat{X}$ and $\text{Central } \hat{Y}$ will be obtained using eq. (3) for the characteristics x and y respectively.

For \hat{R} at state level (i.e., for i-th state, say \hat{R}_i) based on sub-samples 1 and 3 of central sample,

$$M\hat{S}E(\hat{R}_i) = \frac{1}{2} \times \frac{1}{\text{Central } \hat{X}_i^2} \sum_s \left[\sum_{m=1,3} (\hat{Y}_{ism} - {}^c\hat{Y}_{is})^2 - 2\hat{R}_i \sum_{m=1,3} (\hat{Y}_{ism} - {}^c\hat{Y}_{is})(\hat{X}_{ism} - {}^c\hat{X}_{is}) + \hat{R}_i^2 \sum_{m=1,3} (\hat{X}_{ism} - {}^c\hat{X}_{is})^2 \right] \dots (11.2)$$

where ${}^c\hat{Y}_{is} = \frac{1}{2} \sum_{m=1,3} \hat{Y}_{ism}$, ${}^c\hat{X}_{is} = \frac{1}{2} \sum_{m=1,3} \hat{X}_{ism}$, $\hat{R}_i = \text{Central } \hat{Y}_i / \text{Central } \hat{X}_i$, and \hat{Y}_{ism} and \hat{X}_{ism} are estimates of characteristics x and y based on m-th sub-sample of s-th stratum in i-th State from the sample sector of central sample, and $\text{Central } \hat{X}_i$ and $\text{Central } \hat{Y}_i$ will be obtained using eq. (2) for i-th state for the characteristics x and y respectively.

For \hat{R} at state level (say \hat{R}_i) from state sample (i.e. based on sub-samples 2 and 4),

$$M\hat{S}E(\hat{R}_i) = \frac{1}{2} \times \frac{1}{State \hat{X}_i^2} \sum_s \left[\sum_{m=2,4} (\hat{Y}_{ism} - {}^s\hat{Y}_{is})^2 - 2 {}^s\hat{R}_i \sum_{m=2,4} (\hat{Y}_{ism} - {}^s\hat{Y}_{is})(\hat{X}_{ism} - {}^s\hat{X}_{is}) + {}^s\hat{R}_i^2 \sum_{m=2,4} (\hat{X}_{ism} - {}^s\hat{X}_{is})^2 \right] \dots (12)$$

where ${}^s\hat{Y}_{is} = \frac{1}{2} \sum_{m=2,4} \hat{Y}_{ism}$, ${}^s\hat{X}_{is} = \frac{1}{2} \sum_{m=2,4} \hat{X}_{ism}$, ${}^s\hat{R}_i = \frac{State \hat{Y}_i}{State \hat{X}_i} ; \hat{Y}_{ism}$ and \hat{X}_{ism} are estimates of characteristics x and y based on m-th sub-sample (sub-sample 2 and 4) of s-th stratum in i-th State from the state sample, and ${}^{State} \hat{X}_i$ and ${}^{State} \hat{Y}_i$ will be obtained using eq. (5) for i-th state for the characteristics x and y respectively.

For \hat{R} at all-India based on pooled sample (i.e. sub-samples 1, 2, 3 and 4) is,

$$M\hat{S}E(\hat{R}) = \frac{1}{12} \times \frac{1}{\hat{X}^2} \sum_s \left[\sum_{m=1}^4 (\hat{Y}_{sm} - \hat{Y}_s)^2 - 2\hat{R} \sum_{m=1}^4 (\hat{Y}_{sm} - \hat{Y}_s)(\hat{X}_{sm} - \hat{X}_s) + \hat{R}^2 \sum_{m=1}^4 (\hat{X}_{sm} - \hat{X}_s)^2 \right] \dots (13)$$

where \hat{Y}_{sm} and \hat{X}_{sm} are estimates of characteristics x and y based on all sub-samples 1, 2, 3 and 4 of s-th stratum, $\hat{Y}_s = \frac{1}{4} \sum_{m=1}^4 \hat{Y}_{sm}$, $\hat{X}_s = \frac{1}{4} \sum_{m=1}^4 \hat{X}_{sm}$ and $\hat{R} = \hat{Y} / \hat{X}$. Here, \hat{Y} , \hat{X} and \hat{R} are pooled all-India estimate of the characteristics Y, X and R (i.e., ratio Y/X) respectively. In case, pooling at any State level is attempted, the corresponding pooled estimate of characteristics y, x and R may be used for that State using eq. (7). In short, formula for MSE (\hat{R}_i) based on pooled sample is :

$$M\hat{S}E(\hat{R}_i) = \frac{1}{12} \times \frac{1}{Pooled \hat{X}_i^2} \sum_s \left[\sum_{m=1}^4 (\hat{Y}_{ism} - \hat{Y}_{is})^2 - 2\hat{R}_i \sum_{m=1}^4 (\hat{Y}_{ism} - \hat{Y}_{is})(\hat{X}_{ism} - \hat{X}_{is}) + \hat{R}_i^2 \sum_{m=1}^4 (\hat{X}_{ism} - \hat{X}_{is})^2 \right] \dots (13.1)$$

where \hat{Y}_{ism} and \hat{X}_{ism} are estimates of characteristics x and y based on all sub-samples 1, 2, 3 and 4 of s-th stratum for the i-th state, $\hat{Y}_{is} = \frac{1}{4} \sum_{m=1}^4 \hat{Y}_{ism}$, $\hat{X}_{is} = \frac{1}{4} \sum_{m=1}^4 \hat{X}_{ism}$ and $\hat{R}_i = \frac{Pooled \hat{Y}_i}{Pooled \hat{X}_i}$.

Please note that, in case one or more sub-sample is void in a stratum, the estimate MSE of \hat{R} will be estimated using the equations (13) based on only non-void sub-samples.

5. Estimates of RSE:

$$R\hat{S}E(\hat{Y}) = \frac{\sqrt{Var(\hat{Y})}}{\hat{Y}} \times 100 \dots (14)$$

$$R\hat{S}E(\hat{R}) = \frac{\sqrt{M\hat{S}E(\hat{R})}}{\hat{R}} \times 100 \dots (15)$$

6. Multipliers for enterprises:

The formulae for multipliers for a stratum are given below:

formula for sub-sample wise multiplier	formula for combined sample multiplier
$\frac{E_{is}}{e_{ism}}$, m = 1, 2, 3 or 4.	$\frac{E_{is}}{e_{is}}$, $e_{is} = \sum_{m=1}^4 e_{ism}$

7. Treatment for surveyed cases and casualty cases:

7.1 *Casualty cases:* The casualty case may occur in cases where the unit is existing but non-response due to closure and owner/occupier is not traceable (code 5), non-response due to production not yet started or accounting year not closed during the year (code 7) or non-response due to other reasons [incl. relevant records are with court/Income tax or recalcitrant/refuse to submit the return department, etc, or factory under prosecution in respect of earlier ASI] (code 8). Thus, the units with survey codes 5, 7 and 8 as per Item 12, Block A are treated as casualties.

7.2 *Imputation of data from past survey for casualty units:* In case any units in the census sector becomes casualty, information in respect of all the characteristics may be borrowed from the previous year, if available, for the census sector units belonging to that post-survey stratum of 'State × District × Sector × 3-Digit of NIC'. This is also followed in case of units pertaining to sample sector which are casualty but information on various characteristics for previous year of those units is available. All such units, for which previous year's information is available, are treated as if 'open' and status code '1' is given against these units.

7.3 While counting the number of units surveyed (e_{ism}) in the m-th sub-sample of a stratum, all the units with survey codes 1 to 4 in Item 12, Block A will be considered excluding the casualty cases (i.e., those casualty cases where even previous year's information is not available).

8. Treatment in cases of void strata

8.1 A stratum may be void because of the casualty of all the units belonging to the stratum. This may occur in one sub-sample or more sub-samples. If it happens to only one sub-sample, then estimate for the stratum with one void sub-sample may be based on a single available sub-sample. Since the estimate of the sample sector within a stratum is the simple average of the two sub-samples (assuming samples are selected in the form of two sub-samples), by considering only one sub-sample, the stratum level estimate will be same as the single available sub-sample estimate. This situation where at least one sub-samples is available, we will not treat this stratum as 'void'. The situation where none of the sub-sample is available in a stratum, we will treat that stratum as 'void'. However, the various cases of void sub-samples are discussed below:

8.2 When a stratum is void i.e., none of the sub-samples 1 and 3 is available, then in order to generate estimate pertaining to sample sector based on central sample, the 'void' stratum may be merged with the nearest stratum looking into the description of the 3-digit NIC activity within the district, or else it could be merged with the 3-digit NIC activity 'others' within that 3-digit NIC Group in the district of the respective State. This will ensure the generation of district level estimates within a State.

8.3 The treatment will be similar if the stratum is void in both the sub-samples 2 and 4 to generate estimates from the state sample. In this case merging of stratum may be required in generating state sample estimates. If only one sub-sample (out of sub-sample 2 and 4) is void, then estimate for that stratum may be generated on the basis of single sub-sample as is mentioned in earlier paragraph 8.1. It may be possible that in a particular stratum, sub-samples 1 and 3 are void but sub-samples 2 and 4 are not void or conversely sub-samples 1 and 3 are not void but sub-samples 2 and 4 are void. In the later case merging of stratum is required in generating state sample estimate while merging is not required in generating estimates from central sample. In such cases for generating pooled estimate, merging is also not required. The stratum merging in generating pooled estimate is required only when all the four sub-samples in a stratum are void. The same merging principle, which is mentioned in earlier paragraph 8.2, is to be followed in such cases.

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Government of India
Ministry of Statistics and Programme Implementation
Return under Collection of Statistics Act, 2008 as amended in 2017 and rules framed there under in 2011
Annual Survey of Industries 2019-2020 (Part -I)
(Please read the instructions before filling the return)

Block A: Identification particulars (for official use)											
1. Schedule Despatch (DSL) No.											
2. PSL No.											
3. Scheme code (<i>Census-1, Sample-2</i>)											
4. Industry code as per frame (4-digit level of NIC-2008)											
5. Industry code as per return (5-digit level of NIC-2008)											
6. Description of Industry:											
7. State Code											
8. District Code											
9. Sector (<i>Rural-1, Urban-2</i>)											
10. RO / SRO code											
11. No. of Units											
12. Status of Unit (<i>Code</i>)											

Block B: Particulars of the factory (to be filled by owner of the factory)														
1. Name and address of the Industrial undertaking:						1.1 Vill./Town:								
						1.2 District name:								
						1.3 State name:								
						1.4 PIN Code								
2. Type of organisation (<i>code</i>)														
3. Corporate Identification Number (CIN)														
4. Whether the unit has ISO Certification, 14000 Series (<i>yes-1, no-2</i>)														
5. Year of initial production														
6. Accounting year (..... to)										to				
7. Number of months of operation														
8. Whether the share capital of the company includes share of foreign entities (<i>yes-1, no-2</i>)														
9. Any R&D unit in your factory? (<i>yes & registered with DST/DBT-1, yes & registered with others-2, no-3</i>)														
10. Details of contact person						i) Name & designation:								
						ii) Tele (with STD code)								
						iii) FAX no.								
						iv) E-mail								

DECLARATION

I hereby declare that information furnished in this return is correct and complete to the best of my knowledge and belief.

Date :

Place :

(Name and Signature of owner with stamp)

DSL No PSL No

Block C: FIXED ASSETS												
Sl. No.	Type of Assets	Gross value (Rs.)					Depreciation (Rs.)				Net value (Rs.)	
		Opening as on -----	Addition during the year		Deduction & adjustment during the year	Closing as on ----- (cols. 3+4+5-6)	Up to year beginning	Provided during the year	Adjustment for sold/ discarded during the year	Up to year end (cols. 8+9-10)	Opening as on ----- (cols. 3-8)	Closing as on ----- (cols. 7-11)
			Due to revaluation	Actual additions								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1.	Land											
2.	Building											
3.	Plant & Machinery											
4.	Transport equipment											
5.	Computer equipment including software											
6.	Pollution control equipment/ Environment improvement equipment											
7.	Others											
8.	Sub-total (items 2 to 7)											
9.	Capital work in progress											
10.	Total (items 1+8+9)											

DSL No PSL No

Block D: WORKING CAPITAL AND LOANS			
Sl. No.	Items	Opening (Rs.)	Closing (Rs.)
(1)	(2)	(3)	(4)
1.	Raw Materials & Components and Packing materials		
2.	Fuels & Lubricants		
3.	Spares, Stores & others		
4.	Sub-total (items 1 to 3)		
5.	Semi-finished goods/work in progress		
6.	Finished goods		
7.	Total inventory (items 4 to 6)		
8.	Cash in Hand & at Bank		
9.	Sundry Debtors		
10.	Other current assets		
11.	Total current assets (items 7 to 10)		
12.	Sundry Creditors		
13.	Over draft, cash credit, other short term loan from banks & other financial institutions		
14.	Other current liabilities		
15.	Total current liabilities (items 12 to 14)		
16.	Working Capital (item 11-item 15)*		
17.	Outstanding loans (excluding interest but including deposits)**		
<p><i>Note:</i></p> <p>* Give reasons in the footnote for negative values and abnormal verification in opening and closing values.</p> <p>** If outstanding loans include interest, a footnote may be given</p>			

DSL No PSL No

Block E: EMPLOYMENT AND LABOUR COST							
Sl. No.	Category of staff	Man-days worked			Average number of persons worked	No. of mandays paid for	Wages/ salaries (in Rs.)
		Manu- facturing	Non Manufacturing	Total			
1	2	3	4	5	6	7	8
Part A: Details for each category of staff							
1.	Male workers employed directly						
2.	Female workers employed directly						
3.	Sub-total (items 1 + 2)						
4.	Workers employed through contractors						
5.	Total workers (items 3 + 4)						
6.	Supervisory & managerial staff						
7.	Other employees						
8.	Unpaid family members/ proprietor/ coop. members						
9.	Total employees (items 5+6+7+8)						
Part B: Some details for all categories of staff combined							
10.	Bonus (in Rs.)						
11.	Contribution to provident & other funds (in Rs.)						
12.	Workmen & staff welfare expenses (in Rs.)						
13.	Number of working days	(i) Manufacturing days					
		(ii) Non-manufacturing days					
		(iii) Total (i+ ii)					
14.	Total cost of production (in Rs.) [entry in col. 8 of item 9, 10, 11, and 12, block E + entry in col. 3 of item 1, 2(i), 2(ii), 3, 4, 5, 6, 7, 8, 9 & 10, block F + entry in col. 6 of item 23 of block H + entry in col. 6 of item 7, block I]						

DSL No PSL No

Block F : OTHER EXPENSES			
Sl. No.	Items	Expenditure (in Rs.)	
(1)	(2)	(3)	
O T H E R I N P U T	1.	Work done by others on materials supplied by the industrial undertaking	
	2.	Repair & maintenance of	
		(i) Buildings and other construction	
		(ii) Other fixed assets	
	3.	Operating expenses	
	4.	Expenses on raw materials and other components for own construction	
	5.	Insurance charges	
	6.	Rent paid for plant & machinery and other fixed assets	
	7.	Expenses on Research & Development (R&D)	
	8.	Rent paid for buildings	
	9.	Rent paid for land on lease or royalties on mines, quarries and similar assets	
	10.	Interest paid	
	11.	Purchase value of goods sold in the same condition as purchased	
12.	Inward transportation cost		
13.	Outward transportation cost		

Block G: OTHER OUTPUT/RECEIPTS			
Sl. No.	Items	Receipts (in Rs.)	
(1)	(2)	(3)	
O T H E R O U T P U T	1.	Receipts from manufacturing services (including work done for others on materials supplied by them and sale value of waste left by the party)	
	2.	Receipts from non-manufacturing services (including non-industrial services)	
	3.	Value of electricity generated and sold	
	4.	Value of own construction	
	5.	Net balance of goods sold in the same condition as purchased. (item 11 of block G <i>minus</i> item 11 of block F)	
	6.	Rent received for plant & machinery and other fixed assets	
	7.	Variation in stock of semi-finished goods (col. 4 <i>minus</i> col. 3 against item 5 in block D)	
	8.	Rent received for buildings	
	9.	Rent received for land on lease or royalties on mines, quarries and similar assets	
	10.	Interest received	
	11.	Sale value of goods sold in the same condition as purchased	
	12.	Other production subsidies	

DSL No PSL No

Block H: Indigenous input items consumed (if needed, additional sheets may be used for recording input items with serial nos. starting from 25)						
Sl. No.	Item description	Item code (NPC-MS)	Unit of quantity	Quantity consumed	Purchase value (in Rs.)	Rate per unit (in Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Major ten basic items (indigenous)					
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.	Other basic items (indigenous)*	9920100				
12.	Total basic items (items 1 to 11)	9990100				
13.	Non-basic chemicals – all kinds	9920300				
14.	Packing items	9990800				
15.	Electricity own generated	9990400	KWH			
16.	Electricity purchased & consumed	9990500	KWH			
17.	Petrol, diesel, oil, lubricants consumed	9990600				
18.	Coal consumed	9990700	Tonne			
19.	Gas consumed	9990900	KG			
20.	Other fuel consumed	9920400				
21.	Consumable store	9922000				
22.	Total non-basic items (items 13 to 21)	9992000				
23.	Total inputs (items 12+ 22)	9993000				
24.	Any additional requirement of electricity (unmet demand)	9999999	KWH			
* Full description of items not in NPC-MS 2011 (Revised):						

DSL No PSL No

Block I: Imported input items consumed - directly only (if needed, additional sheets may be used for recording input items with serial nos. starting from 8)						
Sl. No.	Item description (Major five imported items)	Item code (NPC-MS)	Unit of quantity	Quantity consumed	Purchase value (in Rs.)	Rate per unit (in Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.						
2.						
3.						
4.						
5.						
6.	Other imported items	9922100				
7.	Total imports (consumed) (items 1 to 6)	9994000				

DSL No PSL No

Block J: Products and by-products manufactured by the unit (if needed, additional sheets may be used for recording output items with serial nos. starting from 14)												
Sl. No.	Products/By-products description (First ten major items as per value - no brand name)	Item code (NPC-MS)	Unit of quantity	Quantity manufactured	Quantity sold	Gross sale value (Rs)	Distributive expenses (Rs.)				Per unit net sale value (Rs. 0.00) (col. 7-[col. 8+col. 9+col.10-col.11] ÷ col. 6)	Ex-factory value of quantity manufactured (Rs.) (col.12× col.5)
							Excise duty	Sales tax/VAT	Others	Subsidy (-)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.	Other products/ by-products*	9921100										
12.	Total (items 1 to 11)	9995000										
13.	Share (%) of products/by-products directly exported											

* Full description of items not in NPC-MS 2011 (Revised):

DSL No PSL No

Block K: Information and Communication technology (ICT) usage		
Sl. No.	ICT indicator	yes-1, no-2
1.	Did the factory use computer/s during FY 2019-20?	
2.	Did the factory use the internet during FY 2019-20?	
3.	Did the factory have a website as on the date of survey?	
4.	Did the factory receive orders via the internet during FY 2019-20?	
5.	Did the factory place orders for business purpose via the internet during FY 2019-20?	
6.	Did the factory connect to the internet either by a. Narrowband or b. Fixed broadband or c. Mobile broadband during FY 2019-20?	
7.	Does the factory have a local area network (LAN) as on the date of survey?	

Block L: Energy Conservation (EC) measures		
Sl. No.	EC indicator	yes-1, no-2
Have any measures been taken during last financial year with regard to:		
1.	Electrical saving?	
2.	Coal saving?	
3.	Oil saving?	
4.	Gas saving?	

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Block M: Particulars of field operations			
1.	Name of Superintending Officer	5.	Date of receipt from factory
2.	Signature of Superintending Officer	6.	Date of verification/compilation
3.	Name & Designation of Scrutinising Officer	7.	Date(s) of scrutiny
4.	Signature of Scrutinising Officer	8.	Date of despatch

Block N: Comments of Superintending Officer/Scrutinising Officer
<i>Note: Reasons for negative working capital and for any abnormal values or entries (high or low) in respect to important characteristics (Such as GVA, working capital, wage rate, number of workers, distributive expenses, depreciation etc.) should be given invariably. For instance the reasons for high GVA could be increased demand/production, profit, govt. subsidy; or for low GVA, the reasons could be decreased demand/production, capacity under-utilization, high input cost etc. similarly reasons for any abnormal values of certain important ratios eg. Ratio of output to input, ratio of depreciation/distributive expenses to output etc should be given. Please refer to detailed instructions also for further guidance.</i>

Annual Survey of Industries 2019-2020						
Part A						
Report of scrutiny on Part-I of the return						
State (code) _____		Distt. (code) _____		DSL No./PSL No. _____		
Ind. code (5-digit NIC 2008) as per return _____				Scheme Code _____		
Sl. No.	Bl. no.	Item	Unit	Average rate per unit*	If high or low, reasons to be furnished by	
1	H	Input items (Indigenous)	X	X	Superintending Officer	Scrutinising Officer
		Major Ten basic items consumed				
		1)				
		2)				
		3)				
		4)				
		5)				
		6)				
		7)				
		8)				
		9)				
		10)				
		11) Electricity purchased				
12) Coal						
2	I	Directly imported items consumed (major five items)				
		1)				
		2)				
		3)				
		4)				
		5)				

*Average value per unit in nearest whole rupee is to be reported.

3. Percentage yield of product from the basic materials consumed (in case the quantity are common or directly convertible in whole number)

4	Item	Current year (2019-20)	Previous year (2018-19)	Reasons for significant variation, if any.
	1) Average salaries/wages per manday worked (Rs.) (E _{5,8} / E _{5,5})			
	2) Total worker (number) (E _{5,6})			
	3) Total employees (number) (E _{9,6})			
	4) Total emoluments (E _{9,8} + E _{10,8} + E _{11,8} + E _{12,8})			
	5) Variation in finished goods (D _{6,4} - D _{6,3})			
	6) Working Capital (D _{16,4})			
	7) Total input (F _{1,3} +F _{2(i),3} +F _{2(ii),3} +F _{3,3} +F _{4,3} +F _{6,3} +F _{7,3} +F _{8,3} +F _{11,3}) (+) (H _{23,6}) (+) (I _{7,6})			
	8) Total output (J _{12,7}) (-) (J _{12,8} +J _{12,9} +J _{12,10} -J _{12,11}) + (D _{6,4} - D _{6,3}) + (G _{1,3} +G _{2,3} +G _{3,3} +G _{4,3} +G _{6,3} +G _{7,3} +G _{8,3} +G _{11,3} +F _{7,3})			
	9) Gross value added (GVA) (Item 8-Item 7 as above)			

Item	Current year (2019-20)	Previous year (2018-19)	Reasons for significant variation, if any.
10) Net value added (Item 9 as above) - Depreciation (C _{10,9})			
11) Net Income (Item 10 as above) (-) (F _{9,3} +F _{10,3})			
12) Profit (Item 11 as above) (-) (E _{9,8} +E _{10,8} +E _{11,8} +E _{12,8})			
13) Actual addition to fixed assets (C _{10,5})			
14) GVA (through Ex-factory Value) (J _{12,13}) (+) (G _{1,3} +G _{2,3} +G _{3,3} +G _{4,3} +G _{6,3} +G _{7,3} +G _{8,3} +G _{11,3} +F _{7,3}) (-) (F _{1,3} +F _{2(i),3} +F _{2(ii),3} +F _{3,3} +F _{4,3} +F _{6,3} +F _{7,3} +F _{8,3} +F _{11,3}) (-) (H _{23,6}) (-) (I _{7,6})			

5. Impose check on the following and give observations against each item		
Sl. No.	Check points	Observations (Yes-1/No-2)
1.	Whether codes and identification particulars have been correctly furnished in Block A?	
2.	Whether information for all the items in Block B have been correctly furnished?	
3.	If the working capital in item 16 of Block D is negative whether reasons furnished in the footnote of Block D of the Return and also in Block N along with code?	
4.	Whether the return has been duly signed by owner with stamp?	
5.	If wide variation is noticed between Opening & Closing value of Working Capital, whether reasons furnished in the footnote of Block D and also in Block N along with code?	
6.	Whether special check has been made in case of negative GVA?	
7.	Whether basic entries have been thoroughly rechecked where output/input ratio is less than 0.5?	
8.	Whether ratio of Distributive expenses to gross sales is reasonable? If no, whether the relevant entries have been rechecked particularly where this ratio exceeds 20%?	
9.	If the total Bonus is more than 20% of total wages/salaries whether suitable remarks given in the Return?	
10.	If sale value of goods sold in same condition as purchased (Item-11 of Block G) is less than the purchase value of the same (Item-11 of Block F), whether reasons furnished in the return ?	
11.	Whether Balance Sheet, Profit & Loss Account and Working Sheet are attached with the O/C of the Return?	
12.	Whether, the ex-factory value of output in column-13 of Block J have been calculated correctly for each of the 10 major items of product and by-product and also for item 11?	
13.	Whether the entries in Blocks H & I are reported independently?	

Signature of the Superintending Officer

()
Name of the Superintending Officer

PART-B (To be filled in by Scrutinizing officer)		
Impose check on the following and give observations against each item		
Sl. No.	Check points	Observations (Yes-1/No-2)
1.	Examine the Industry Code with reference to Production/Process and state whether Industry Code is reported in 5 digit NIC 2008 against item 5 of Block A?	
2.	Whether valid new State Code has been entered against item 7 of Block A?	
3.	Whether Schedule Despatch no. has been correctly filled in against item 1 of Block A?	
4.	State whether proper remarks in Block N for all important parameters such as GVA, working capital, wage rate, number of workers, distributive expenses, depreciation etc. are given?	
5.	Whether average salaries/wages per manday worked (worker) has been checked calculated correctly and are within the reasonable limits?	
6.	Whether special check has been made in case of negative GVA?	
7.	Whether basic entries have been rechecked where output/Input ratio is less than 0.5?	
8.	Whether ratio of distributive expenses to gross sales is reasonable? If no, whether the relevant entries have been rechecked particularly where this ratio exceeds 20%?	
9.	If total bonus exceeds 20% of total salaries & wages, whether suitable remarks furnished?	
10.	Whether yield ratio of products from basic materials consumed (in case the units of quantity are common or directly convertible) are correctly calculated and are within prescribed limits?	
11.	Whether data reported in the return have been checked with Balance Sheet and Profit & Loss Account?	

Signature of Scrutinizing officer

()
Name of Scrutinizing officer

CONCEPTS AND DEFINITIONS

Important concepts and definitions used in ASI are explained below.

1. A number of accounting, economic and other terms related to the factories are used in conduct of Annual Survey of Industries. For proper assessment and interpretation of ASI data, those are given below.

2. **Accounting Year:** For the purpose of ASI, the accounting year is the period on which the factory closes its books of account. With the enactment of Income Tax Act, by and large, the accounting year of all factories is from April to March.

3. **Reference Period:** It corresponds to the financial year. For example, for ASI 2019-2020 the reference period is the financial year commencing from 1st April 2019 and ending on 31st March 2020 or the accounting year of the factory ending on any date between 01.04.2019 to 31.03.2020.

4. **Survey Period:** Survey period is a period during which work of any Annual Survey of Industries is undertaken. The survey period for ASI 2019-2020 is from May 2021 to October, 2021.

5. **Factory (as per the Factory Act 1948):** Factory is one, which is registered under Sections 2m(i) and 2m(ii) of the Factories Act, 1948. The Sections 2m(i) and 2m(ii) refer to any premises including the precinct thereof (i) wherein ten 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 on with the aid of power, or is ordinarily so carried on, or (ii) wherein twenty 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 on without the aid of power, or is ordinarily so carried on. Closed factories with fixed assets on site are also considered as registered factories till they are de-registered and removed from the live-register maintained by the Chief Inspector of Factories (CIF) in the State.

6. **Manufacturing Process:** This is as per Section 2(k) of the Factories Act, 1948.

'Any process' for:

(i) *making, altering, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or,*

(ii) *pumping oil, water or sewage ; or,*

(iii) *generating , transforming or transmitting power; or,*

(iv) *composing types for printing by letter press, lithography, photogravure or other similar process or book binding; or,*

(v) *constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels; or,*

(vi) *preserving or storing any article in cold storage.*

7. **Gross Value of Plant and Machinery:** Gross value of plant and machinery represents the total original (un-depreciated) value of installed plant and machinery as at the end of the

accounting year. It includes the book value of own constructed plant and machinery, if installed, and the approximate value of rented-in plant and machinery as at the time of renting in but excludes the value of rented-out plant and machinery. Total value of all the plant and machinery acquired on hire-purchase basis is also included. Thus it represents the gross value of plant and machinery engaged in production process.

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

9. Depreciation: Depreciation is consumption of fixed capital by the factory due to wear and tear and obsolescence during the accounting year and is taken as provided by the factory owner, or if not provided by the factory this is estimated on the basis of cost of installation and working life of the fixed assets.

10. Finished Goods: Finished Goods are those, which are manufactured by the factory for sale. Finished goods should conform to a prescribed standard.

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

12. Working Capital: Working Capital is the sum total of the physical working capital as already defined above and the cash deposits in hand and at bank, land, the net balance of amounts receivable over amounts payable at the end of the accounting year. Amounts receivable include value of credit items on revenue account, such as sums due to the factory for goods sold, amounts advanced in connection with normal factory work, bills of exchange payable to the factory, payments made in advance such as for fire insurance, telephone charges, rates and taxes, call deposits and security deposits having a normal life of less than one year, etc. It excludes unused overdraft facility, fixed deposits irrespective of duration, advances for acquisition of fixed assets, long-term loans including interest thereon and investment.

13. Invested Capital: Invested capital is the total of fixed capital and physical working capital.

14. Productive Capital: This is the total of fixed capital and working capital.

15. **Outstanding Loans:** Outstanding loans represent all loans, whether short-term or long-term, whether interest bearing or not, outstanding according to the books of the factory as on the closing day of accounting year.

16. **Contract Worker:** All persons who are not employed directly by an employer but through the third agency, i.e. contractor, are termed as contract workers. Those workers may be employed with or without the knowledge of the principal employer.

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

18. **Labour Turnover:** Labour turnover measures the extent of change in the working force due to accession and separation during a given period. The term 'accession' was defined as the total number of workers added to employment during the period, whether new or re-employed or transferred from other establishments or units under the same management. Inter-departmental transfers within the same establishment are, however ignored. The term 'separation' implies termination of employment at the instance of worker or employers. It includes termination of services due to death or retirement. As in the case of accession, transfers to other establishments are included but transfers within the same establishment are ignored. Retrenchment as a result of rationalization or modernization or any other cause, is also treated as separation.

19. **Wages:** Wages are defined to include all remuneration capable of being expressed in monetary terms and also payable/paid more or less regularly in each pay period to workers (defined above) as compensation for work done during the accounting year. It **includes:**

(i) Direct wages and salary (i.e. basic wages/salaries, payment of overtime, dearness, compensatory, house rent and other allowances);

(ii) Remuneration for period not worked (i.e. basic wages), salaries and allowances payable for leave period, paid holidays, lay-off payments and compensation for unemployment (if not paid from source other than employers);

(iii) Bonus and ex-gratia payment paid both at regular and less frequent intervals (i.e., incentive bonuses and good attendance bonuses, production bonuses, profit sharing bonuses, festival or yearend bonuses etc.).

It **excludes** layoff payments and compensation for employment except where such payments are for this purpose, i.e., payments not made by the employer. It **excludes** employer's contribution to old age benefits and other social security charges, direct expenditure on maternity benefits and creches and other group benefit in kind and travelling and other expenditure incurred for business purposes and reimbursed by the employer. The wages are expressed in terms of gross value, i.e., before deductions for fines, damages, taxes, provident fund, employee's state insurance contribution etc. Benefits in kind (perquisites) of individual nature are only **included**.

20. **Bonus:** Profit sharing bonus, festival bonus, year-end bonus, and all other bonuses and ex-gratia payments paid at less frequent intervals are covered by this term.
21. **Workmen and Staff Welfare Expenses:** These include expenditure incurred by the employer on the maternity benefits and crèches and other benefits such as supply of food, beverages, tobacco, clothing and group lodging at concessional rates and educational, cultural and recreational facilities and services and grants to trade unions and cooperative stores meant for employees. All group benefits are included.
22. **Emoluments:** These are defined in the same way as wages but paid to all employees plus imputed value of benefits in kind i.e. the net cost to the employers on those goods and services provided to employees free of charge or at markedly reduced cost which are clearly and primarily of benefit to the employees as consumers. It includes profit sharing, festival and other bonuses and ex-gratia payments paid at less frequent intervals (i.e. other than bonus paid more or less regularly for each period). Benefits in kind include supplies or services rendered such as housing, medical, education and recreation facilities. Personal insurance, income tax, house rent allowance, conveyance etc. for payment by the factory also is included in the emoluments.
23. **Supplements to Emoluments:** These include: (i) employer's contribution to old age benefits, i.e., provident fund, pension, gratuity, etc.; (ii) employer's contribution towards other social security charges such as Employees' State Insurance, compensation for work injuries, occupational diseases, maternity benefits, retrenchment and lay-off benefits etc.; and (iii) group benefits like direct expenditure on maternity, crèches, canteen facilities, educational, cultural and recreational facilities and grant to trade unions, co-operative stores etc. meant for employees.
24. **Compensation of Employees:** Compensation of employees is the total of emoluments and supplement to emoluments.
25. **Mandays Worked:** These are obtained by summing up the number of mandays worked by persons working in each shift over all the shifts on all days, i.e. both manufacturing and non-manufacturing days. This figure excludes persons who are paid but remain on leave, strike, etc.
26. **Mandays Paid For:** The number of mandays paid for is arrived at by summing up the number of employees paid for in each shift. This also includes mandays on weekly schedule holidays if paid for and those absences with pay as also mandays lost through lay off/ strike for which compensation was payable.
27. **Working Day:** Working day means the days on which a manufacturing process and/ or repair or maintenance work was carried on.
28. **Non-working Day:** Apart from manufacturing day and repair and maintenance days there may be some non-working days. Non working days are those days on which the workers give their attendance but due to non-availability of raw materials power etc. no effective work is done. As the workers are paid for these days such days are also taken into account for the purpose of labour statistics.
29. **Basic Materials:** Basic materials are the materials which are important and of key nature to the industry, on which the manufacturing process is based, viz. metal for machine, leather for shoe. Such material is not lost through the process of production but only changes its forms.

30. Consumable Stores: All such materials which assist the manufacturing process and lose their identity without entering the products are called consumable stores, e.g., cotton waste.

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

32. Materials Consumed: Materials consumed represent the total delivered value of all items of raw materials, components, chemicals, packing materials and stores which actually entered into the production process of the factory during the accounting year. It also includes the cost of all the materials used in the production of fixed assets, including construction work for factory's own use. Components and accessories fitted as purchased with the finished product during the accounting year are also to be included. It excludes intermediate products. Intermediate products in the above context mean all those products which are produced by the factory and consumed for further manufacturing process.

33. Total Input: This comprises gross value of fuels, materials etc. consumed (as defined above) and also other inputs viz. (a) cost of non-industrial services received from others, (b) cost of materials consumed for repair and maintenance of factory's fixed assets including cost of work done by others to the factory's fixed assets, (c) cost of contract and commission work done by others on materials supplied by the factory, (d) cost of office supplies and products reported for sale during last year & used for further manufacture during the accounting year and (e) rent paid for buildings and plant & machinery and other fixed assets, (f) expenses on Research & Development (R&D).

34. Intermediate Product: Intermediate Product is a product which is obtained during a manufacturing process, which may or may not be saleable and is not the intended final product.

35. Net Value of Semi-Finished Goods: It represents the excess/deficit of value of semi-finished goods and/or goods-in-process at the end of the accounting year over that at the beginning of year.

36. Products: These are defined to include the ex-factory value (i.e. exclusive of taxes, duties etc. on sale and inclusive of subsidies etc., if any) of all products and by-products, excluding intermediate products, that have been completed during the accounting year for sale whether actually sold during the accounting year or entered into books. Also include fixed assets produced by the factory for its own use.

37. Gross Output: Gross output is defined to include the ex-factory value, (i.e., exclusive of taxes, duties, etc. on sale and inclusive of subsidies etc., if any) of products and by-products manufactured during the accounting year, and the net value of the semi-finished goods, value of own construction and also the receipts for industrial and non-industrial services rendered to others, rent received for building, plant & machinery and other fixed assets, net balance of goods sold in the same condition as purchased, value of electricity generated and sold and an amount equal to

expenses on research & development (R&D). Value of gross output and total output has been used in the text inter-changeably to mean the same thing.

38. Industrial Services: Any services taken or rendered from one to another unit resulting in increase in the value of material during the manufacturing process are industrial services.

39. Non-Industrial Services: All such services which do not have a direct bearing on the manufacturing process but are needed by any manufacturing unit are called non-industrial services, say, transport.

40. Net Value Added: This is the increment to the value of goods and services that is contributed by the factory and is obtained by deducting the value of total inputs and depreciation from gross value of output.

41. Net Income: It is obtained by deducting the value of rent paid & interest paid from the NVA.

42. Net Profit: It is obtained by deducting compensation of employees from net income.

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
016	0163	Post-harvest crop activities
	0164	Seed processing for propagation
089	0893	Extraction of salt
101	1010	Processing and preserving of meat
102	1020	Processing and preserving of fish, crustaceans and molluscs and products thereof
103	1030	Processing and preserving of fruit and vegetables
104	1040	Manufacture of vegetable and animal oils and fats
105	1050	Manufacture of dairy products
106		Manufacture of grain mill products, starches and starch products
	1061	Manufacture of grain mill products
	1062	Manufacture of starches and starch products
107		Manufacture of other food products
	1071	Manufacture of bakery products
	1072	Manufacture of sugar
	1073	Manufacture of cocoa, chocolate and sugar confectionery
	1074	Manufacture of macaroni, noodles, couscous and similar farinaceous products
	1075	Manufacture of prepared meals and dishes
	1079	Manufacture of other food products n.e.c.
108	1080	Manufacture of prepared animal feeds
110		Manufacture of beverages
	1101	Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials
	1102	Manufacture of wines
	1103	Manufacture of malt liquors and malt
	1104	Manufacture of soft drinks; production of mineral waters and other bottled waters

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
120	1200	Manufacture of tobacco products
131		Spinning, weaving and finishing of textiles
	1311	Preparation and spinning of textile fibres
	1312	Weaving of textiles
	1313	Finishing of textiles
139		Manufacture of other textiles
	1391	Manufacture of knitted and crocheted fabrics
	1392	Manufacture of made-up textile articles, except apparel
	1393	Manufacture of carpets and rugs
	1394	Manufacture of cordage, rope, twine and netting
	1399	Manufacture of other textiles n.e.c.
141	1410	Manufacture of wearing apparel, except fur apparel
142	1420	Manufacture of articles of fur
143	1430	Manufacture of knitted and crocheted apparel
151		Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur
	1511	Tanning and dressing of leather; dressing and dyeing of fur
	1512	Manufacture of luggage, handbags and the like, saddlery and harness
152	1520	Manufacture of footwear
161	1610	Saw milling and planing of wood
162		Manufacture of products of wood, cork, straw and plaiting materials
	1621	Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board and other panels and board
	1622	Manufacture of builders' carpentry and joinery
	1623	Manufacture of wooden containers
	1629	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
170		Manufacture of paper and paper products
	1701	Manufacture of pulp, paper and paperboard
	1702	Manufacture of corrugated paper and paperboard and containers of paper and paperboard
	1709	Manufacture of other articles of paper and paperboard
181		Printing and service activities related to printing
	1811	Printing
	1812	Service activities related to printing
182	1820	Reproduction of recorded media
191	1910	Manufacture of coke oven products
192	1920	Manufacture of refined petroleum products
201		Manufacture of basic chemicals, fertilizer and nitrogen compounds, plastics and synthetic rubber in primary forms
	2011	Manufacture of basic chemicals
	2012	Manufacture of fertilizers and nitrogen compounds
	2013	Manufacture of plastics and synthetic rubber in primary forms
202		Manufacture of other chemical products
	2021	Manufacture of pesticides and other agrochemical products
	2022	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
	2023	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
	2029	Manufacture of other chemical products n.e.c.
203	2030	Manufacture of man-made fibres
210	2100	Manufacture of pharmaceuticals, medicinal chemical and botanical products
221		Manufacture of rubber products
	2211	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
	2219	Manufacture of other rubber products

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
222	2220	Manufacture of plastics products
231	2310	Manufacture of glass and glass products
239		Manufacture of non-metallic mineral products n.e.c.
	2391	Manufacture of refractory products
	2392	Manufacture of clay building materials
	2393	Manufacture of other porcelain and ceramic products
	2394	Manufacture of cement, lime and plaster
	2395	Manufacture of articles of concrete, cement and plaster
	2396	Cutting, shaping and finishing of stone
	2399	Manufacture of other non-metallic mineral products n.e.c.
241	2410	Manufacture of basic iron and steel
242	2420	Manufacture of basic precious and other non-ferrous metals
243		Casting of metals
	2431	Casting of iron and steel
	2432	Casting of non-ferrous metals
251		Manufacture of structural metal products, tanks, reservoirs and steam generators
	2511	Manufacture of structural metal products
	2512	Manufacture of tanks, reservoirs and containers of metal
	2513	Manufacture of steam generators, except central heating hot water boilers
252	2520	Manufacture of weapons and ammunition
259		Manufacture of other fabricated metal products; metalworking service activities
	2591	Forging, pressing, stamping and roll-forming of metal; powder metallurgy
	2592	Machining; treatment and coating of metals
	2593	Manufacture of cutlery, hand tools and general hardware

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
	2599	Manufacture of other fabricated metal products n.e.c.
261	2610	Manufacture of electronic components
262	2620	Manufacture of computers and peripheral equipment
263	2630	Manufacture of communication equipment
264	2640	Manufacture of consumer electronics
265		Manufacture of measuring, testing, navigating and control equipment; watches and clocks
	2651	Manufacture of measuring, testing, navigating and control equipment
	2652	Manufacture of watches and clocks
266	2660	Manufacture of irradiation, electromedical and electrotherapeutic equipment
267	2670	Manufacture of optical instruments and equipment
268	2680	Manufacture of magnetic and optical media
271	2710	Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus
272	2720	Manufacture of batteries and accumulators
273		Manufacture of wiring and wiring devices
	2731	Manufacture of fibre optic cables for data transmission or live transmission of images
	2732	Manufacture of other electronic and electric wires and cables
	2733	Manufacture of wiring devices
274	2740	Manufacture of electric lighting equipment
275	2750	Manufacture of domestic appliances
279	2790	Manufacture of other electrical equipment
281		Manufacture of general purpose machinery
	2811	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
	2812	Manufacture of fluid power equipment
	2813	Manufacture of other pumps, compressors, taps and valves

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
	2814	Manufacture of bearings, gears, gearing and driving elements
	2815	Manufacture of ovens, furnaces and furnace burners
	2816	Manufacture of lifting and handling equipment
	2817	Manufacture of office machinery and equipment
	2818	Manufacture of power-driven hand tools
	2819	Manufacture of other general-purpose machinery
282		Manufacture of special-purpose machinery
	2821	Manufacture of agricultural and forestry machinery
	2822	Manufacture of metal-forming machinery and machine tools
	2823	Manufacture of machinery for metallurgy
	2824	Manufacture of machinery for mining, quarrying and construction
	2825	Manufacture of machinery for food, beverage and tobacco processing
	2826	Manufacture of machinery for textile, apparel and leather production
	2829	Manufacture of other special-purpose machinery
291	2910	Manufacture of motor vehicles
292	2920	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
293	2930	Manufacture of parts and accessories for motor vehicles
301		Building of ships and boats
	3011	Building of ships and floating structures
	3012	Building of pleasure and sporting boats
302	3020	Manufacture of railway locomotives and rolling stock
303	3030	Manufacture of air and spacecraft and related machinery
304	3040	Manufacture of weapons and ammunition
309		Manufacture of transport equipment n.e.c.

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
	3091	Manufacture of motorcycles
	3092	Manufacture of bicycles and invalid carriages
	3099	Manufacture of other transport equipment n.e.c.
310	3100	Manufacture of furniture
321		Manufacture of jewellery, bijouterie and related articles
	3211	Manufacture of jewellery and related articles
	3212	Manufacture of imitation jewellery and related articles
322	3220	Manufacture of musical instruments
323	3230	Manufacture of sports goods
324	3240	Manufacture of games and toys
325	3250	Manufacture of medical and dental instruments and supplies
329	3290	Other manufacturing n.e.c.
331		Repair of fabricated metal products, machinery and equipment
	3311	Repair of fabricated metal products
	3312	Repair of machinery
	3313	Repair of electronic and optical equipment
	3314	Repair of electrical equipment
	3315	Repair of transport equipment, except motor vehicles
	3319	Repair of other equipment
332	3320	Installation of industrial machinery and equipment
351	3510	Electric power generation, transmission and distribution
352	3520	Manufacture of gas; distribution of gaseous fuels through mains
353	3530	Steam and air conditioning supply
360	3600	Water collection, treatment and supply

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
370	3700	Sewerage
381		Waste collection
	3811	Collection of non-hazardous waste
	3812	Collection of hazardous waste
382		Waste treatment and disposal
	3821	Treatment and disposal of non-hazardous waste
	3822	Treatment and disposal of hazardous waste
383	3830	Materials recovery
452	4520	Maintenance and repair of motor vehicles
454	4540	Sale, maintenance and repair of motorcycles and related parts and Accessories
521	5210	Warehousing and storage
581		Publishing of books, periodicals and other publishing activities
	5811	Book publishing
	5812	Publishing of directories and mailing lists
	5813	Publishing of newspapers, journals and periodicals
	5819	Other publishing activities
591		Motion picture, video and television programme activities
	5911	Motion picture, video and television programme production activities
	5912	Motion picture, video and television programme post-production activities
	5913	Motion picture, video and television programme distribution activities
592	5920	Sound recording and music publishing activities
742	7420	Photographic activities
829		Business support service activities n.e.c.
	8292	Packaging activities

Description along with 3/4-digit NIC-2008 codes

3-digit NIC-2008	4-digit NIC-2008	Description
951		Repair of computers and communication equipment
	9511	Repair of computers and peripheral equipment
	9512	Repair of communication equipment
952		Repair of personal and household goods
	9521	Repair of consumer electronics
	9522	Repair of household appliances and home and garden equipment
	9523	Repair of footwear and leather goods
	9524	Repair of furniture and home furnishings
	9529	Repair of personal and household goods, n.e.c.
960		Other personal service activities
	9601	Washing and (dry-) cleaning of textile and fur products

The Factories Act 1948

[63 of 1948]

AIV.1 "**Factory**" means any premises including the precincts thereof

(i) Wherein ten 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 on with the aid of power or is ordinarily so carried on, or,

(ii) Wherein twenty 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 on without the aid of power or is ordinarily so carried on, but does not include a mine subject to the operation of the Mines Act, 1952, or a railway running shed.

AIV.2 The "**Manufacturing Process**" referred to above has been defined [vide section 2(k)]

in the Factories Act, 1948

as: "Any process

for-

(i) making, altering, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or,

(ii) pumping oil, water or sewage ;

or,

(iii) generating, transforming or transmitting power;

or,

(iv) composing types for printing by letter press, lithography, photogravure or other similar process or book binding; or,

(v) constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels.

(vi) preserving or storing any article in cold storage"

[Abstract from Factories Act 1948 for ASI]



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