International Metalworkers' Federation

Metal Industry in India – A Survey

A Survey of Characteristics of the Metal Industry, Its Structure and Trade Unions in India

IMF-LO/FTF Organizing Project in India
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Foreword

“India is today the second most populous country in the world. It is also an important country for the metal industry employing almost three million workers.

Hence the International Metalworkers’ Federation is focusing its attention on India. This research report was initiated in order to obtain accurate and up-to-date information on the composition and location of the metal industry and the unions in the industry. These results are then used in the organising project that was launched in the year 2000 with IMF affiliates SMEFI and INMF-Mines and with the support of IMF Danish affiliates CO-Industri and Danish Metal through LO-FTF Council.

We hope that this information will be useful in organising the metalworkers in the country and strengthening and uniting their unions.

Marcello Malentacchi
General Secretary
IMF, Geneva, Swizerland

Preface

"**The Survey of Metal and Metal working industry in India**" is a study on the mentioned sector requisitioned by the **International Metalworkers' Federation** with the manifest objective to "Organise the UnOrganised". The primary mission of this research is to collect information on the metalworking Industry, the enterprises and the Trade Unions functioning therein, with the express objective of building up a database for Indian Metal Industry. This information will be the key to thoroughly comprehending the problems challenging the metal industry and their workers on a continuous basis. The present work will definitely help in comprehending the respective states' industrial scenario and labour market situation to facilitate the *organising work*.

Six states with a highest concentration of Metal Industry were identified for the survey. These are **Uttar Pradesh, Rajasthan, Maharashtra, Gujarat, Andhra Pradesh** and **Karnataka**. The basic statistical information requisite for building up a database encompassing the total industrial picture specially in the manufacturing and mining industries, traditional domestic metal industries and also multinational or transnational companies, was hence collected from:

- Manufacturing and mining industries;
- Principal enterprises in the metalworking sector; and
- Trade Unions working in the Metal Industries.

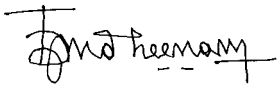
Four Research Institutes had been incorporated for conducting the survey in six project states and these were – ***Indian Institute of Economics***, Hyderabad (for Andhra Pradesh), ***Maniben Kara Institute***, Mumbai (for Maharashtra & Gujarat), ***Roshini Associates*** (for Karnataka), ***Sri Ram Centre for Industrial Relation and Human Resources*** (for Uttar Pradesh & Rajasthan). Present work is the compiled and edited survey report and has been supplemented from different sources. Introduction, Key Findings, Conclusion and Recommendation along with Glossary and Annexures have been prepared by IMF South Asia Office to facilitate reading and giving idea about other state and IT field. Annual Survey of Industries (ASI) is the principal source of industrial statistics in India and industrial data in Key Findings and other additions are obtained mainly from it (1997-98), which is the latest avilabale data and other statistical sources like Manpower Profile, Statistical Outline of India, Census of India, Economic Survey, Pocket Books of Labour Statistics, Labour Journals, ILO's world Employment Report, Statistical Abstract, Reports from four Research Institutes hired for survey in six states etc. ASI industrial group has been followed in classifying industries and the classification is based on the value of the principal product manufactured by them even though they might be manufacturing products belonging to different industries.

Where quantitative information was not available, descriptive anecdotal information has been furnished. The characteristics of metal industries in other important states has been compiled and put as an annexure1 to give the view of the metal workers in the other industrialised states of India. In addition to this a chapter on *Information Technology* summarising job implication for men & women and industries' regional distribution in India

has been incorporated in the annexure2. **The database of enterprises with their names, addresses and workers' strength in the project states has been compiled separately for each state.**

The research and publication of this document is carried out as part of expressed objectives of the **IMF-LO/FTF Organising project in India**. The present work is a sincere effort on our part to guide the selected states' trade union and their members to carry out the organising work effectively and will be handy for all the concerned to understand the state of metal industries and workers in India in general and selected states in particular.

Furthermore I thank all four Research Institutes for conducting survey and providing us valuable information. I express my special appreciation to **Mr. Vinod Kumar Srivastava**, Project Assistant, IMF South Asia Office for compiling the Research Report in present form and additions to it. The present work would have not been possible without the support of all IMF South Asia Office staff and so I thank them all. Last but not least our sincere thanks to all project partners.



Date :

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Introduction

Project States In India

N

Jammu & Kashmir

Himachal Pradesh

Punjab

Uttaranchal

Haryana

Delhi

Rajasthan

Uttar Pradesh

Bihar

Sikkim

Arunachal Pradesh

Assam

Nagaland

Meghalaya

Manipur

Tripura

Mizoram

Jharkhand

West Bengal

Gujarat

Madhya Pradesh

Chhattisgarh

Orissa

Maharashtra

Andhra Pradesh

Bay of Bengal

Arabian Sea

Goa

Karnataka

Tamil Nadu

Kerala

Lakshadweep (India)

Andaman & Nicobar Islands (India)

INDIAN OCEAN

Project States

Other Identified State

Economic Scenario of India

The Indian Economy now approaching its 55th year started its march towards growth with social justice under explicit state patronage but within the broad framework of a mixed economy with centralised planning after it attained political independence from two centuries of British rule in 1947.

The development strategy was largely influenced by - (1) the cynicism of policy makers regarding any possible help from the rest of the world by way of investments, transfer of technology and trade and (2) reservation regarding the ability of the market forces of their own to bring about an optimum allocation of resources balancing the country's two main objectives – 'growth' and 'equity'.

Since 1977, and specially after 1985-86, the Government has embarked upon a series of economic reforms leading towards liberalisation and deregulation. Subsequently there has been a significant improvement in the growth rate of the country from the long existing income growth of 3.5% to an average growth rate of 5.5% and above. Yet India's progress was not proportionate with the huge investments undertaken. And in the year 1991, the Indian Government reversed the main strand of its economic policy towards market orientation and globalization as the panacea for the economic ills facing the nation and headed for a more market friendly environment and a greater integration with the world economy which was undergoing substantial changes in the recent years. The country departed from its macro economic regime of the strategy of state intervention and import substitution and liberalised industrial licensing. As a result companies can diversify their production and expand their capacity without excessive restrictions.

However, the sudden Globalisation of the capital market in the absence of adequate and effective financial regulation mechanisms have tended to increase excessively the dependence of some economies on short term foreign debt and high-risk loans.

It was expected that the economic reforms would lead to increase of exports and improvement of trade balance. Although exports grew in the first half of the 1990's they have stagnated since 1996-97 (as per the table below). However exports of machinery, transport and metal manufactures increased because of rapid increase of IT exports.

Key statistics of the Indian Economy

	1950-51	1970-71	1990-91	1995-96	1997-98	1999-00	2001-02
National income & population							
National population: (Rs million)	359	541	852	922	955	1,027	1,027
National income : GDP at current Price (Rs million)	91,89	391,72	4,502,430	9,365,480	12,207,160	17,864,590	20,803,000
Per capital income (at current prices) (Rs)	256	724	5,285	10,158	12,782	16,047	21,600

Agriculture							
Agricultural production index (1981-82 = 100)+	46.2	85.9	148.4	160.7	164.9	176.8	175.9 P
Foodgrains production (million tonnes)	50.8	108.4	176.4	180.4	192.3	208.9	209.2 P
Industry							
Industrial production index (1993-94 = 100)	18.3	65.3	212.6	122.3	137.6	154.9	163.3#
Finished steel production (million tones)	1.0	4.6	13.5	21.7	23.4	27.2	n.a
Cotton cloth production (Bn.sq.mtr)	4.2	7.8	17.8	22.9	25.7	38.6	n.a
Power							
Electricity capacity (million kw)	2.3	16.3	74.7	95.2	102.0	113.0	n.a
Electricity generation (billion kwh)	6.6	61.2	289.4	418.0	464.4	448.6	383.2#
Villages electrified	3	107	481	501	506	n.a	n.a
Foreign trade							
Exports (Rs million)	6060	15,350	325,530	1,063,530	1,301,010	1,629,250	1,544,450#
Imports (Rs million)	6080	16,340	431,980	1,226,780	1,541,760	2,045,830	1,817,530#
Labour (in million)							
Organised sector employment	n.a	17.5	26.7	27.5	28.3	28.1	28.1
Registered job seekers	0.3	5.1	36.3	36.7	39.1	40.4	41.2
Money & banking (Rs million)							
Money supply	22,800	110,190	2,658,280	6,067,750	8,213,320	11,241,740	14,584,000
Bank deposits	8,810	59,060	1,996,430	4,507,740	6,054,100	8,133,450	9,832,680^
Bank credit	5,470	46,840	1,163,010	2,725,370	3,240,780	4,359,590	5,249,450

Prices							
Wholesale price index (1993-94 = 100)	17	35	183	296	330	145.3	161*
All India consumer price index industrial workers 1982 = 100	17	38	193	313	366	428	469 **
All India consumer price index non-manual employees 1984-85 = 100	n.a	33	161	259	302	352	378*

Source: Statistical Outline of India 2000-2001

* *As on 19.01.2002 (provisional);* ** *December, 2001*

+ Of 46 crops, including plantations; base triennium ending 1981-82 = 100 (revised).

P: *Provisional;* # : April-December, 2001; ^ : Including resurgent India Bonds (RBI) of Rs. 179,450 million since August 28, 1998 and Rs. 256,620 million from proceeds of India Millenium Deposits (IMD) since Nov 17th, 2001.

A more manifest representation of the Indian economic Scenario in the following table displays the major indicators of Indian Economy with reference to India's Net Domestic Product and State Domestic Product.

Net Domestic Product by Industry of Origin*, (At Current Prices)

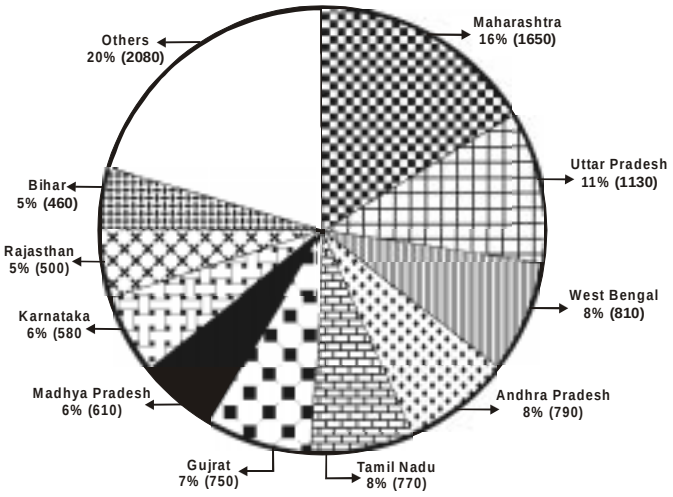
	1997-98	**1998-99**	**1999-2000**
	Rs. Million		
Primary sector	3919060	4639180	4890190
	(31.7)	(32.0)	(30.5)
Of which:			
1. Agriculture	3356750	4036630	4227030
	(27.1)	(27.8)	(26.3)
2. Mining	249410	262320	289350
	(2.0)	(1.8)	(1.8)
Secondary sector	2779870	3120590	3464670
	(22.5)	(21.5)	(21.6)
Of which:			
1. Manufacturing (regd.)	1155680	1226290	1357910
	(9.3)	(8.5)	(8.5)
2. Manufacturing (unregd.)	701380	780930	828790
	(5.7)	(5.4)	(5.2)
Tertiary sector			
● Transport communication & trade	2639980	3063240	3381600
	(21.1)	(20.5)	(21.1)

Of which:			
1. Railways	102840	96910	110280
	(0.7)	(0.7)	(0.7)
2. Trade, hotels & restaurants	1898630	2197440	2417200
	(15.3)	(15.2)	(15.1)
● Finance, insurance & real estates	1394030	1622390	1937440
	(11.3)	(11.2)	(12.1)
Of which:			
1. Banking & insurance	797290	911210	1081270
	(6.4)	(6.3)	(6.7)
● Community, social & personal services	1646980	2048840	2383420
	(13.3)	(14.1)	(14.8)
Of which:			
1. Public administration & defense	719570	904060	1066660
	(5.8)	(6.2)	(6.6)
Total	12379920	14494240	16057320
	(100)	(100)	(100)

Source: Statistical Outline of India

Note: Figures in brackets show percentages to total.

* At factor Cost



The Gross State Domestic Product (GSDP) at Current Prices, 1997-98

(Figures in bracket is in Rs. thousand million)

Source: Statistical Outline of India

Judged by the standard criteria of growth rates in national income and per capita income, the Indian economy has done well since liberallisation. Between 1992-93 and 1999-2000 the average annual growth rate was 6.65 %. This is even higher than the previous high of 6.04 % achieved between 1985-86 and 1989-90. Between 1992-93 and 1999-2000, there is no year in which the growth rate has been less than 5%. The co-efficient of variation of growth

rate has been lower than in the 1980s. The average annual per capita income growth rate between 1992-93 and 1999-2000 has been 4.7 % as compared with a growth rate of 3.4% in the Eighties. But these growths shares certain facts that industrial production came down to 2.3% during April – December 2001-2002 in terms of overall Index of Industrial Production (IIP) from 5.8% in the corresponding period of the previous year. This is the lowest recorded during the last ten years. Industrial slow down is observed in all major sectors where manufacturing sector has shown a marginal recovery of 2.4% during April-December 2001, which is much lower than the 6% growth registered during the same period in 2000. The distinctively higher growth rate in GDP in 1990s has been because of the sharp increase in the growth rate of service sector. The share of service sector in the gross domestic product has increased by 7-8 % points in the 1990s to reach 49 % in 2001-02.

In the present scenario of economic development under the ambit of liberalisation, privatisation and globalisation **one moot question rises** – ***whether labour issues have been sufficiently addressed or not***. Globalisation and liberalisation have immense effect on the labour intensive units. Privatisation of Public sector units began in full swing, which is contrary to the very idea of inception of Public Sector industries as the issues of economic and social justice originally motivated it. Most of the Public Sector units are metal industries and have a large chunk of workers, which have been left in the hand of prospective buyers who are all set to downsize the labour force to clip off the cost burden. Workers once again pay the cost of disgruntled economy. In country like Mexico and Chile, efforts were made to inform the employees/labour on the desirability of privatisation and how it will affect their life. Sri Lanka undertook labour/employees restructuring prior to privatisation. But Indian workers are not fully aware of repercussions of the ongoing process and its ill effects. On the other hand government attitude on labour laws reforms seems heartless. Massive lay off, retrenchment, voluntary retirement scheme (VRS) – forced or suggestive and privatising even profit making Public Sector Units (PSUs) has affected the labour semantics by **contributing more to the unorganised sector (93%)** and exposing India's massive workforce to the despaired destiny and unpaired woes.

Selected growth trend in Manufacturing Sector (percentage)

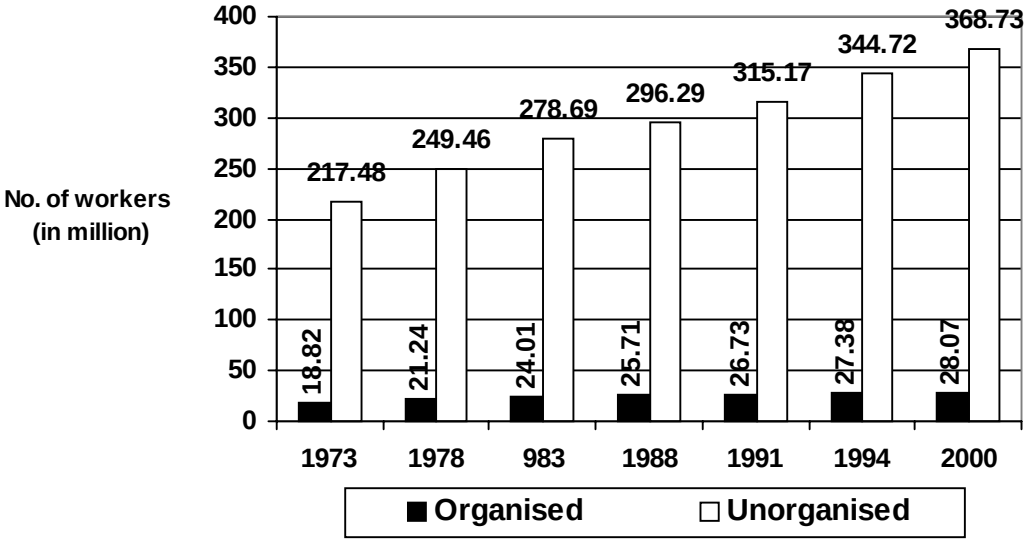
	Growth rate		Relative contribnution+	
	2000-01 P	1999-00	2000-01	1999-00
Manufacturing sector	5.4	7.1	15.1*	15.4*
Metal product	15.0	-1.2	8.7	-0.6
Transport equipment & parts	-2.0	5.7	-2.2	4.9
Machinery & equipment	7.3	17.8	18.9	31.1
Basic metal & alloy industries	1.9	5.0	3.0	6.2

Source : Statistical Outline of India 2001-02

P : Provisional

+ Signifies ratio of the change in Index of respective industry group to the change in overall Index adjusted for the weight of the relevant Industry group.

* manufacturing sector's contribution to GDP.



The unorganised workforce has increased as a result of economic liberlisation, globalisation and privatisation from 296.29 million to 368.73 million i.e. 72.44 million (24.44 %) increase whereas organised workforce has an increase of 2.36 million (9.17 % increase) during 1988-2000. Since 1995 onward unorganised sector growth is much higher because of economic recession and government policy of voluntary retirement and retrenchment, layoff and massive job cut whereas organised employment in the organised sector, i.e. in all public-sector and non-agricultural establishments employing ten or more persons in private sector, decreased from 28.24 million in March 1997 to 28.16 million in March 1999, which further decreased to 28.07 million in 2000. **The unorganised owes are getting aggravated with the alarming number of people entering labour market every year. Job insecurity and alienation are the possible threat to the unionisation.**

Mineral deposits & Mining Sector of India

India with its huge geographical area, is fairly well endowed with mineral resources. It is the **world's largest producer of Mica blocks and splitting** and is also a **major producer of Chromite, Iron ore, Manganese ore, Barytes and Kyanite**. India hosts potentially **attractive deposits of gold, diamonds and zinc-lead**. India has large number of reported metallic as well as non-metallic mines.

Number of reporting Metal Mines and Non-Metal Mines in India

Minerals	**1998-99**	**Minerals' main concentration in States** (in bracket no. of mines)**
Bauxite	155	Gujrat (75), Madhya Pradesh (38), Bihar (27)
Chromite	22	Orissa (15), Karnataka (5), Maharashtra (2)
Copper ore	11	Bihar (5), Rajasthan (3), Sikkim (2)
Gold	7	Karnataka (4), Andhra Pradesh (3)
Iron ore	220	Orissa (76), Karnataka (53), Goa (44), Bihar (21), Madhya Pradesh (15)
Lead & zinc	8	Rajasthan (6), Andhra Pradesh (1), Orissa (1)
Manganese ore	150	Orissa (40), Andhra Pradesh (32), Karnataka (26), Goa (25), Madhya Pradesh (15), Maharashtra (10)
Others	2	Gujarat (1), Madhya Pradesh (1)
Total metallic mines	574	Orissa (94), Gujrat (75), Karnataka (64), Madhya Pradesh (54), Bihar (53), Goa (46), Rajasthan (12).
Total non-metallic mines	2047	Rajasthan (472), Gujarat (365), Andhra Pradesh (291), Madhya Pradesh (284), Karnataka (113)
All India *	**3196**	**Rajasthan (484), Madhya Pradesh (469), Gujrat (442), Andhra Pradesh (370), Bihar (327), Orissa (202), Karnataka (177), Maharashtra (137),**

Source: Indian Bureau of Mines, Ministry of Mines

* *All India figures include Fuel Mines (575) also (Coal, Lignite etc.)*

** *Only important states have been mentioned.*

The mineral sector with **an outlay of about Rs. 98.2 bn. in 1988-89** has grown at an **average rate of 7.3% during the past decade**. Of the **52 minerals produced**, India is by and large **self sufficient in 30 minerals** which include Coal, Bauxite, Iron and Manganese ore.

Metal Mineral Production

Mineral	1980 - 81	1996 - 97	1997 - 98	1998 - 99	1999 - 00
	'000 Tonnes				
Bauxite	1,932	6,076	6,112	6,452	6,489
Chromite	324	1,456	1,515	1,404	1,324
Copper ore	2,004	3,896	4,500	4,253	2,976
Lead concentrates	19	60	61	64	63
Manganese ore	1,632	1,871	1,642	1,526	1,514
Zinc concentrates	50	277	293	350	355
	Mn. Tonnes				
Iron ore	42.2	68.2	75.7	70.7	72.7
	Kg				
Gold	2,412	2,710	2,636	2,463	2,247

Source: Economic Survey 2000

The Employment in the metal mines is as follows:

Employment in Metallic Mines

	1993	1994	1995	1996	1998
Metal Mines	**Total no. of Persons employed**				
Chromite	10526	9977	9408	9781	9133
Copper ore	12233	11164	10473	9921	10273
Magnesite	6522	4705	4040	3547	3457
Manganese ore	18548	18248	18085	18129	16074
Iron ore	39751	38546	39657	38637	38637
Gold (Kg)	7884	7364	7095	6875	6836
All India	**779,416**	**749,590**	**736,112**	**716,183**	**704,537**

Source: Statistical Abstract, 1999.

This sector which was hitherto reserved for the public sector has now been opened for exploitation by the private sector. The minerals now open for investment by the private sector are mostly in metal mines like iron ore, manganese, chrome, sulphur, gold, diamond, copper, lead, zinc, molybdenum, tungsten, nickel and platinum group of minerals. So the ill effect of privatisation is overwhelming in metal mines sector.

The revised policy has removed any restriction on equity holding by foreign nationals in a

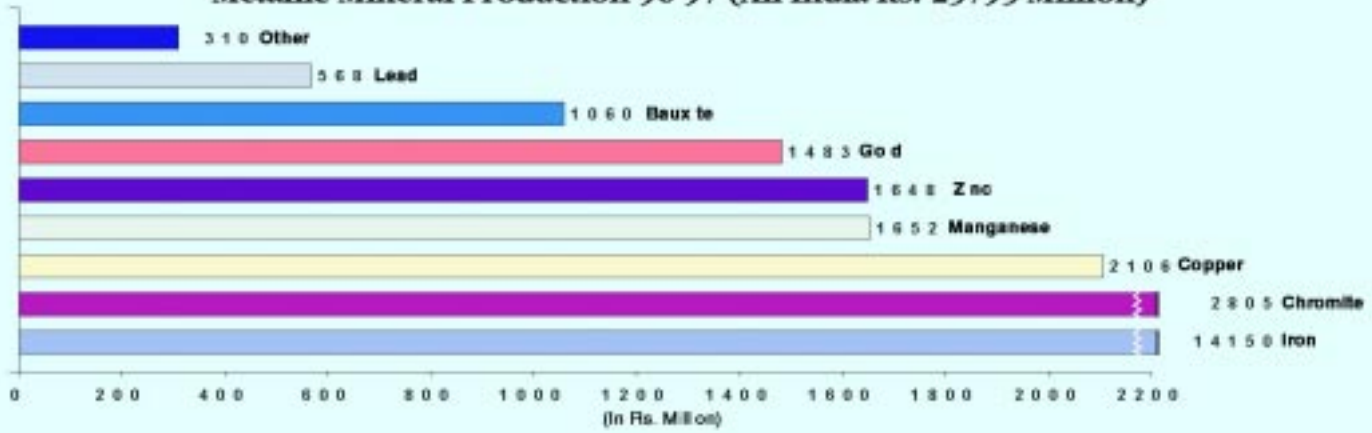
mining company. Mineral and metal processing units which wish to develop captive mines to secure assured supplies of raw materials will be allowed foreign equity participation in the manner and to the extent already permitted to such processing units. With increasing discovery of mineral deposits by application of modern exploration techniques, world grade mines are expected to be opened and constructed to produce minerals at costs, which are internationally competitive.

The opening up of the Mining sector has evinced a keen response from countries like Australia, Canada, USA, South Africa, etc. It is expected that exploration and exploitation activities in respect of the 13 minerals now thrown open for exploitation by the private sector would be accelerated.

Metallic Mineral

1996-97 Statistical and Geographical Representations

Metallic Mineral Production 96-97 (All India Rs. 25795 Million)



Characteristics of Metal Industry in India : An overview

India – with its immense natural resources is richly endowed with mineral deposits including iron ore, copper, bauxite, gold, chromite, manganese etc. Consequently the metal and metal working Industry in India has been interest-bearing for many centuries. However, India's journey to industrial development commenced wholly subsequent to attaining independence in 1947. The Industrial Policy Resolution of 1948 marked the evolution of the Indian Industrial Policy and the initiative taken by the consecutive governments have been attempts to build on the past industrial achievements and to accelerate the process of making Indian Industry internationally competitive.

But, the year 1991, saw the Government of India changing its macro-economic political conduct and introducing a more liberalized Economy. It departed from the strategy of state intervention & import substitution and liberalised industrial licensing. This course adopted in the new policies gave more thrust towards privatisation, opening up the market by removal of import restrictions and inviting foreign investments. The unfortunate result of these precocious changes was however the retrenchment of workers, takeover of Government owned enterprises by Private entrepreneurs, closure of units and increase in unemployment.

Subsequently, the 1990's have posed grave challenges for the Indian Metal Industry, and has left its impact on the metal industry which witnessed the piling up of stocks of finished and semi finished products, industry resorting to lay off and adopting Voluntary Retirement Scheme (VRS) and even contemplating closure. The production structure was also marked with changes, with units cutting down regular employment and shifting jobs from formal to informal sector to reduce costs and some others adopting sub-contracting of production. 60% of the country's 186 mini steel producers using electric arc furnace route are on the verge of a possible closure.

Enactment of SICA (Sick Industrial Companies (special provisions) Act, 1985) and constitution of BIFR (Board for Industrial & Financial Reconstruction) was expected to provide some relief. But this does not seem to have taken place. **According to BIFR, the number of companies registered with it went up 17 % to 4023 on June 2002 from 3,435 on March 2001,** which included those from Central Public Sector Units (PSUs), State PSUs and from the Private Sector. The accumulated losses increased 37% to Rs. 786183.2 million from Rs. 575,500 million during the same period. The net worth of the companies registered with BIFR also went up from Rs. 314,200 million in March 2001 to Rs. 420,000 million in June 2002.

The workforce of these 4,023 companies stand at around 2.15 million compared to the 2 million employed in the 3,435 companies on March 2001.

The small-scale industries, which are outside the purview of BIFR, were also marked by serious sickness. According to survey conducted by the ASSOCHAM, there were as many as **221,530 units sick in the SSI sector**, of which **42,147 were in metal and engineering sectors**.

Sick Industrial Unit (at the end of March 2001)

States	No. of sick / weak units Small Scale Industries	No. of sick / weak units Non- Small Scale Industries
West Bengal	113845	252
Uttar Pradesh	23117	233
Bihar	16423	69
Andhra Pradesh	11841	385
Kerala	11144	76
Tamil Nadu	9959	317
Assam	8632	56
Maharashtra	8056	611
Orissa	6668	59
Madhya Pradesh	6614	161
Rajasthan	6395	102
Gujarat	5408	328
Tripura	5352	3
Karnataka	4400	204
Manipur	4150	3
Delhi	2143	115
Punjab	1836	91
Haryana	1285	104
Jammu & Kashmir	848	8
Meghalaya	376	16
Himachal Pradesh	368	30
Pondicherry	186	13
Others	464	71

It is further disquieting to note that the **country produces around 60 million tonnes of ore** – lumps, fines and pellets included – of which **around 28 million tonnes are committed for exports**. That would leave just about **32 million tonnes for the domestic steel and sponge iron manufacturers**. Of this as much as 21 million tonnes would be from the captive mines of the two giants, SAIL and TISCO. Indications are that India would require iron ore productions of well over 70 million tonnes. However, given the current scenario, despite the huge potential that exists in the country, there is unlikely to be a dramatic increase in the production of iron ore.

Key findings :

Indian Metal Industries' All India Characteristics, 1997-'98

Basic Metal and Alloys Industries, (values in Rs. million*, others in numbers)

Characreristics → Industries ↓	No. of factories	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
			Men	Women							
1. Manufacture of iron and steel in primary/self-fnished forms.	1809	477205	219646	4000	223651	39043	262694	77190	339884	29166	35119
2. Manufacture of semi-finished iron & steel product in re-rolling mills, cold- rolling mills & wire drawing mills	1836	172572	58820	332	59152	16282	75434	28896	104330	4968	5997
3. Manufacture of ferro-alloys	127	29878	10306	72	10378	6459	16837	5614	22451	1066	1327
4. Copper manufacturing	178	29078	5236	111	5354	3296	8650	3537	12187	571	663
5. Brass manufacturing	270	1964	4579	83	4662	1443	6105	1479	7584	222	260
6. Aluminium manufacturing	340	57459	27609	187	27796	11347	39143	16076	55219	4024	5222
7. Zinc manufacturing	30	8072	7056	244	7300	96	7396	3170	10566	1165	1337
8. Casting of metals	2118	26684	63885	830	64715	18008	82723	27437	110160	5179	6281
9. Processing or re-rolling of metal scraps except iron & steel scraps	93	1507	2267	123	2390	1209	3599	952	4551	142	173
10. Other non-ferrous metal ind.	130	2318	2644	0	2644	1487	4131	1275	5406	211	245
Total	**6931**	**806738**	**402048**	**5982**	**408042**	**98670**	**506712**	**165626**	**672338**	**46713**	**56622**

1 Productive Capital= Fixed Capital + Working Capital (Physical working capital + Cash deposits)
2 Total no. of employees = Total directly employed workers + Workers employed through contractors + Employees other than workers
3 Total number of workers = Total directly employed workers + Workers employed through contracters (Total no. of workers comprises chid labour, which is not mentions here)
4 Employees other than workers = Supervisory and managerial staff + Other non-manual workers.
5 Annual wages & salary with bonus includes wages & salary of workers, supervisory & managerial staff & other employees
6 Total emoluments = Annual wages & salary with bonus+ employers' contribution as defined in the glossary notes under heading wages & salary.
* The value figure are rounded off to millions of rupees

Key findings :

Indian Metal Industries' All India Characteristics, 1997-'98

Manufacture of Metal Prouducts & Parts, except Machinery & Equipment (Values in Rs. million*, others in numbers)

Characreristics → Industries ↓	No. of factories	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
			Men	Women							
1. Manufacture of fabricated structural metal products	1229	16117	29650	500	30150	7207	37357	16758	54115	3114	3707
2. Manufacture of fabricated metal products not elsewhere classified	1839	18434	38687	1118	39805	6529	46334	15619	61953	2615	3223
3. Maufacture of furniture & fixtures primarily of metals	363	3912	11242	9	11251	1859	13110	4665	17775	1240	1586
4. Manufacture of hand tools, weights & measures & gen. hardware.	1580	15191	39870	1014	40884	1955	42839	12948	55787	2618	3228
5. Finished or semi-finished metal product by forging, pressing, stamping & roll forming of metals; powder stamping & metallurgy.	456	24201	16311	30	16341	3509	19850	8453	28303	1736	2086
6. Treatment or coating of metal such as plating, polishing, anodising, engraving, printing, hardening, buffing, welding or other specialised operations; gen. mechanical engg. on a payment or contract basis.	702	1486	6370	381	6751	1050	7801	2313	10114	338	388
7. Manufacture of metal cutlery, utensils and kitchenware.	1482	8747	17614	1428	19042	1934	20976	7776	28752	1117	1315
8. Manufacture of metal products (except machinery & equipment)	608	6418	16507	1608	18115	692	18807	5621	24428	1075	1265
Total	**8259**	**94507**	**176251**	**6088**	**182339**	**24735**	**207074**	**74153**	**281227**	**13852**	**16798**

Key findings:

Indian Metal Industries' All India Characteristics, 1997-'98

Manufacture of Machinery & Equipment other than Transport Equipment (Values in Rs. million*, others in numbers)

Characreristics → Industries ↓	No. of factories	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
			Men	Women							
1. Manufacture of agriculture machinery & equipment & parts thereof.	809	19068	30953	58	31011	1790	32801	14796	47597	4240	5191
2. Manufacture of machinery/ equipment used by construction & mining industries	257	5222	8771	20	8791	2209	11000	5890	16890	1146	1372
3. Manufacture of prime movers, boilers, steam generating plants& nuclear reactors	780	28279	29220	939	30159	8598	38757	21737	60494	4954	6140
4. Manufacture of industrial machinery for food & textile industries (including bottling and filling mechinery)	1074	18569	30776	704	31480	2916	34396	14763	49159	3034	3765
5. Manufacture of industrial machinery except for food & textitle industry	1183	14109	30065	176	30241	4118	34359	19460	53819	3523	4257
6. Manufacture of refrigerators, air-conditioners & fire fighting equipments & their parts & accessories	230	15721	19377	270	19647	1619	21266	9955	31221	2639	3243
7. Manufacture of general purpose electrical machinery/ equipment, their components and accessories.	1531	38954	60742	527	61269	4326	65595	34232	99827	7080	8779

Key findings :

Indian Metal Industries' All India Characteristics, 1997-'98

Manufacture of Machinery & Equipment other than Transport Equipment (Values in Rs. million*, others in numbers)

Characreristics → / Industries ↓	No. of factories	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of employees[2]	Annual wages & salary with bonus[5] (Rs)	Total emoluments[6] (Rs)
			Men	Women							
8. Manufacture of machine tools their parts and accessories	1146	11641	28691	384	29075	713	29788	14698	44486	3062	3779
9. Manufacture of office, computing & accounting machinery & parts (excluding manufacture of computers & computer based system including word processors	74	1286	2111	45	2156	252	2408	1227	3635	233	271
10. Manufacture of special purpose machinery/equipment, their components and accessories.	1136	15690	24733	833	25566	2909	28475	12551	41026	2018	2394
11. Manufacture of electrical industrial machinery, apparatus & parts thereof	2195	73645	96945	5792	102737	9306	112043	63989	176032	15320	19359
12. Manufacture of insulated wires & cables incl. manufacture of optical fibre cables	550	48600	23251	492	23743	2144	25887	14972	40859	2736	3331
13. Manufacture of accumulators, primary cells and primary batteries	152	6696	10061	405	10468	712	11180	3550	14730	95	1296
14. Manufacture of electric lamps	530	9988	15660	5893	21553	2112	23665	6763	30428	1507	1805
15. Manufacture of electric fans and electric /electro-thermic domestic appliances & parts therof.	611	6938	10678	1230	11908	2788	14696	7434	22130	86	1036

Key findings :

Indian Metal Industries' All India Characteristics, 1997-'98

Manufacture of Machinery & Equipment other than Transport Equipment (Values in Rs. million*, others in numbers)

Characreristics → / Industries ↓	No. of factories	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of employees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emoluments[6] (Rs.)
			Men	Women							
16. Manufacture of apparatus for radio broadcasting, TV transmission, radarapparatus, radio remot control apparatus & apparatus for radio/line telephony and line telegraphy	296	35069	27037	5188	32341	812	33153	23148	56301	4721	5934
17. Manufacture of TV receivers, apparatus for radio broadcasting radio telephony/ telegraphy; video recording/reproducing, record/cassette players & other sound recording /reproducing apparatus as micro- etc. & pre-recorded audio/video records phones, loudspeakers, amplifiers, phones, loudspeakers, amplifiers, tapes.	474	41128	18594	7847	26441	1324	27765	14043	41808	2661	3396
18. Manufacture of cmputer & computer based systems.	180	13790	6060	5100	11160	4148	15308	10596	25904	1757	2210
19. Manufacture of electronic valves & tubes & other electronic components.	533	23993	16147	7077	23224	1836	25060	12680	37740	2229	2754
20. Manufactue of radiographic X-ray apparatus, X-ray tubes & parts & electric equipment.	250	3822	6839	318	7157	150	7307	3685	10992	844	1033
Total	**13991**	**432208**	**496711**	**43298**	**540127**	**54782**	**594909**	**310169**	**905078**	**63885**	**81345**

Key findings :

Indian Metal Industries' All India Characteristics, 1997-'98

Manufacture of Transport Equipment and Parts (Values in Rs. million*, others in numbers)

Characreristics → Industries ↓	No. of factories	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
			Men	Women							
1. Ship and boat building	198	13917	17715	98	17813	3556	21369	6078	27447	1748	1957
2. Manufacture of locomotives and parts.	52	6097	16593	348	16941	74	17015	5404	22419	2077	2202
3. Manufacture of railways/ tramways wagons & coaches & other railroad equipments	152	10941	73923	839	74762	1366	76128	23693	99821	6806	7424
4. Manufacture of heavy motor vehicles; coach work.	687	75131	78529	1514	80043	8309	88352	38748	127100	10032	12541
5. Manufacture of motor cars & other motor vehicles principally designed for the transport of less than 10 persons (including manufacture of racing cars and golf- cars.	1229	79369	79305	1917	81222	11478	92700	34503	127203	12018	14983
6. Manufacture of motor-cycles & scooters & parts (incl three wheels)	534	30854	45955	1145	47100	7384	54484	19394	73878	5182	6400
7. Manufacture of bycycles, cycle- rickshaw and parts therof.	654	7114	31463	310	31773	2339	34112	8513	42625	1471	1776
8. Manufacture of aircraft, spacecraft and their parts.	26	17282	8526	35	8561	59	8620	3987	12607	2417	2682
9. Mnufacture of bullock-carts, pushcarts and hand carts etc	12	26	213	0	213	9	222	81	303	9	11
10. Manufacture of transport equipment and parts	466	13790	13324	1498	14822	1940	16762	7098	23860	1073	1314
Total	**4010**	**254523**	**365546**	**7704**	**373250**	**36514**	**409764**	**147499**	**557263**	**42832**	**51288**

Key findings :

Indian Metal Industries' All India Characteristics, 1997-'98

Other Manufacturing Industries, (Values in Rs. million*, others in numbers)

Characreristics → Industries ↓	No. of factories	Productive Capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
			Men	Women							
1. Manufacture of medical, surgical, scientific,& measuring equipment except optical equipment.	525	12697	20185	2088	22273	1155	23428	11775	35203	2276	2781
2. Manufacture of photographic, cinematographic, cinematographic & optical goods & equipment (excluding photochemicals, sensitised paper & film.	117	12377	5025	566	5591	169	5760	2970	8730	538	638
3. Manufacture of watches & clocks.	202	5831	8630	4323	12953	386	13339	4362	17701	1092	1333
4. Manufacture of jewellery & related articles.	450	19309	18770	8874	27644	3048	30692	7834	38526	1956	2283
5. Minting of Currency coins	4	1517	4253	1	4254	0	4254	996	5250	534	546
6. Manufacture of Sports & atheletic goods	102	1004	4014	523	4537	675	5212	1803	7015	240	276
7. Manufacture of musical instruments (excluding toys)	13	204	670	14	684	14	698	555	1253	102	131
8. Manufacture of stationery articles	312	3857	4369	2255	6624	1388	8012	3504	11516	543	647
9. Manufacture of items based on solar energy like solar cells, cookers, air& water heating systems & other related items	10	927	630	161	791	15	806	559	1365	152	193
10. Manufacture of miscellaneous products not elsewhere classified	513	7034	9494	2478	11972	7108	19080	4732	23812	691	812
Total	**2248**	**64755**	**76040**	**21283**	**97323**	**13958**	**111281**	**39090**	**150371**	**8122**	**9640**

Key findingS :

Indian Metal Industries' All India Characteristics, 1997-'98

Repair of Capital Goods, (Values in Rs. million*, others in numbers)

Characreristics → Industries ↓	No. of factories	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
			Men	Women							
1. Repair of agriculture machinery or equipment	45	91	726	6	732	0	732	294	1026	53	58
2. Repair of prime-movers, boilers, steam generating plants & nuclear reactors.	6	1146	486	0	486	128	614	233	847	143	176
3. Repair of machine tools.	6	53	49	0	49	22	71	14	85	2	2
4. Repair of industrial machinery other than machine tools	34	466	1497	30	1527	116	1643	520	2163	154	206
5. Repair of electrical industrial machinery and apparatus	71	177	1222	9	1231	215	1446	598	2044	114	126
6. Repair of apparatus for radio-broadcasting or TV, transmission; radar apparatus, radio remote control apparatus & apparatus for radio/line telephony or telegraphy	6	7	87	3	90	0	90	151	241	26	29
7. Repair of locomotives & other rail road equipments	59	2103	72046	1561	73607	447	74054	12400	86454	6084	6327
8. Repair of heavy motor vehicles	1934	14153	149966	551	150521	1092	151613	38997	190610	9839	10859
9. Repair of machinery & equipment not elsewhere classified.	82	750	3297	34	3331	278	3609	1737	5346	512	582
Total	**2243**	**18946**	**229376**	**2194**	**231574**	**2298**	**233872**	**54944**	**288816**	**16926**	**18365**

Key findings:

Indian Metal Industries' All India Characteristics, 1997-'98

Repair of Services, (Values in Rs. million*, others in numbers)

Characreristics → Industries ↓	No. of factories	Productive Capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
			Men	Women							
1. Repair of households electrical appliances	10	10	115	12	127	0	127	44	171	6	7
2. Repair of TV, VCR, radio, transistor tape-recorder, refrigerator & other electronic appliances	65	214	1420	25	1445	2	1447	534	1981	107	126
3. Repair of watches, clocks & jewellery	6	4	31	0	31	0	31	23	54	3	3
4. Repair of motor vehicles & motor cycles except trucks, lorry & other heavy vehicles	1640	8833	38328	125	38454	1007	39461	19471	58932	2577	2893
5. Repair enterprises.	256	2884	7517	125	7642	344	7986	2900	10886	1065	1163
Total	**1977**	**11944**	**47411**	**287**	**47699**	**1353**	**49052**	**22972**	**72024**	**3757**	**4192**

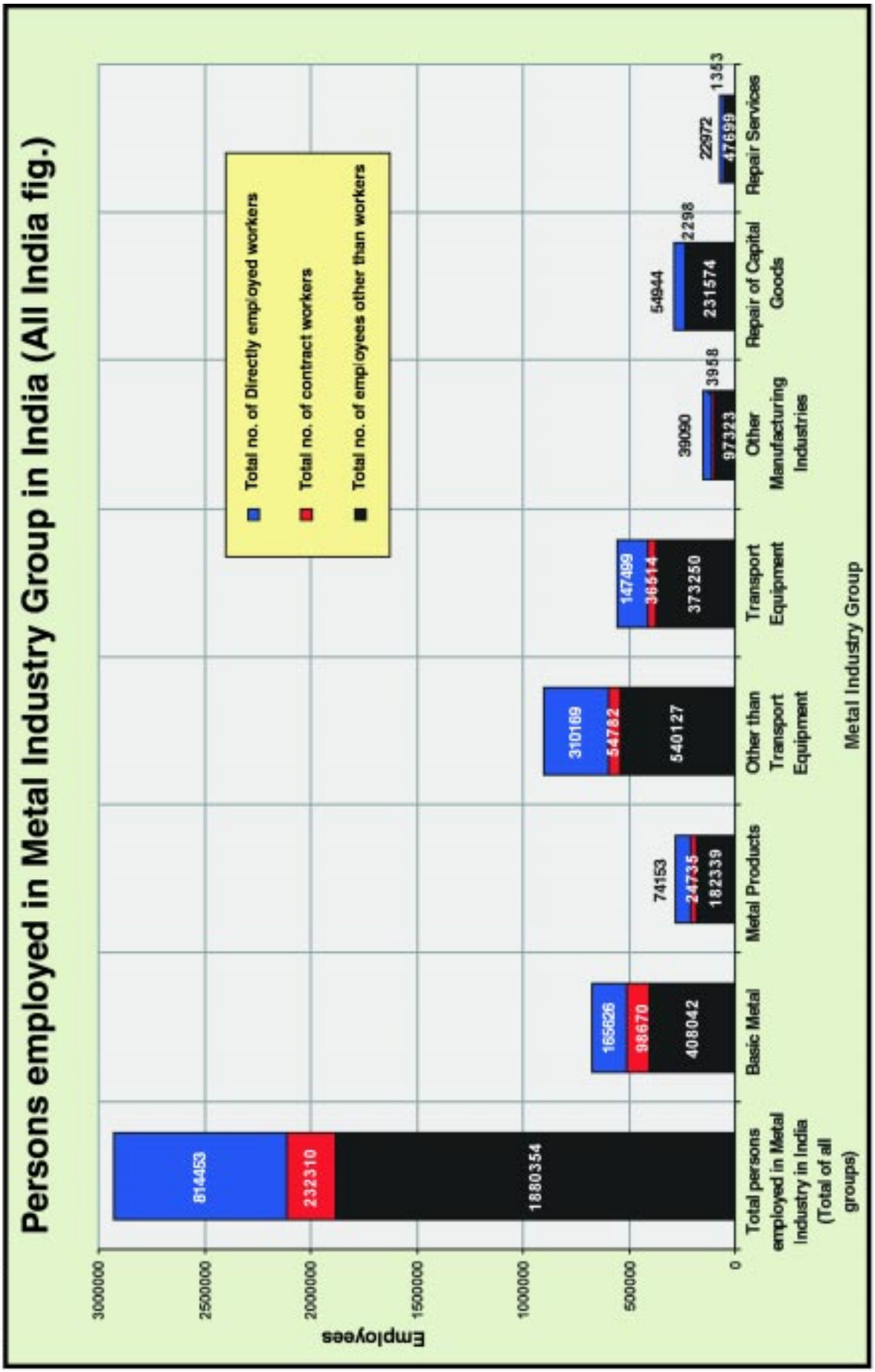
Key findingS :

Indian Metal Industries' All India Characteristics, 1997-'98

Data Finale, (Values in Rs. million*, others in numbers)

Characreristics → Industry Groups ↓	No. of factories 1997-98	No. of factories 1992-93	Increase in no. of factories from 92-93 to 97-98	Total no, of empl-oyees 97-98	Total no. empl-oyees 92-93	Increase in total no. of emplo-ees from 92-93 to 97-98	Total no workers 1997-98	Total no workers 1992-93	Increase in no of workers from 92-93 to 97-98	Total no of workers employed through contractor (97-98)	Total no of directly employed workers (97-98)	% of contract workers to total of workers (97-98)	Total emolu-ments [6] (97-98)
1. Basic Metal and Alloys industries	6931	6247	684	672338	666698	5640	506712	497771	8941	98670	408042	24	566221
2. Manufacture of Metal Products & Parts, Except Machinery & equipments	8259	7038	1221	281227	239871	41356	207074	175503	31571	24735	182339	14	167983
3. Mnufacture of Machinery & Equipment other than Transport Equipment	13991	13434	557	905078	898656	6422	594909	572733	22176	54782	540127	10	813462
4. Mnufacture of Transport Equipment & Parts.	4010	3499	511	557263	350300	206963	409764	252799	156965	36514	373250	10	512881
5. Other Manufacturing Industries	2248	2096	152	150371	118231	32140	111281	86043	25238	13958	97323	14	96401
6. Repair of Capital Goods	2243	2019	224	288816	213251	75565	233872	173476	60396	2298	231574	1	183648
7. Repair Services	1977	1785	192	72024	60692	11332	49052	43367	5695	1353	47699	3	41915
Total Metal Industries in India	**39659**	**36118**	**3541**	**2927117**	**2547699**	**379418**	**2112664**	**1801692**	**310982**	**232310**	**1880354**	**12**	**2382511**

Key findings :



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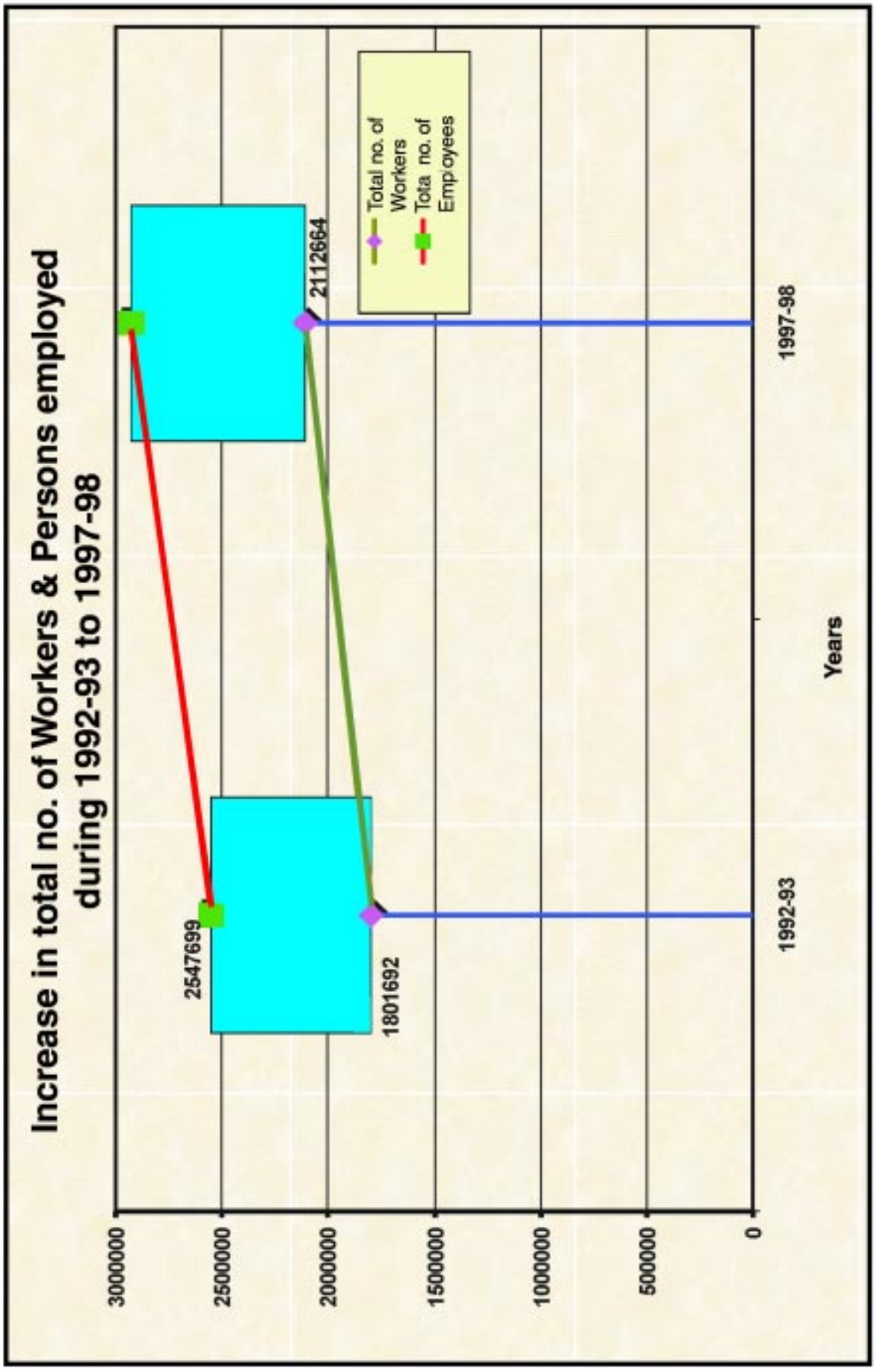

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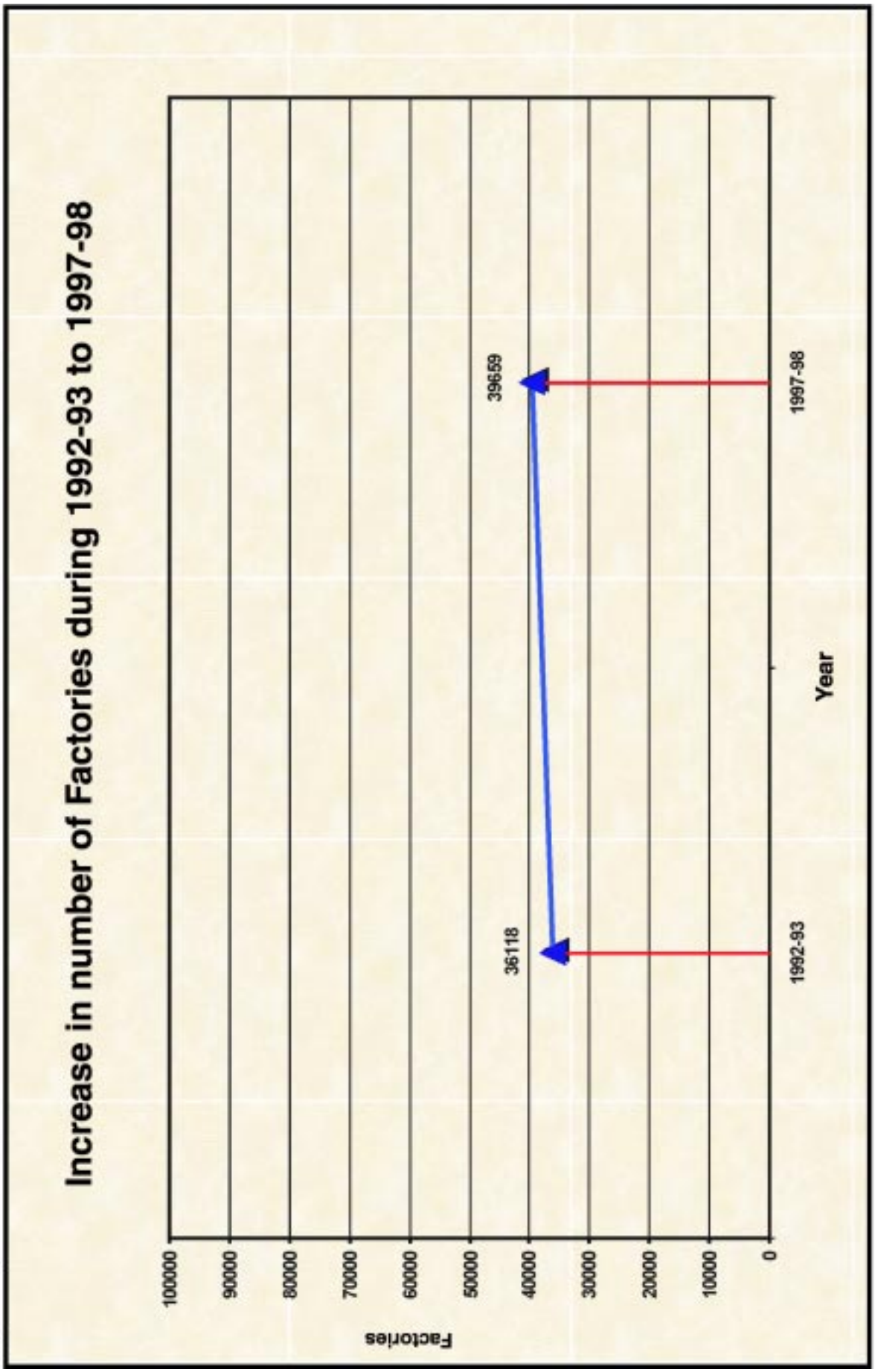


Characteristics of Metal Working Industries and Trade Unions in Selected Surveyed State

Andhra Pradesh

Industrial Belt

1. Hyderabad
2. Kothagundam-Ramagundam Belt
3. Vijayawada
4. Visakhapatnam
5. Vizianagaram
6. Kurnool
7. Tirupati Renigunta

Andhra Pradesh

Part - I

An Overview of the State

Chapter - I

Economic Scenario of Andhra Pradesh

The state government with its enormous potential and resources has ambitious plans for development. It has plans for optimal utilisation of natural resources, effective use of the physical assets already created and increasing private participation and investment. Considerable attention is being devoted to balanced regional development by evening out the difference in the levels of development in the three main regions of Telangana, Coastal Andhra and Rayalaseema.

Setbacks faced by the State:

- The finance for development is mainly through PLAN funds, which are borrowed, and account for as much as 90% now.
- Most of the Government Expenditure on Revenue Account has been oriented towards consumption rather than capital formation.
- This coupled with low productivity of Government investment, has shrunk the base for raising Government Revenue.
- Consequently the loan repayment and interest obligations are steeply rising and resulting in cutting down capital expenditure.

Against all these odds, the state is striving to step up savings rate, increase the productivity of capital through managerial efficiency in planning and implementing projects.

The New Industrial policy adopts a selective Industrial Promotion Strategy with supportive infrastructural investment. Growth with Social Justice and Balanced Regional Development is planned to remove differences in the levels of development as between different classes and regions.

An over view of the economy of A.P can be obtained from the level and composition of gross state domestic product. As per advance estimates for the year 1998-99 , the G.S.D.P was estimated at Rs. 224090 million as against Rs. 202150 million in 1997-98 , showing a growth of Rs.10.85% . The GDP for the All India was Rs. 3,118,280 million in 1997-98 as against Rs. 2,968,450 million in 1996-97 . Generally the growth of GDP measured in constant terms has been lower in A.P when compared to All India Growth Rates.

During 1999-2000, the base for computation of state and national domestic products was changed to 1993-94. According to this the G.S.D.P (at 1993-94 prices) increased from Rs. 680,150 million to Rs. 755,300 million. The level of G.S.D.P and the contribution of various sectors for the year 1997-98 and 1998-99 are shown in the following table:

State Economy

Gross State Domestic Product by Industry of origin at Constant Prices (1993-94)

(Rs. in million)

	1997-98 (P)	1998-99 (Q)
1. Agriculture, Forestry & Fishing		
1.1 Agriculture	154720	197760
1.2 Forestry	6670	7200
1.3 Fishing	12260	13740
2. Mining and Quarrying	16150	16070
Sub-Total - Primary Sector	**189800**	**234770**
3. Manufacturing		
3.1 Registered	75270	77980
3.2 Unregistered	38720	41430
4. Electricity, Gas and Water Supply	19530	18960
5. Construction	36740	39830
Sub total - Secondary sector	**170260**	**178200**
6. Trade, Hotels & Restaurants	93300	105140
7. Transport, Storage and Communications		
7.1 Railways	11720	12070
7.2 Transport by other means and storage	42990	42640
7.3 Communication	11030	12740
8. Financing, Insurance, Real Estate and Banking Services		
8.1 Banking and Insurance	34120	38660
8.2 Real estate ownership of dwelling & Business Services	41450	42720
9. Community, Social and personal services		
9.1 Public Administration	26890	28140
9.2 Other services	58590	60220
Sub-total : Tertiary Sector	**320090**	**342330**
Total Gross State Domestic Product	**680150**	**755300**
Total Net Gross State Domestic Product (1993-94) prices	**605550**	**677120**
Per capita income (Rupees)	**8246**	**9118**

Per capita Income: The per capita income in A.P was Rs. 1380 in 1980-81 and Rs. 2060 in 1990-91 and Rs. 2500 in 1996-97, while the National per capita was respectively Rs. 1630 in 1980-81, Rs. 2232 in 1990-91 and Rs. 2761 in 1996-97. The per capita income of the state has been below the All India per capita income figure.

Demography and Employment Situation

According to the 2001 census, Andhra Pradesh has a population of 75.7 million, occupying the fifth position among the states in the country in respect of geographical area and size of population. However the state has apparently shown an impressive fall in decadal growth rate by over 10% points within a short span of a decade and this success story does inspire confidence that it should be possible to cross all hurdle to achieve sharp declines in population growth .

Work Force : The census data indicates that working population in 2001 was 38.57 million, which is 50.9% of the total population of 75.7 million. However according to the Economic Survey of the state, the work participation rate in the state, as also the percentage of working population among males and females, compare well with the All India Figures.

	A.P	All India
Work participation rate % of the working population	45.05	39.7
(a) Male	55.48	52.00
(b) Female	34.32	22.96

Statistics indicate that the total number of job seekers on the live register of the Employment exchanges recorded a marginal decline of 58% from October 1997 to the end of October 1998. For every 100 persons employed in the organised sector, roughly 155 persons were seeking jobs. The placements made by the exchanges declined drastically showing a sharp decrease in the availability of jobs. Increase in the number of sick units in SSI and medium sectors, uncertainty in the State Public Sector and the State Government's policy of not filling vacancies has contributed to this decline.

Employment in the Organised Sector in Andhra Pradesh

	1997	1998
Employment in the organised sector (in million)	2.042	2.046
Total number of job seekers on live register of Employment Exchanges (in million)	3.378	3.181
Placements made by the Employment Exchanges	18452	9732

According to the available data from Commissioner of Employment and Training regarding job seekers, on the live register, in Oct 1998, there were 2.694 million educated and 0.412 million of unskilled job seekers making a total of 3.106 million. The total number of job seekers had increased from 2.718 million in 1995 to 2.907 million in 1996 , 2.945 million in 1997 and 3.106 million in 1998 . This shows that the emergence of new employment opportunities is not very significant.

Distribution of Employment in the Organised, Mining, Quarrying and Manufacturing Sectors
(in million)

Employment	1997	1998
Organised sector	2.041	2.046
Mining and quarrying	0.103	0.10
Manufacturing	0.524	0.514

The available data appears to show certain decline in the employment in these two sub sectors. Similar decline is also seen in construction, transport and agriculture, while finance, insurance, real estate, community and personal services showed increase. An over all assessment of the employment situation in Andhra Pradesh would show that there is decline in the traditional sectors, while tertiary sector, particularly the new economy, show marginal increases.

Chapter - II

Industrial scenario of Andhra Pradesh

The State was industrially backward, as the per capita value added by manufacture was only Rs. 204 in 1987-88 as against Rs. 359 for the country as a whole. The per worker productivity was also low, the value added per worker being Rs. 17,461 as compared to the corresponding All - India average of Rs. 36,384. The per capita value added by manufacture has increased to Rs. 297 (AP) and Rs.453 (India) in 1988-89.

According to the Annual Survey of Industries 1988-89 brought out by Govt. of India, Andhra Pradesh with 14,292 registered factories accounting for 13.7 % of the factories in the country -

- **occupied the 2nd rank in the total number of registered factories** as against 15,127 in Maharashtra occupying the first place.
- **ranked 5th, in the country In terms of employment**
- **stands 6th regarding out-put**
- **is positioned 7th with reference to value added by manufacture.**

And accounted for -

- **6.2 percent of output**
- **5.3 percent of value added by manufacture of the country.**

The Sectoral Composition of State Domestic Product (SDP)

	Primary	Secondary	Tertiary
1980-81	47	16	37
1990-91	40	19	41
1997-98	31	24	45

The Sectoral composition of SDP is gradually changing in favour of secondary and tertiary sectors, as against the primary sector, and this shows that the job opportunities have increased in tertiary sector and the nature of jobs is confined to small-scale sector of small groups of individuals, which are mostly in unorganised sector.

The share of the secondary sector in the State Domestic Product, which was only 11.7 per cent in the 3rd plan period, improved to 17.5 per cent in the 7th Plan period. But it is still less than the same of All-India at 25.1 per cent. The secondary sector, (registered manufacturing) recorded a considerable improvement in its share from 3.2 per cent of the State Domestic Product in the 3rd Plan to 7.3 per cent of SDP during the 7th plan. However, the share of the secondary sector still remains less than half of the share of either primary or tertiary sector in the State Domestic Product.

The size of Gross Domestic Product at Current Prices and Sectoral Contributions

		Share of		
	Total (in million)	Primary %	Secondary %	Tertiary %
1980-81	81910	43.95	19.01	37.04
1990-91	333,360	34.86	23.58	41.56
1995-96	745,460	34.54	23.19	42.27
1996-97	842,510	34.62	22.94	42.44
1997-98	883,870	30.89	24.35	44.76

The Annual Survey of Industries (ASI) is a primary source of data that reveals the growth and structure of the organised segment of industrial sector. ASI for the period from 1990 shows the position in regard to number of factories, workers employed capital investment etc.

An analysis of the data for the period 1970-71, 1988-89 and 1996-97 is presented in the following table:

	1970-71	1988-89	1996-97
No of factories	5448	14292	18522
Employment (in million)	0.325	0.725	0.879
Value of output (Rs in million)	6860	114480	456980
Value added by manufacturing(Rs in million)	1250	18210	85550

The Index numbers of industrial production with 1970-71 as base, reveal that the general index increased from 274.30 in 1984-85 to 405.10 in 1991-92, and further to 584 in 1997-98 and 550.75 in 1998-99.

Index Numbers of Industrial Production (1970-71 = 100)

Year	Mining & Quarrying	Manufacturing	Electricity	General
1984-85	342.00	287.90	487.90	274.30
1989-90	498.00	326.50	523.40	366.50
1991-92	570.70	348.54	633.50	405.10

Among the components, maximum increase of 66.9 per cent was observed in Mining & Quarrying followed by Electricity with 29.8 per cent and Manufacturing with 21.1 per cent. The annual compound growth rate of general index during the VII Plan period (1985-90) works out to 6.0 percent. The growth in Mining & Quarrying is observed to be more rapid with an annual compound growth rate of 7.8 percent followed by Manufacturing with 6.5 percent and Electricity with 1.4 percent.

As per the Economic Census conducted in 1980 and 1990, the number of enterprises in the

unorganised sector increased from 170.3 million to 245.9 million during the decade registering an increase of 44.4 percent. The number of persons usually working increased from 460 million to 653 million i.e. by 42 percent.

Annual Survey of Industries 1994-95 to 1996-97

Characteristics	Unit	1994-95	1995-96	1996-97	% variation of Col.4 over Col. 5
(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 6)
No. of Factories	Nos	17756	17408	18522	6.40
Fixed Capital	Rs.Million	248153.4	276326.7	321432	16.32
Working Capital	Rs.Million	28838.4	28182.3	51031.6	81.08
Outstanding Loans	Rs.Million	143965.8	154744.1	193196.4	24.85
No. of workers	Nos	889817	952611	878913	-7.736
Mandays Workers	' 000Nos	272105	298502	268122	-10.18
No of Employees (Incl.workers)	Nos	1051461	1115678	1036871	-7.06
Mandays employees	' 000Nos	321675	345730	321504	-7.01
Total persons	Nos	1073781	1127846	1049506	-6.95
Wages to workers	Rs.Million	18187.2	22535.1	21228.2	-5.80
Total Emoluments	Rs.Million	26131.7	32181.7	30840	-4.17

ASI covers all factories registered under section 2 m(1) and 2m(ii) of the factories Act of 1948 , which respectively refer to the factories employing 10 or more workers and using power or those employing 20 or more workers but not using power on any day of the preceding 12 months .The number of factories in the state as per ASI showed an increase from 15,963 in 1989-90 to 17,756 in 1994-95 but declined to 17,408 in 1995-96 before increasing to 18,522 in 1996-97. This is clear **evidence for the fact that the industrial situation has been slightly uncertain.**

Development Strategy

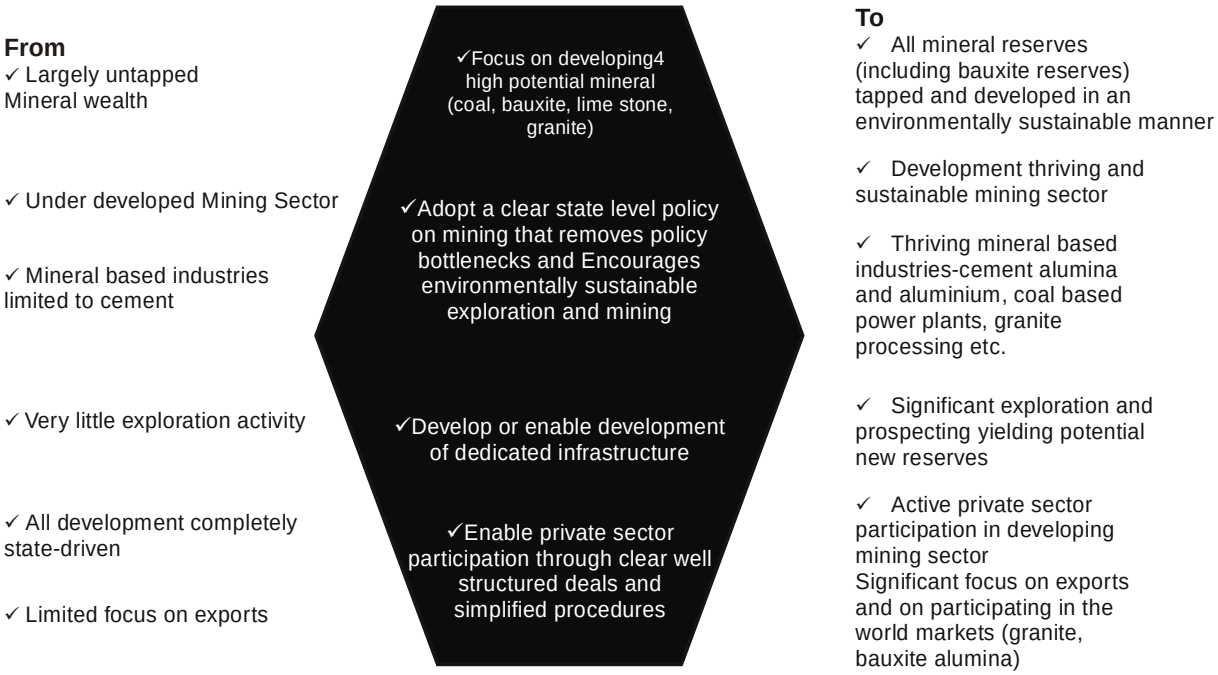
The Government of Andhra Pradesh in its **Vision Document 2020** has identified minerals and mining based activity as a growth engine. The report says that " Today A.P.'s mineral wealth is largely untapped."

- ❖ Though it has 27% of India's bauxite reserves, the state does not mine it at all.
- ❖ The state ranks **2nd in mineral reserves** yet it is **fifth in respect of mineral production** and Coal production is only 0.3 % of the reserves.
- ❖ While the state has 20% of country's lime stone reserves , it accounts for only 14 % of lime stone production.

The state has also vast reserves of barytes and accounts for substantial country's exports, supplying 1/4 of world consumption.

According to the strategy currently under contemplation, the focus should be on coal, granite, limestone and bauxite. But the legal framework for exploitation of minerals and establishment of metal industry needs to be modified, as substantial ore reserves are located in tribal areas, which can be exploited only by the state or the tribals themselves. But the state has significant role in production of metal with the location of Vishaka Steel Plant, based on Balaidilla iron ore, Hindustan Zinc based on concentrates from Rajasthan and abroad, Ferro Alloy plant at Garividi Vizianagaram District, Sponge Iron Plant at Paloncha (Khammam Dist), the location of Mishra Dhatu Nigam working on Metal Alloys for special and Defense Purposes. A number of small and medium units in metalworking are located in the state. The State Government is planning to utilise its mineral potential in an environmentally and socially sustainable manner with the strategy tabulated below:

Vision 2020 for the Mining Sector in Andhra Pradesh



The A.P. Mineral Development Corporation has been made the nodal agent of the Government of Andhra Pradesh for joint ventures exploration and development of mineral deposits in the State. Its main areas of activity is only in the area of Barytes

The A.P. Government's Industry Policy endeavours to liberalise and maximise mining activity and provides incentives for modern technology and high investments, while taking care of tiny and small scale sector by making these units part of an integrated Ancillarisation Programme.

Part - II

Survey of Metal Industry

Chapter - I

Minerals and Metals

The State has vast reserves of bauxite and granite. The districts of Visakhapatnam and East Godavari have reserves of about **700 million tonnes of bauxite with low silica content,** best suited for manufacture Alumina/Aluminium. The State has also established reserves of about **9 million tonnes of copper, lead and Zinc** with 1.35 to 1.60% Copper, 3 to 9% lead and 4 to 5% zinc. The lead deposits of Guntur district are being exploited by M/s. Hindustan Zinc Ltd., a Public Sector unit that has also a manufacturing unit at Visakhapatnam. The Mining Industry is fully poised to enter a new era of development in the State of Andhra Pradesh.

Mineral Production

	Unit	**1997-98**	**1998-99**
Fuel Minerals:			
Coal	(‘000 Tonnes)	28944	28377
Metallic Minerals:			
1.Gold	(Kgs)	193	225
2.Iron ore	(‘000Tonnes)	227	320
3.Manganese	-do-	93	82
4.Silver	(kgs)	10575	8349
Non-Metallic Minerals			
1.Asbestos	(Tonnes)	717	817
2.Barytes	(‘000 Tonnes)	449	655
3.Dolamite	-do-	115	418
4.Limestone	-do-	18589	19138
5.Mica(cruse)	(Tonnes)	787	884
Value of Principle minerals			
Fuel Minerals			
Coal	(Rs. Million)	22840	21770

Metallic Minerals:			
1.Gold	(Rs. Million)	220.0	250.0
2.Iron ore	-do-	17.5	31.4
3.Manganese	-do-	25.6	23.5
4.silver	-do-	78.1	61.7
Non-Metallic Minerals			
1.Asbestos	-do-	14.6	15.7
2.Barytes	-do-	320.0	370.0
3.Dolamite	-do-	110.0	120.0
4.Limestone	-do-	1410.0	1710.0
5.Mica(crude)	-do-	15.0	1.7

Source : Indian Bureau of Mines, Nagpur

The development of industries in the State has been mainly resource based. The levels of production and value of product of fuel metallic & non-metallic minerals as indicated by Indian Bureau of Mines are shown in the above Table.

The data on Index numbers of Industrial production in the State with 1970 = 100 reveals an increase in index noticed in Basic Metals , Metal products as per the table below. The growth and relative size of Mining and Quarrying Basic Metal products in industry etc in the State of A.P can be judged from the same.

Index Numbers of Industrial Production in Andhra Pradesh

Industry	**April to November** (Average)		**% variation** 1998 over 1997
	1997	**1998**	
Mining and Quarrying	680.65	646.79	-5.0
Non Metallic Mineral Products	544.1	467.26	-14.1
Basic Metal Products	130.83	170.14	30
Metal Products (Except Machinery and Transport Equipment)	115.93	126.1	8.8
Machinery (except Electrical Machinery)	240.94	248.18	3
Electrical Machinery	1065	823.01	-22.7
Transport Equipment	3230.55	3027.28	-6.3
Miscellaneous	137	138.45	1.1
Generation of Electricity	933.68	962.01	3
State general Index	584	550.75	-5.7

Major Public Sector units in Minerals and Metal working industry in the state are detailed below :

Rashtriya Ispat Nigam Ltd. established at Visakhapatnam in 1982 commenced production in 1992, produces pig iron, steel products, wire rods and bars. During 1999 -2000, its capacity utilisation was 90%

Mishra Dhatu Nigam Ltd. established at Hyderabad produces super alloys, titanic alloys, special purpose steels for Aeronautics, Defence and Atomic Energy establishment needs. It produced 2009 M.T of Alloys etc., during 1999-2000 and achieved 74% capacity utilisation as against production of 1.933 million tonnes with a capacity utilisation of 73% during the previous year.

National Mineral Development Corporation Ltd. was established in 1958 with registered office at Hyderabad. It is engaged in extraction of iron ore, diamonds and limestone. Its production during 1999-2000 was 13.801 million M. Tonnes of iron ore, as against 11.646 million of M.T during the previous year, achieving an increase of 14%.

Hindustan Zinc Ltd. with registered office at Udaipur (Rajasthan) produces Zinc and Lead Metals.

In addition to the above major P.S.Us, the State of A.P. has 8 other P.S.Us, with some of the registered offices of units and units with manufacturing units located in A.P. and a table with the paid up capital, year of establishment, sales, net profits, products manufactured and actual number of employees of the organizations is given below.

Major Public Sector Units in Minerals & Metals in A.P. (for the year ending 31.3.2000)

S. No.	Name of the Orgnanisation	• Regd. Office • Estd. In: • paid up capl.	• Turnover • Net profit (Rs. In million)	Products Manufactured	No. of Employees (incl: workers)
1.	Mishra Dhatu Nigam Ltd.	• Hyderabad • 1981 • Rs. 1373.4m.	• 1104.8 • 21.4	Super Alloys Special purpose Steels for Defence Atomic Energy	1427
2.	Rashtriya Ispat Nigam	• Visakhapatnam • 1982 • Rs. 78273.2 m	• 29726 • (-)5616.8	Pig Iron & Steel Products, Wire rods, bars	17.254
3.	Hindustan Zinc Ltd.	• Udaipur Unit: Vizag • Rs. 4225.3 m.	• Rs. 15156 • Rs. 904.2 (all units)	Zinc & lead metals	11.496 (all units)
4.	National Mineral Devpt Corpn. Ltd.	• Hyderabad • 1958 • Rs. 1321.6 m.	• Rs. 7904.9 • Rs. 1600	Iron ore, Diamonds, Limestone	6774
5.	Bharat Heavy Electrlcals Ltd.	• New Delhi Unit:Hyderabad • Rs. 2447.6m.	• Rs. 66340 • Rs. 5994.4 (all units)	Thermal, Hydro sets, gas turbines	53.930 (all units)

6.	Bharat Heavy Plates & Vessels Ltd.	• Visakhapatnam • Rs. 293.0 m.	• Rs. 125.52 • (-) 202.1	Process Plants cryogenics Combustion Systems	3933
7.	Bharat Dynamics Ltd.	• Hyderabad • 1970 • Rs. 1150 m.	• Rs. 3240.1 • Rs. 807.7	Missiles systems Small arms	3261
8.	Electronics Corpn of India Ltd.	• Hyderabad • 1967 • Rs. 792.5 m.	• Rs. 4331.6 • (-) 6.7	Industrial Electronics, Electronic Equipments. Atomic Energy Requirements	6,572
9.	HMT Bearings Ltd.	• Hyderabad (1970) • 1981	• Rs. 549.6 • Rs.17.6	Ball Taper bearings	695
10.	Hindustan Machine Tools Ltd (for the year Unit at Hyd. ending 31.3.1999)	• Bangalore • 1953 • Rs. 1305 m.	• Rs. 8742.2 • (-) 367.7 (All units)	Special purpose Machines,CNC Machines.watches	19,387 (in all units)
11.	Hindustan Aeronautics Ltd.	• Bangalore • (1940)Private • 1942 Govt. took Over) • Rs.1205 m.	• 24008.8 • Rs.3682.6 (All units)	Aircraft Manufg. Helicopters Radar and Bangalore Electric equipments	34.448 (in all unit)
12.	Praga Tools Ltd. (1943-Private company	• Hyderabad • 1959-Defence undertaking Subsidiary of Ltd.,HMT Ltd.	• Rs. 146.9 • (-) 291.1	Machine tools Foundry, Forge items CNC Machines	1,319

Transport Equipment and Components

The size and age of the units is mainly assessed in respect of available information pertaining to investment, employment of workers and the date of establishment.

Transport Equipment and Components

1.Investment (in million Rs.)	**Below Rs 0.5 million**	**Rs 0.5 to 1 million**	**Rs.1 to 2 million**	**Above Rs.2million**	**Total (million)**
Bus body building Transport Equipment	1	8	3	1	13
Spares and components	—	32	6	4	42
Total no of Units	1	40	9	5	55

2.Employment (no of workers)	**Below 10 workers**	**10-20 workers**	**20-30 workers**	**Above**	**Total 30 workers**
Bus body building Transport equipment	3	2	2	6	13
Spares and components	18	6	6	12	42
TOTAL NO. OF UNITS	21	8	8	18	55
3.Established in (age of units)	**less than 5 years**	**5-15 years**	**15-25 years**	**over 25**	**Total**
Bus body Building Transport Equipment	—	9	2	2	13
Spares and components	—	31	6	5	42
Total no.of Units	—	40	8	7	55

Source : Compiled at The Indian Institute of Economics

The units covered include small and medium, engaged in the manufacture of Auto components, sparkplugs, cylinder liners, brake drums, tractor-trailers and bus body building. All the units employ over 1000 workers. There has been a steep increase in the number of units established during the period 1986 to 1995 with as many as 40 units coming up. Over 80% of the units have investment ranging between 0.5 to 1 million.

Basic Metals

The survey consists of units numbering 322 manufacturing Ferro Alloy, Aluminium and steel products. The product range is MS Angles, Rounds, Flats, switches and crossing Tract accessories for railways, ferro chrome and silicon, aluminium sheets, circles dies etc. During the period 1986-95, 70% of the units 227 nos. are established. Over 25% of the units have an average investment of Rs. 3.5 million and employ over 40 workers. The total no. of employees is about 6500 and supply to Automobile, Sugar, Textiles, Engineering and Defence Equipment companies. (Refer Table below)

Basic Metals

Investment (in millions of Rs.)	**Below Rs 0.5**	**Rs 0.5 to 1 million**	**Rs. 1 to 2 million**	**Above Rs.2 million**	**Total**
	29	98	109	86	322
Employment (no of workers)	Below 10 workers	10-20 workers	20-30 workers	Above 30 workers	Total
	70	90	43	119	322
Established in (age of units)	less than 5 years	5-15 years	15-25 years	over 25 years	Total
	—	227	64	31	322

Source : Compiled at The Indian Institute of Economics

Machinery and Components

The data pertains to 252 units in general engineering and machine manufacture. The supplies are made to OEMs and cater to equipment requirement of local industries. Over 80% of units are established during the period 1985-95 and have an average investment between Rs. 0.5 million to Rs. 1 million. The total number of employees is about 3175.

Machinery and Components

Investment (in million Rs.)	**Below Rs. 0.5 million**	**Rs. 0.5 to 1million**	**Rs. 1 to 2 million**	**Above Rs. 2 million**	**Total**
	37	125	61	29	252
Employment (no of workers)	Below 10 workers	10-20 workers	20-30 workers	Above 30 workers	Total
	122	81	24	25	252
Established in (age of units)	less than 5 years	5-15 years	15-25 years	over 25	Total
	—	210	32	10	252

Source : Compiled at The Indian Institute of Economics

Regional spread of Industries:

The Industrial spread in the state of A.P. exhibits concentration around the major cities of Hyderabad, Visakhapatnam and Vijayawada. The Centres of industrial activities are around

1. Hyderabad city and surrounding districts of Ranga Reddy. and Medak
2. Visakhapatnam
3. Vijayawada - Guntur
4. Kurnool and Yerraguntla
5. Tirupathi Renigunta
6. Kothagudam - Ramagundam belt.

The state had established major industrial estates to promote and develop industries at selected places like Patancheru, Pashamylaram, Sanathnagar, Balanagar, Nacharam industrial estates at Visakhapatnam and Vijayawada. The units selected for survey are located in all the above major clusters of industrial activity.

Chapter - II

Statutory Minimum Wages in Metal Industry

The Minimum wage rates fixed under the statute, The Minimum Wages Act 1948 , with Andhra Pradesh minimum wage Rules has two main objectives - 1) to provide sustenance and maintenance of the worker and the family and (2) to preserve his efficiency as a worker.

The statutory minimum wage notification covers employees in scheduled employments notified for over 55 categories. It is extended to all employees, in the category, when the total employment in the state is over 1000 workers at any time. It classifies employees in general category, serving in accounts, time office, security, stores etc, and workers as highly skilled semi-skilled and unskilled and basic wages per month are fixed.

The minimum wage notification also gives variable, dearness allowance to be paid to each category of employees linked to cost of living index (with base year 1982 = 100 series) with a minimum basic wage of Rs. 500 per month. The cost of living allowances to be paid per cent increase is Rs. 3.00 and for every increase of Rs.50 in basic wages and part thereof 0.25 paise shall be paid as variable dearness allowance. The CLI notification is notified every 6 months by the commissioner of labour and is applicable to all employees paid salaries on monthly or daily basis and is equally applicable to men and women workers where the nature of work is the same.

Minimum rates of wages are fixed by the month or day and piece rates workers are also covered under the Act. Minimum rate wages are to be paid irrespective of the extent of profits, financial condition of the establishment or availability of workman at lower rate. They are fixed for scheduled employment categories of employees specified in the schedule or any process or branch of work forming part of such employment.

In the case of metal industry, covered under our study, the minimum rates fixed under three categories of employment are as under -

1) **Automobile Engineering workshop** (G.O.Rt.903 dt 22-5-98)
2) **Metal Foundries and General Engineering** (G.O.Rt.1218 dt.4-7-98.)
3) **Steel Mill and steel rerolling Mills** (G.O.Rt. 1229 Dt : 8-7-98)

1) Automobile engineering workshop - The minimum basic rates of wages are linked to consumer price index at 194 points (Base Year 1982 = series) in 1992 and later revised in 1998 to 342 points with same basic year 1982 series.

Name of the Category	Earlier Basic Wages	Renewed Basic Wages
Office and General		
- Superintending/Head Clerk	1150.00	2024.00
- Accountant	1080.00	1901.00
- Tel operator/ Steno / Cashier	1015.00	1786.00

- Typist/ Computer operator	945.00	1663.00
- Clerk/ Store keeper/Time keeper	810.00	1426.00
-Office boy/Watch man/Sweeper	675.00	1188.00
Highly Skilled		
- Engineer / Supervisor	1960.00	3450.00
- Foreman / Charge man	1620.00	2851.00
Skilled		
- Draughtsman/Engine mechanic/ Machinist/ Painter/Blacksmith /Auto Electrician /Tinker	1350.00	2376.00
- Asst. Foreman/ Moulder/ Heat Treatment Operator/Grinder / Welder	1080.00	1901.00
- Coach Builder(Wood/Metal)/Panel Beater/ Asst. Mechanic/Tailor/Fitter/Driller/Turner	1080.00	1901.00
- Vulcaniser/Carpenter/Upholster/Bench fitter/ Winder/Machine Winder/Fitter/Helper/Liner	1080.00	1901.00
- Boiler man/Tyre Mechanic	1080.00	1901.00
Semi-skilled		
- Assistant Engine Mechanic	810.00	1426.00
- Assistant Painter	810.00	1426.00
- Assistant Auto Electrician	810.00	1426.00
- Assistant Blacksmith	810.00	1426.00
- Assistant Machinist	810.00	1426.00
- Assistant Tinker	810.00	1426.00
- Assistant Turner	810.00	1426.00
- Assistant Driller	810.00	1426.00
- Assistant Grinder	810.00	1426.00
- Assistant Fitter/ Valcaniser	810.00	1426.00
- Assistant Carpenter	810.00	1426.00
- Assistant Welder/ Upholster	810.00	1426.00
- Lubricator	810.00	1426.00
- Tyre Sorter/Tyre man	810.00	1426.00
- Press Operator	810.00	1426.00

Unskilled		
- Cleaner/ Greaser	675.00	1188.00
- Hammer man / Tool Keeper	675.00	1188.00
- Helper/Petrol Pump Boy	675.00	1188.00
- Mazdoor	675.00	1188.00

Any rise in cost of price index over and above the minimum base point is to be paid as Cost of living allowance also termed as variable dearness allowance.

Cost of living Allowance: The minimum basic rates of wages are linked to consumer price index for the industrial workers at 342 points (Base year 1982 = 100 series). For any rise in Cost of price Index over and above this level, the cost of living allowance will be specified as follows -
Basic wage Cost Of Living Allowance to be paid per point increase (In Rs) For Rs 500/- (taken as base) Rs 3.00/- and for an increase of every Rs 50/- in the basic wages and part thereof 0.25 paise shall be paid as VDA subject to the limitation of Rs 10.50 for basic wage of Rs, 2000/- and above which varies with changes in Industrial VDA.

2) Metal Foundaries and General Engineering : The workers in this category were covered under the Minimum Wages Act 1948 since 1993 as per G.O.Ms. No 38 W.D.C.W. & L dt : 12-3-93 and revised again in 1998 as per G.O. Rt.No.1218 L.Et . F dt 4-7-1998. The minimum basic rates of wages are also linked to consumer price index at 242 points (base year 1982 = 100 series) in 1993 and later revised in 1998 to 243 points. With same base year , 1982 series. Any rise in cost of price index over and above minimum base points is to be paid as cost of living allowance , also termed as variable dearness allowance

Name of the Category	**Basic Wages**
Highly skilled	
- Foreman / Charge man	2475.00
Skilled	
C**ategory** - A	
- Mechanic/Pattern Maker	1819.00
- Craneshap driver/Plumber	1819.00
C**ategory** - B	
- Turner/ Machinist/ Moulder/ Welder	1650.00
- Blacksmith / Electrician/ Miller Swapper	1650.00
- Carpenter / Fitter	1650.00
C**ategory** - C	
- Core Maker/ Driller/ Winder/Painter	1551.00
- Tiner/ Assembler/ Nickel Plater	1551.00

- Chipper/ Puch and Press Operator	1551.00
Semi-Skilled	
- Hammer man / Grinder/ Oilman	1276.00
- Wireman / Helper	1276.00
- Assistant to all Skilled categories above	1276.00
Un-Skilled	
Peon/Attender/ Watchman/ Chowkidar	1079.00
Office Boy/ Cleaner/Gardener/ Mali	1079.00
Office Staff	
Manager	2319.00
Clerk/Typist/Cashier/ Time Keeper	1417.00
Store Keeper/Accountant/Steno	1551.00
Computer Operator	1551.00

Any rise in cost of price index over and above the minimum base point is to be paid as Cost of living allowance also termed as variable dearness allowance.

Cost of living Allowance: The minimum basic rates of wages are linked to consumer price index for the industrial workers at 342 points (Base year 1982 = 100 series). For any rise in Cost of price Index over and above this level, the cost of living allowance will be specified as follows -

Basic wage	**Cost of Living Allowance to be paid per point increase** (In Rs.)
For Rs 500/- (taken as base)	Rs 3.00/-

And for an increase of every Rs. 50/- in the basic wages and part thereof 0.25 paise shall be paid as VDA subject to the limitation of Rs 10.50 for basic wage of Rs. 2000/- and above which varies with changes in Industrial VDA.

3) Steel Mills and Steel Rerolling Mills : This category was covered under the Minimum Wages Act 1945 since 1993, as per G.O.Ms No. 69 W.D.C.W.L dt : 15-5-1993 and revised again in 1998, as per G.O.Rt.No . 1229 L.E.T.F.Dt : 8-7-98 . The minimum basic rates of wages are also linked to consumer price index at 229 points base year 1982=100 series) in 1993 and later revised in 1998 to 342 points , with same base year 1982 series .

Name of The Category	**Basic Wages**
Office and General	
Manager	2815.00
- Accounts Officer	2512.00
- Supervisor (Non-technical)	2012.00

- Chief Accountant	1714.00
- Accountant/ Cashier/ Steno	1512.00
- Store keeper/Store Assistant	1512.00
- Typist/ Stores In charge	1408.00
- Clerk/ Jr. Assistant/ Receptionist/Despatch clerk/ Accounts Asstt/ Computer Operator	1408.00
- Tel Operator/Office Assistant	1408.00
- Time keeper	1408.00
- Watch man/Security Guard	1311.00
- Superintending/Head Clerk	1006.00
- Peon/ Attender/Office boy/ Mali Sweeper/Scavenger/Water Boy	1005.00
Highly skilled (Group-A)	
- Chief engineer	2815.00
- Engineer - Mechanical/Electrical	2719.00
- Foundry Engineer	2719.00
- Chemist	2615.00
- Senior Foreman	2317.00
Highly skilled (Group-B)	
- Mould Operator/ Melter/ Laddle Operator/ Billet Gas Cutter	2116.00
- Foreman, Tee merman/ Bariman	2116.00
- Refractory mason/ Fitter(concest)	2116.00
- Billet Inspector	2116.00
- Micro-cum-Sulphur Precit Inspector	2116.00
- Section In charge	2116.00
- Supervisor (Technical)	2116.00
- Asst. Engineer/Furnace First hand	2116.00
- Sampler/ Scrap Weigh bridge operator/ Triller Operator	1512.00
- Plumber/Pump Asst.	1512.00
- Screen Machine operator	1512.00
- Tang/Tons man	1512.00

Skilled	
- Gass Cutter/Welder/ Electrician	1512.00
- Winder/Fitter	1512.00
- Turner / Lath worker	1512.00
- Blacksmith/Kainohman	1512.00
- Utensils Press machine/Operator	1512.00
- Scethman/Fireman	1512.00
- Mechanic (Qualified)	1512.00
- Press Operator /Machinist	1512.00
- Crane Operator/Fitter Mechanic	1512.00
- Billet Gas Cutter/Welder	1512.00
- Mason/Furnace Second hand	1512.00
- Moulder/ Tracer/Civil Maistry	1512.00
- Instrumentationist/Technician	1512.00
- Laddle Salter/ Stopper/Rod Maker	1512.00
- MPH Attendant / Compounder	1512.00
- Skid Bank Operator	1512.00
- Material handler/ Carpenter	1512.00
Semi-skilled (Group-A)	
- Spinner/ hammer man/ Sharper man/ Pump Operator	1207.00
- Mechanic (Unqualified)	1207.00
- Wireman/Electrical Helper/Welder	1207.00
- Kundiman	1207.00
- Furnace III Hand / Pressman	1207.00
- Concest Helper/ Pultiman	1207.00
- Totaman /Sealing man	1207.00
- Pusher man	1207.00
Semi-skilled (Group-B)	
- Cutting man/ Assistant Gas Cutter Helper	1207.00
- Utensils Polisher/Packer	1207.00

- Buling Worker	1207.00
- Assistant - Mechanic / Machinist / Stricer/ Turner	1207.00
- Laboratory assistant	1207.00
- Assistant - Lathe, Tons man	1207.00
- Handworker/ Girder man	1207.00
- Twisting Operator	1207.00
- Head security Guard	1207.00
- Charge man/ Crane Helper	1207.00
- Laddle Helper / Grinder	1207.00
Unskilled (Group-A)	
- Loader/Un-loader/ Hamali Mutta Jattu Coolie/ Coal Carrier	1125.00
Unskilled (Group-B)	
- Helper	1006.00
- Mazdoor/ Casual Labour and other skilled worker	1006.00
- Laboratory Boys	1006.00
- Chatal worker	1006.00

Any rise in cost of price index over and above the minimum base point is to be paid as Cost of living allowance also termed as variable dearness allowance.

Cost of living Allowance : The minimum basic rates of wages are linked to consumer price index for the industrial workers at 342 points (Base year 1982 = 100 series). For any rise in Cost Of price Index over and above this level, the cost of living allowance will be specified as follows -

Basic wage	**Cost Of Living Allowance to be paid per point increase** (In Rs)
For Rs 500/- (taken as base)	Rs 3.00/-

And for an increase of every Rs 50/- in the basic wages and part thereof 0.25 paise shall be paid as VDA subject to the limitation of Rs 10.50 for basic wage of Rs, 2000/- and above which varies with changes in Industrial VDA.

Payment of wages

Medium and large-scale industries - paid according to settlements (periodically done for a five year period)

Small Scale Industries

: highly skilled workers - paid minimum wages or even higher wages as per contract or their acknowledged skills

: other category of workers - paid the minimum wages, only after a satisfactory period on the job for six months or a year

: the new recruits - treated as trainees though not provided for, specifically in the statutory laws governing minimum wages

Total Wages Earned at Minimum Wages Prescribed as on October 2000

		Steel rolling (Rs.)	Automobile Engineering (Rs.)	General Eng & Metal Foundation (Rs.)
Higher Skilled	Minimum basic	2815.00	3450.00	2475.00
	VDA	1268.50	1526.50	1118.00
	Total	4383.50	4976.50	3593.00
Semi Skilled	Minimum basic	1207.00	4426.00	1276.00
	VDA	580.50	666.50	602.00
	Total	1787.50	2092.50	1878.00
UnSkilled	Minimum basic	1006.00	1188.00	1079.00
	VDA	494.50	559.00	516.00
	Total	1500.50	1747.00	1595.00

The cost of living index numbers for industrial workers in the state are notified by the Labour Bureau, Govt. of India/ Commissioner of Labour and communicated by the Directorate of economics and Statistics, Govt. of Andhra Pradesh, Hyderabad.

Contract Labour (CL)

According to study conducted by IMF, South Asian office (in 1997) that out of the total contract labour employed, about 80 % are doing the similar jobs done by permanent workers and the remaining 20 % are employed on the needs and requirements incidental to the running of companies. The following table reveals the position in certain PSUs.

Intensity of CL in central PSUs in Hyderabad and comparative statement with that of permanent workers (as on 31st March, 1997)

Name of PSU	No of Permanent Labour	No of Contract Labour	Mini Wage for per .W Rs. P/M	Mini wage for C.L Rs. P/M	Diff P/M in Rs.
BHEL	6000	2000+ 800 (*)	4042	1200	2842
HAL	2658	220	3730	1980	1750
HCL	2000	200	3730	1410	2320
ECIL	3700	400	330	1350	2380
BDL	2100	425	3730	1100	2630

Source : Compiled at The Indian Institute of Economics

** Society Contract labour (the contract labour employed in the construction work are excluded from the figures shown)*

Enquiries reveal the same situation prevails to date, and the tendency has extended to more number of medium and large private units. As per the information available with the Commissioner of Labour, the participants of contract labour under the Contract Labour Act 1970 during the past 4 years are as under:

	1997	1998	1999	2000
No of Principal Employees	1446	1919	2034	2486
Contract Licensed	3780	5423	5308	6376
Total No of contract Workers	85817	112941	101021	104733

Since liberalisation in 1991, the keen competition in the markets is leading many an industrial unit to outsource some of the jobs hitherto done inside as use of contract labour for certain jobs looks feasible and gain cost advantage in Wage Bill. Except for providing canteen facilities and payment of annual bonus partially, there has been gross discrimination in providing fringe benefits like transport, Loans, advances, uniforms, LTC etc. to contract labour in comparison with regular workers.

Chapter - III

Conditions of Work

❖ **Health and safety problems.**

In organised PSUs and major Private industrial units adequate conditions are prevailing in respect of health and safety measures. In the case of small-scale industrial units health and safety problems are not attended to and it may be critical where work is done under hazardous conditions.

❖ **Incentives:**

There are no jobs on incentives or piece rate basis and no policies for wage determination existing, especially in small-scale sector. In the case of some medium and large scale units, where organised unions are operating, wage revision is taking place generally every three years and settlements reached after negotiations, wage settlements normally include, besides basic wage and C.L based D.A (variable D.A) uniform, canteen, benefits, etc.

❖ **Working hours**

The working hours and holidays are fixed under the Factories Act. All the registered units follow the same. In case of work done on holidays, extra payment is made as per wage settlement, which is normally on par with the norms of the Factories Act or more beneficial. Similarly in case of mutual settlement, for certain categories of worker doing work on holidays, compensatory off is given.

Leave facilities and paid holidays: These are provided as per statutory regulations under the Factories Act. . The State Government annually announces a list of holidays under the Factories Act after discussions with major Union Representatives , Associations and employers organisations like FAPCCI . Under the A.P factories and Establishment Act 1974. Four holidays under the National Holidays and four festival holidays are given to all industrial establishments .

❖ **PF, ESI and other benefits**

While the workers under medium and large scale sectors are covered under the payment of minimum wages, as per scheduled employment notification, P.F, E.S.I and Payment of Gratuity Act, the same statutory benefits are yet to reach a majority of workers in the SSI sector. For successful implementation of new economy measured, it is needed urgently to integrate workers in the SSI sector, who are mostly unorganised with the main stream working force in medium and large scale units, gradual implementation and monitoring of social security benefits would improve their wage levels for similar work in organised sector. In the SSI sector fringe benefits like canteen facilities, transport, uniform, annual bonus, incentives, housing, children's education facilities, loans / advances etc. are now not available in majority of small scale units.

❖ **Women workers in metal working industry**

Andhra Pradesh being an agriculturally predominant state , women workers are mainly confined to Agriculture operation, Tobacco and cotton growing / processing units, besides their presence in Garment and pharmaceutical industry . Excepting for a small number of women in supervisory cadres in light engineering units, women workers are not significant in size and numbers in the metal working units - Large, Medium and Small Sectors. However there are significant number of women worker in major, medium and small scale in electronic industries sectors. Further there is growing trend of feminisation of work in particular sector of IT industry.

❖ **Collective bargaining**

PSUs are the main trend setters for major private sector units in respect of several issues like provision of housing and transport facilities, long term advances for building houses etc. Wage increases are sought at each settlement (after a period of 5 years) and thus range from 15 to 20 percent and also 35 to 40 per cent in some industries depending upon the financial and economic feasibility of the units. The justification normally comes, for these increases is that the real wages of working class is much below the increased cost of living noticed over the past few years. The real wage growth of 1999-2000 is 2.3% as per economic survey while the consumer price index increased by 7 to 8 per cent in the same period

❖ **Trade unions**

In Andhra Pradesh as in the rest of the country, the trade unions are relatively free to operate because of favourable labour registration. However the situation in regard to the functioning of the Trade Unions is changing very fast consequent to the economic reforms and globalisation efforts that are going on. There has been a considerable fall in the membership of the trade unions. Independent unions at enterprise level are on the increase with the emergence of regional political parties. This may lead to more fragmented trade union movement in the years to come. Union Membership is concentrated in PSUs and well-established private sectors where the bulk of their membership comes from. The increase in sub contracting and casual labour has created increased pressure on trade unions. The Unions are now handicapped greatly in reaching a number of workers due to the fear of competitive atmosphere prevailing.

❖ **Impact of globalisation**

With volatile swings in employment, greater degrees of automation in the building of machine tools, and continuous failure to invest in the skills and development participation of work organisation, emphasis is shifting from production of parts and assembly to servicing Machines. The shifting of industrial operations of traditional manufacturing of items like textiles etc. from Bombay to interior parts of the country with lesser wage cost is clearly noticeable.

Designing and manufacture of capital intensive machine tools is now shifting to distribution of such things as disposable cutting tools measuring equipments, cutting oils and chemical solvents. Established and well-known firms are trading on their national or international names and established distribution net works. Leading companies are entering into tie-ups with multinationals for suitable and related items of their expenses.

Chapter - IV

Administration of Labour Regulations

The responsibility of implementation of various labour enactments numbering 24 is vested with The Department of Labour, Training and Factories. A Principal Secretary with a Minister in Charge heads the department in the State Secretariat. At the operational level , there are i) Commissioner , assisted by Deputy Commissioners in various Regions ii) Director of Employment and Training (iii) Director of Factories and (iv) Labour Contracts and Industrial Tribunals . With a view to ascertain the degree of compliance and enforcement of the various regulations, the IIE approached various departments for details of cases and compliance. The data covers the entire industry, including metal and metal working establishments and gives a comprehensive view of the Labour Regulations

1. **Industrial Relations -** I.D Act 1947 deals with various matters of industrial relations covering wage and conditions of services, strikes and lockouts disputes regarding wage settlement etc. The disputes raised, settlement reached and man days lost due to strikes and lockouts during 1997, 1998 and 1999 are as under.

	1997	1998	1999
(a) Disputes Raised	3217	2206	1905
(b) Settlements/awards	741	1934	1171
(c) Strikes and lockouts	68	45	37
(d) Workers involved	31947	14124	18946
(e) Mandays lost	2065622	1809843	1152815

2. **Payment of Bonus Act 1965:** Covers all establishments liable to pay Bonus as per the Act and Labour Inspector oversees the implementation through periodical inspection.

	1997	1998	1999
No of establishments Covered	11986	31602	19001
Amount of Bonus got paid (Rs. in Million)	13.2	47.3	40.3

3. **Trade Union Act 1926 :** registers new Unions coming up annually and administers elections of Trade Unions registered as per regulations.

	1997	1998	1999
No. of Trade Unions Registered	11967	6488	12484

4. **Minimum Wages Act 1948 :** deals with schedules of employment categories and prescribes minimum wages per month or day , after due process of consultations and discussions with the representatives of labour and employers.

	1997	1998	1999
(a) Schedules	58	54	58
(b) Claims filed	10252	7126	18461
(c) Workers benefited	16046	13252	25119
(d) Amounts awarded (Rs. in million)	37.4	31.4	52.2

5. **Workmen's Compensation Act 1923 :** Deals with the compensation payable to workmen injured while on duty etc.

	1997	1998	1999
(a) Cases filed	5741	5036	3955
(b) Cases disposed off	3795	3252	2219
(c) Amounts awarded (Rs. in million)	102.8	56.0	77.6

6. **Payment of Gratuity Act 1972** requires payment of gratuity to all workers, putting in a minimum number of 5 years of service or as mutually agreed.

	1997	1998	1999
(a) Cases received	881	678	543
(b) Cases disposed off	576	496	882
(c) Amount awarded (Rs. in million)	2.638	3.820	4.518

7. **Payment of Wages Act 1976 :** Deals with regular payment of wages to the workers , monthly or weekly as per the case may be Cases are filed against employers or management for non payment of wages within the stipulated period.

	1997	1998	1999
(a) Cases disposed off	444	190	122
(b) Workers benefited	1897	275	85
(c) Amount awarded (Rs, in million)	13.662	3.924	0.726

Besides the above , the Department of Labour is actively monitoring the implementation of **Andhra Pradesh Shops and establishment Act 1988. Motor Transport Workers Act 1961, Welfare Fund Act 1987, Child Labour (Rehabilitation & Regulation) Act 1986, Contract Labour Act 1970, Equal remuneration Act 1976, Andhra Pradesh Factories & Establishments (National Festival and other Holidays) Act 1974** etc.

The Department of Labour maintains **11 Labour Courts** for resolving the disputes under the Enactments. The total factories registered as on 31-12-2000 are 34376 employing 865,890 workers . The Labour Welfare Board distributed Scholarships to children of workers 4999 , an amount of Rs. 2,730,500 during the year ending 31-12-2000. Ex gratia amount Rs. 7,514,169 was paid by the Management in addition to Statutory benefits during the year ending 31-12-2000.

The Department of Labour organised 29 training programmes, in plant to suit specific industry requirements like chemicals etc. Free medical Health Camps were conducted in 372 factories where 29463 workers were medically examined.

The employment situation as indicated on the live registers of employment exchanges upto 31-12-2000 showed 3,147,285 candidates seeking jobs. During the year ending 31-12-2000, fresh registrations were 259,652 and of the 8613 vacancies 3599 were placed in jobs.

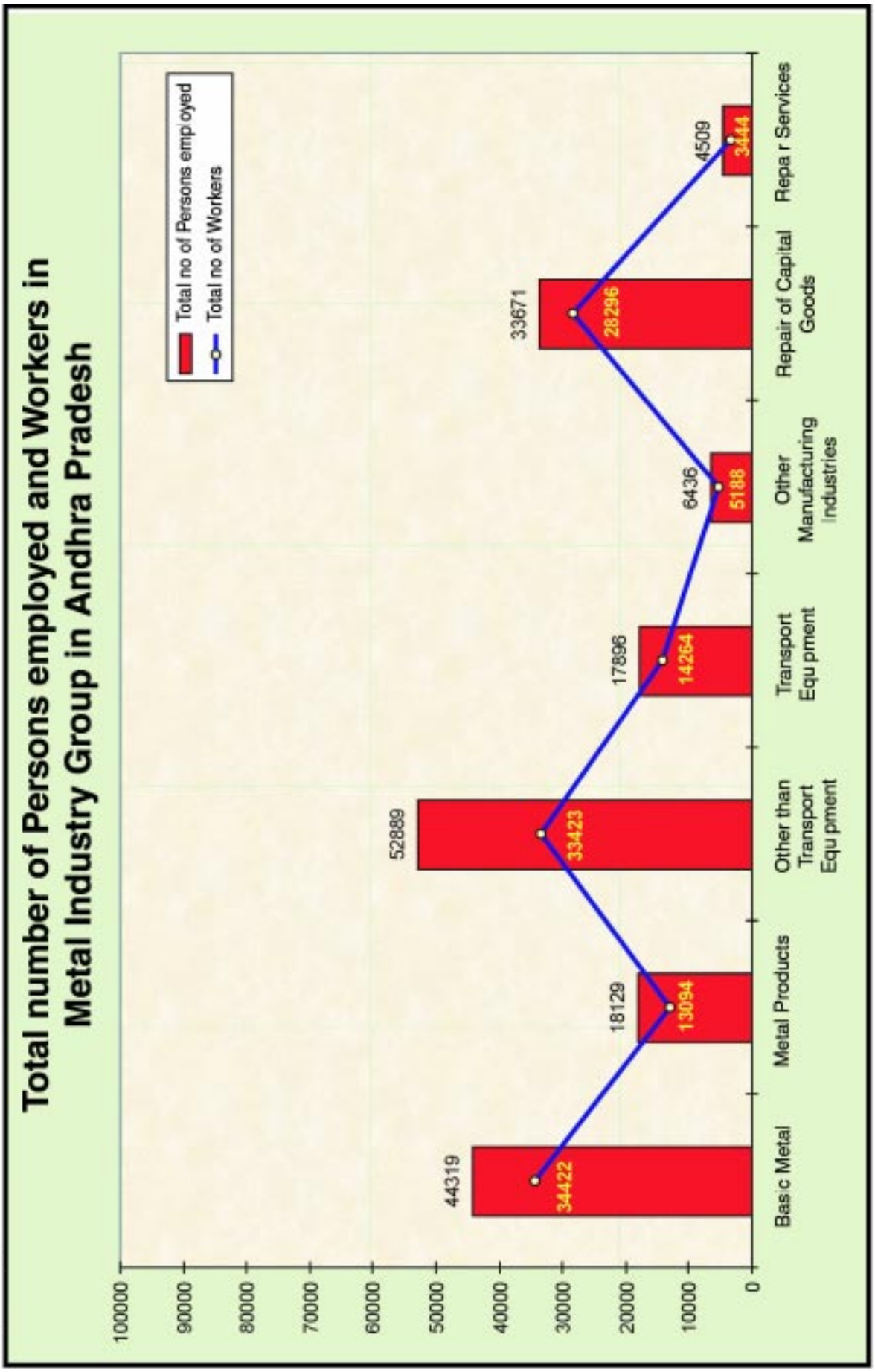
Key findings :

Indian Metal Industries' Characteristics in 1997-98 in *Andhra Pradesh*

(values in Rs. million*, others in numbers)

Characreristics → industry group ↓	No. of factories	factories' % in state to all India	Productive capital [1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers 3	Employees other than workers4	Total no. of emplo-yees2	Annual wages & salary with bonus5 (Rs.)	Total emolu-ments6 (Rs)
				Men	Women							
(1) Basic Metal & Alloys Industries	297	4	71424	26315	107	26429	7993	34422	9897	44319	27629	33002
(2) Manufacture of Metal Products & Parts, except Machinery & Equipment	704	9	5080	11038	883	11921	1173	13094	5035	18129	613	707
(3) Manufacture of Machnery & Equipment Other than Transport Equipment	736	5	22054	29897	2060	31957	1496	33423	19436	52889	4229	5308
(4) Manufacture of Transport Equipment and Parts	130	3	4929	11965	76	12041	2223	14264	3632	17896	808	917
(5) Other Manufacturing industries	73	3	1799	3691	1197	4888	300	5188	1248	6436	376	440
(6) Repair of Capital Goods	295	13	652	27877	341	28221	75	28296	5375	33671	2013	2183
(7) Repair Services	121	6	214	3239	54	3293	151	3444	1065	4509	154	170
TOTAL	**2356**	**6**	**106152**	**114022**	**4718**	**118750**	**13411**	**132131**	**45688**	**177849**	**35821**	**42728**
All India figure	39659	100	1683618	1793383	86836	1880354	232310	2112664	814453	2927117	196089	2382511
% of State Total to All India fig.	6	6	6	6	5	6	6	6	6	6	18	2

Key findings :



Uttar Pradesh

Industrial Belt

1. Agra*
2. Aligarh*
3. Allahabad*
4. Azamgarh
5. Badayun
6. Bareilly
7. Etawa
8. Fatehpur*
9. Ghaziabad*
10. Ghazipur
11. Gonda
12. Hamirpur*
13. Hathras
14. Jalaun*
15. Kanpur Rural*
16. Kanpur Urban*
17. Kheri
18. Lucknow*
19. Lakhimpur
20. Lalitpur
21. Meerut*
22. Mhoba
23. Mirzapur*
24. Moradabad*
25. Mthura
26. Muzaffarnagar*
27. Noida*
28. Pilibit
29. Rai Bareily
30. Saharanpur*
31. Sahibabad*
32. Sultanhpur
33. Unnao*
34. Varanasi*

*Metal Industry Belt

Uttaranchal is the newly formed state and earlier it was part of Uttar Pradesh

Uttar Pradesh

Part – I

An Overview of the State

Chapter - 1

Economic Scenario of Uttar Pradesh

Uttar Pradesh is the most populated State of India. However in the industrial field, it occupies the 5th place (as per number of registered factories). The main industries are leather, sugar, textile and engineering mostly in the small-scale sector. The metal industries occupy a prominent place employing around 0. 4 million persons in 7 metal industry groups (NIC) with around 51, 000 factories with a productive capital of about Rs. 62330 million. The State has also many traditional handicrafts and metal industries in the small, tiny and cottage industries. Against the total population estimate of about 166 million as per 2001 census, work participation rate in the State accounts for about 34 % as against all- India participation rate of 39.7 percent. Participation of the female members is only around 12 per cent.

Information collected from the field in the course of the study narrates the industrial scenario of the state with special emphasis of metal working industries and the all-India status position about industrial development has been provided over a long period based on the results of the *Annual Survey of Industries (ASI)* conducted by the Central Government. This over-time analysis of industrial development shows the trend of industrial growth for the 2 States vis-a-vis all-India growth.

Overall Industrial Scenario of India vis a vis Uttar Pradesh

Year	No. of Factories		Productive Capital (Million)		Persons engaged (000)		Ex Factory Value of output (Million)	
	U.P. (%D)	All-India (%D)	U.P. (%D)	All-India (%D)	U.P. (%D)	All-India (%D)	U.P. (%D)	All-India (%D)
1980-81	5661	96503		431200	494	7854		61084
85-86		101016 (4.67)		838940(94.55)		7584(-3)		1201550(96.70)
88-89		104077 (3.03)		1163700(38.71		7558(3)		1843490(53,42)
89-90		107992 (3.76)		1407910(20.98)		8257 (5)		2300420(24.78)
90-91		110179 (2.02)		1761680(25.12)		8279(0.2)		2705640(17.61)
91-92		112286 (1.91)		1963710(11.46)		8320(0.4)		2991960(10.58)
92-93		119494 (6.41)		2553610(30.04)		8836 (6.20)		3686140(23.20)
93-94		121594 (1.75)		3115220(21.99)		8838 (0.02)		4257440(15.49)
94-95	10154	123010 (1.16)	40694	3649410(17.14)	1360	9227 (4.40)	48702	5179870(21.66)

95-96	10613 (4.52)	134571 (9.39)	40727 (.08)	4561310(24.98)	1418 (4.26)	10222(10.78)	57063 (17.16)	6705140(29.44)
96-97		134556(-0.01)		4976820 (0.9)		9785 (-4)		6925200(3.2)
97-98	20852	135551 (O.7)		5865310 (1.7)		10001 (2)		8254230(19)

Source: Annual Survey of Industry (Factory Sector), Statistical abstract India, 97, 98, 99) Sankhiki Rooprekha Rajasthan 1982-83 – 1993-94

%D – Percentage in respect of the previous year

Export Performance

At all-India level, there has been steady increase in the total exports. While total exports during the period 1998-99 was valued at Rs. 325,530 million, the same increased to Rs. 1,629,250 million during 1999-2000. The increase was very sharp during 1995-96 recording an increase by about Rs. 738,000 million. In so far as Metal (manufactures, machinery, transport and iron and steel) group is concerned, the increase in exports in value terms was from Rs. 38,720 million in 1990-91 to Rs. 214,350 million in 1999-2000. As observed for the total exports, the increase in value terms was also significant when it rose from Rs. 38,720 million in 1990-91 to Rs. 145,720 million in 1995-96. One may argue that such a high growth was mainly owing to policies of liberalisation introduced in the industrial and also trade sectors. It will not be wrong to suggest that continued liberalisation over the years contributed to a sustained growth in exports.

In so far as the performance in exports is concerned, by and large, the trend was more or less similar to all-India trend showing continuous increase for major groups of items as per the information supplied by the Industry Directorate of U.P.

As for individual groups of industries, computer software recorded the highest increase in the recent past from NOIDA, an internationally known software center. The value of exports increased from Rs. 500 million in 1997-98 to Rs. 10,050 million in 1998-99 and again recorded a phenomenal increase to Rs. 28,000 million in 1999-2000. Thus it is now the fastest growing export industry in Uttar Pradesh over taking the traditional woolen carpets, art metal ware and leather products. Engineering goods also recorded increases over the years but were of lower magnitude.

Exports of Major Items from Various Districts of Utter Pradesh in Value Terms

Major Items	Main Districts	1997-98 (Million)	1998-99 (Million)	1999 –2000 (Million)
Woollen Carpets Durrees	Mirzapur, Bhadohi Varanasi	17300	17570	18000
Leather & Leather Products	Kanpur, Unnao, Agra, Noida	8050	8980	9500
Art Metal Ware	Moradabad, Mirzapur, Varanasi Etah, Aligarh, Jhansi, Almora Mathura, Unnao, Meerut	16870	17380	18000
Cotton Textiles,Threads, Readymade Garments	Lucknow,Jaunpur,Agra,Allahabad	7600	8030	8350
Agricultural Produce,	Mathura, Meerut, Nainital,Unnao	6270	6390	6500

Processed Fruits/Foods Engineering Goods, Building Hardware	Agra,Ghaziabad, Noida, Kanpur, Meerut	3100	3300	3500
Gems, Jewellery, Imitation Jewellery	Lucknow, Firozabad,Agra, Kanpur, Meerut , Mathura	2000	2300	2500
Computer Software	Noida	500	10030	28000
Sports Goods	Meerut	530	640	700
Other Items		6820	11730	15000

Part – II

Survey of Metal Industry

Chapter - I

Minerals and Metals

The industrial scenario in the state of Uttar Pradesh was analysed at great lengths and was intended to provide a backdrop before we attempt to analyse enterprise-specific information collected from the chosen metal working industries.

The major Metal Working Enterprises are in the Industrial Towns of Kanpur Urban, Kanpur Dehat, Unnao, Fatehpur, Hameerpur Jalaun, Ghaziabad, Sahibabad, Moradabad, Meerut, Noida, Saharanpur, Muzaffarnagar, Shamli, Khatauli and Jansath.

Important features of Metal Industries in Uttar Pradesh vis-a-vis all India over the years

Name of the Industry/ Year	No. of Factories		Total Persons Engaged		Productive Capital (Million)		Gross Output Ex factory Value	
	U.P.	All India	UP	All India	UP	All India	U.P.	All India
Basic Metal and Alloys Industry								
1990-91		8620		691947				
1991-92		8675		662913				
1992-93		9020		684463				
1993-94		9222		680230				
1994-95	3510	6373	47288	635929	9630	5089678		580409.1
1995-96	3808	6820	52606	741193	15900.3	4759523		407007.8
1996-97	4111	N.A.	53857	N.A	15989.9	N.A.		N.A.
1997-98	4476	6917	54508	670042	15734.8	7985506		935237
1998-99	4741		55509		15873.2			
Manufacture of Metal Prouducts and Parts, except Machinery and Equipment								
1990-91			—	362942				
1991-92		13252	—	363897				
1992-93		14668	—	366637				
1993-94		14810	—	375242				
1994-95	21257	7287	115863	250036	3936.6	501928		107857.9
1995-96	22941	7984	163449	284194	4676.5	731436		149389.3
1996-97	24493	N.A	128540	N.A	10921.7	N.A		N.A

1997-98	25888	8214	132137	283394	11192.3	920129		184465.1
1998-99	26998		135420		11497.1			
Manufacture of Machinery and Equipments other than Transport Equipments								
1990-91		11223		556789				
1991-92		11299		524383				
1992-93		11038		522286				
1993-94		11170		969170				
1994-95	13486	13663	135801	393825	22007.8	2598657		57735.6
1995-96	13566	14304	148815	104725	22965.9	3313117		79010.7
1996-97	15310	N.A	151085	N.A	22390.0	N.A.		N.A.
1997-98	15507	13964	147039	905422	22099.2	4410789		843407.8
1998-99	16812		150014		22311.2			
Manufacture of Transport Equipment and Parts								
1990-91		3493		491195				
91-92		3511		478988				
92-93		3760		490702				
93-94		3889		485917				
94-95	2401	4057	50998	542683	7620.5	1115724		316168.2
95-96	2508	4106	49861	621880	8801.8	1855974		476641.4
96-97	2579	N.A	50139	N.A	8808.1	N.A		N.A
97-98	2606	4011	49584	553585	8677.9	37096590		494396.6
98-99	2697		50051		8719.3			
Other Manufacturing Industries								
1990-91		2358		121636				
1991-92		2335		120152				
1992-93		2326		122947				
1993-94		2454		123485				
1994-95		2059		121508		323662		65898.2
1995-96		2277		145810		487009		87956.5
1996-97		N.A		N.A		N.A.		N.A. |
1997-98		2244		149592		630140		110668.1
1998-99								-

The names of enterprises in different towns have been categorized separately. The District Industries Officers of the Industrial towns of Ghazipur, Mahoba, Sultanpur, Agra, Azamgarh, Farrukhabad, Rai Bariely, Lakhinpur, Kheri, Gonda, Fatehpur, Lalitpur, Hathras, Siddharth Nagar, Etawa, Bariely, Badayun and Dilibit have recorded that no heavy metal industries exist in those areas.

Statutory Minimum Wages

The Minimum Wages Act, 1948 requires the appropriate Governments, Central as well as States, to fix minimum rates of wages payable to the employees where employees are defined as persons employed for hire or reward to do any work skilled or unskilled, manual

or clerical etc. The minimum rates of wages are fixed in respect of those scheduled employments in which there are 1,000 or more employees employed in the entire state. The table below documents the minimum wages set for the unskilled workers in the metal industry of Uttar Pradesh.

Minimum rates of Wages for Unskilled Workers in Metal Industry fixed under Minimum Wages Act, 1948, for the State of Uttar Pradesh (as on 01 / 07 / 1997)

Name of Scheduled Employment	Minimum Wages (p.m) (w.e.f)	VDA if any (p.m) (w.e.f)	Total minimum wages (p.m)
Mechanical Transport Workshops	Rs. 750.00	Rs. 341.32	Rs. 1091.32
Automobile Repair Workshops	Rs. 750.00	Rs. 341.32	Rs. 1091.32
Metal Manufactories	Rs. 690.00	Rs. 330.52	Rs. 1020.52
Engineering Industries			
(less than 50 employees)	Rs. 690.00	Rs. 330.52	Rs. 1020.52
Engineering Industries			
(employing 50 - 500 employees)	Rs. 770.00		
	(1.4.1990)	Nil	Rs. 770.00
Mica Industry	Wages not fixed as number of workers is less than		
		1000	
Tin Plate Shaping & Printing	Rs. 690.00	Rs. 330.52	Rs. 1020.52
Engineering Industries			
(employing more than 50 - 500	Rs. 820.00		
employees)	(21.4.1989)	Nil	Rs. 820.00
Any foundry	Rs. 725.00	Rs. 329.94	Rs. 1054.94

Source : "Minimum rate of wages"- by R K A Subrahmaya

Functioning of Trade Unions

During the pre-independence period, Kanpur was the most important industrial centre of Uttar Pradesh. In the major industrial units specially owned by British, workers were organised under powerful Trade Unions mostly led by prominent social activists. The workers came to believe that their agitation against the British employers to achieve better working conditions, was in a way, supporting also the freedom movement. In the post-independence period, industries especially in Lucknow, Meerut and Ghaziabad started recording higher industrial growth. The number of registered Trade Unions for the State, as a whole did not however shows much increase in 1992. Both for number of unions and membership there appeared to be stagnating during 1993 as against continuous rise in the number of unions as also membership for all-India up to 1993. As per the information furnished by the Registrar of Trade Unions, U.P. during 1998-99, total number of unions in the selected 18 important industrial towns were reported to be 3,739.

Highest number of unions was recorded for Kanpur followed by Lucknow and Ghaziabad

Registered Number of Trade Unions

Year	Uttar Pradesh			
	Central Unions		State Unions	
	On register	Submitting returns	On register	Submitting returns
1992	208 E	-	1786	-
1993	208 E	-	1786	-

E- Estimated

Industry wise Registered Unions in Uttar Pradesh (1998-99)

S.No	Industry Name	Kanpur	Meerut	Saharanpur	Gorkhpur	Agra	Nainital	Jhansi	Ghaziabad	Gautam Budh Nagar	Faizabad	Varanasi	Ajamgarh	Lucknow	Bairli	Muradabad	Allahabad	Mirzapur	Dehradun	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1.	Hotel/Restaurant	10	01	01	--	10	03	--	06	02	--	06	--	06	01	04	01	--	02	53
2.	Transport	43	07	08	15	07	03	01	09	02	01	06	--	26	--	02	10	--	--	139
3.	Paper	--	--	--	--	--	08	01	10	02	01	05	--	05	03	04	01	--	02	42
4.	Agriculture	07	--	--	--	05	02	01	01	02	08	03	--	16	09	01	01	--	05	61
5.	Textile	119	10	05	11	04	07	07	26	02	--	08	06	25	04	09	12	01	08	264
6.	Tobacco/Bidi	01	01	--	--	--	--	--	03	02	--	08	--	05	--	03	08	--	02	33
7.	Sugar	11	70	38	97	05	14	--	10	02	32	12	08	44	51	43	--	--	03	440
8.	Tea	--	--	--	--	03	--	--	--	02	--	--	--	--	--	--	--	--	04	09
9.	Petroleum	--	--	--	--	--	--	--	--	02	--	--	--	--	02	--	01	--	--	05
10.	Chemical	40	08	03	02	05	03	03	24	--	02	08	--	09	06	03	01	21	25	163
11.	Engineering	72	15	10	03	16	10	10	40	--	12	15	02	19	12	03	24	01	08	272
12.	Rubber	17	08	03	02	02	01	--	08	--	--	--	--	06	04	--	03	--	03	57
13.	Bank/Insurance	88	10	--	07	14	05	05	03	--	07	06	03	46	10	05	07	--	04	220
14.	Distilary/Beveries	--	09	08	03	01	11	--	05	--	04	--	--	09	09	08	03	--	o3	73
15.	Central	12	03	01	01	18	02	02	08	--	--	16	--	08	01	--	01	--	15	88
16.	Miror Industry	02	--	--	--	21	--	--	12	--	--	--	--	01	--	01	--	--	10	47
17.	Defence	99	19	02	--	09	03	02	--	--	--	--	--	19	16	--	26	--	18	213
18.	Electric	24	03	29	--	02	07	01	37	--	--	04	--	22	01	--	--	21	06	157
19.	Education\ Nursing Home	11	--	03	--	07	05	--	03	--	04	--	--	19	03	--	02	--	05	62
20.	Gas	10	02	--	--	05	--	--	--	--	--	--	--	05	--	--	--	--	02	24
21.	Food/Drinks	42	10	04	07	04	--	01	09	--	02	--	--	21	04	02	04	01	--	111
22.	Leather	26	--	--	--	04	--	--	13	--	--	--	--	14	--	--	--	--	02	59

S.No	Industry Name	Kanpur	Meerut	Saharanpur	Gorkhpur	Agra	Nainital	Jhansi	Ghaziabad	Gautam Budh Nagar	Faizabad	Varanasi	Ajamgarh	Lucknow	Bairli	Muradabad	Allahabad	Mirzapur	Dehradun	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
23.	Metal/Iron	16	08	01	03	05	--	01	09	--	02	--	--	21	04	02	04	01	--	111
24.	Semi Govt.	75	17	16	24	26	22	07	26	--	06	--	--	82	12	04	15	04	18	354
25.	Oil	10	--	--	01	03	02	--	09	--	02	--	--	11	--	01	04	--	--	43
26.	Cinema	04	01	01	02	01	--	--	05	--	--	04	01	07	01	--	01	--	02	30
27.	Feritiliser	08	01	01	08	--	--	04	--	--	02	--	07	03	01	02	01	--	02	33
28.	Medicine/Medical	12	09	06	04	02	02	03	05	--	--	--	--	17	01	01	05	--	02	69
29.	Printing Press	19	13	16	09	03	--	--	08	--	--	05	--	16	--	02	09	01	01	102
30.	Shop/Commercial	36	02	03	04	05	--	--	17	--	--	06	--	05	01	--	03	01	07	90
31.	Unorganised	22	--	02	04	28	--	03	35	--	27	16	03	86	32	13	11	11	--	293
32.	Wood/Ferniture	--	--	--	--	--	--	--	--	--	--	--	--	03	03	05	--	--	--	11
33.	Electronic	--	--	--	--	--	--	--	01	--	--	--	--	13	02	02	01	--	--	19
34.	Cosmatic	--	--	--	--	--	--	01	--	--	--	--	--	--	01	--	--	--	--	02
35.	Journalist	--	--	--	--	--	--	01	--	--	04	03	--	05	--	--	--	--	--	13
36.	Telephone	--	--	--	--	--	--	01	--	--	--	--	--	06	--	01	--	--	--	08
37.	Woolen	--	--	--	--	--	--	--	02	--	--	05	--	02	--	--	--	--	--	09
38.	Flour	--	--	--	--	--	--	--	01	--	--	--	--	01	--	02	--	--	--	04
Total		**836**	**227**	**161**	**207**	**215**	**110**	**55**	**335**	**18**	**114**	**136**	**23**	**581**	**190**	**125**	**166**	**74**	**166**	**3739**

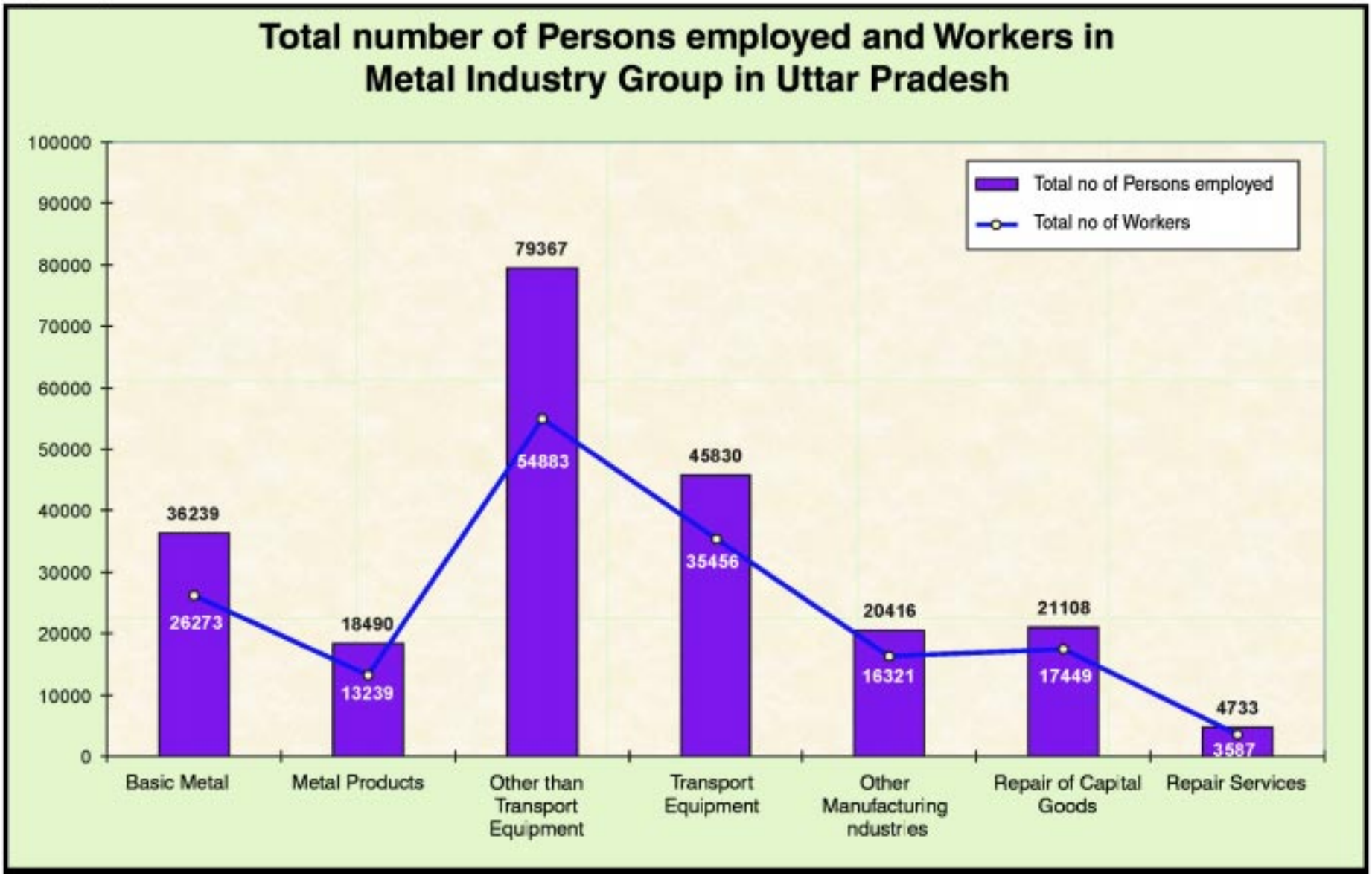
Key findings :

Indian Metal Industries' Characteristics in 1997-98 in *Uttar Pradesh*

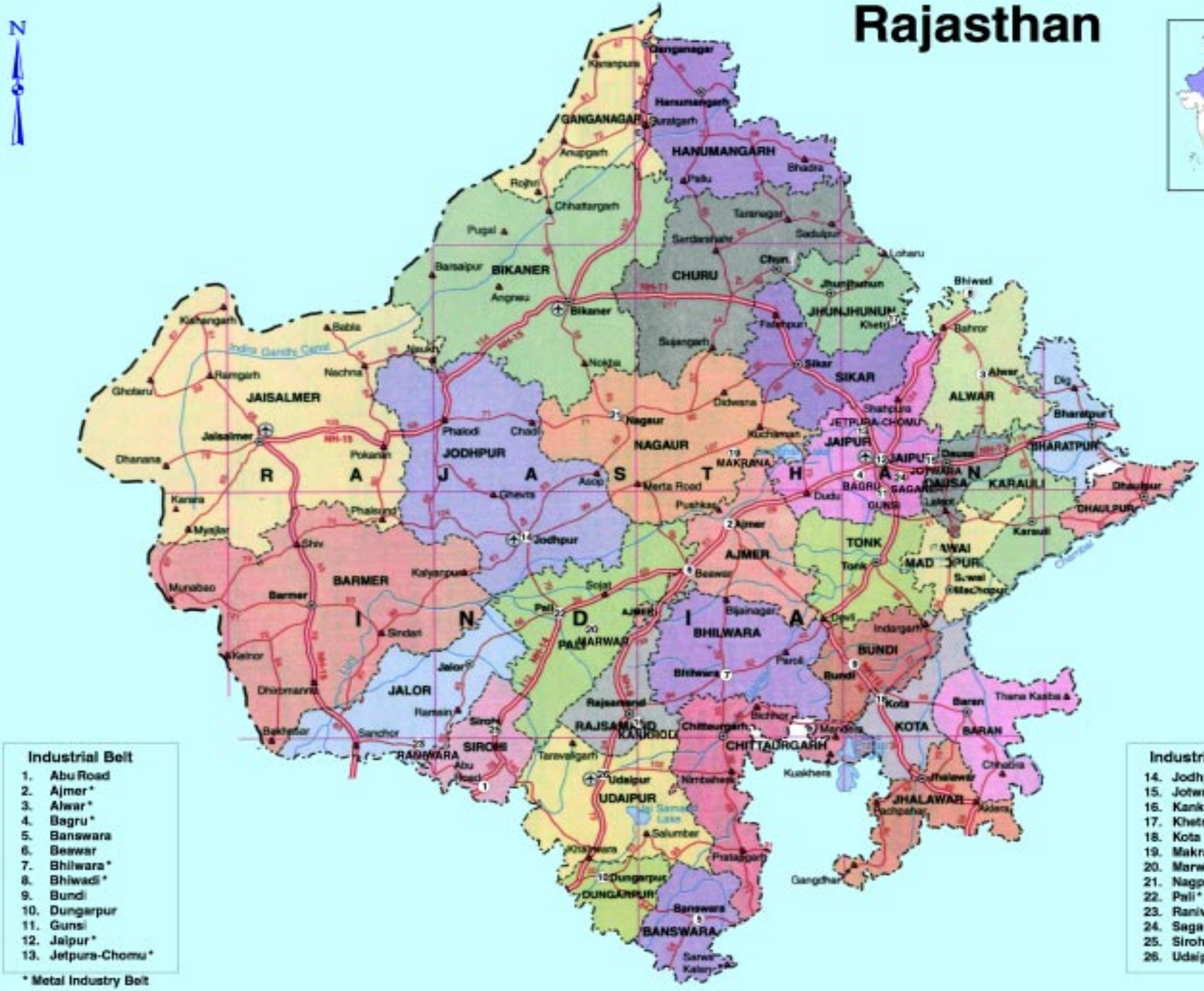
(Values in Rs. million*, others in numbers)

Characreristics → industry group ↓	No. of factories	Factories' % in State to all India	Productive capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs)
				Men	Women							
(1) Basic Metal & Alloys Industries	562	8	48464	19747	198	19945	6328	26273	9966	36239	19563	23837
(2) Manufacture of Metal Products & Parts, except Machinery & Equipment	630	8	5549	12093	76	12169	1070	13239	5251	18490	880	1072
(3) Manufacture of Machnery & Equipment Other than Transport Equipment	1071	8	33948	48862	2883	51745	3138	54883	24484	79367	6586	6708
(4) Manufacture of Transport Equipment and Parts	289	7	21373	32052	1224	33276	2180	35456	10374	45830	2856	3399
(5) Other Manufacturing industries	292	1	6455	9143	775	9918	6403	16321	4095	20416	799	964
(6) Repair of Capital Goods	180	0	436	16889	78	16967	482	17449	3659	21108	1242	1313
(7) Repair Services	145	7	675	3485	28	3513	74	3587	1146	4733	174	192
TOTAL	**3169**	**32**	**116900**	**142271**	**5262**	**147533**	**19675**	**167208**	**58975**	**226183**	**32100**	**37486**
All India figure	39659	100	1683618	1793383	86836	1880354	232310	2112664	814453	2927117	196089	2382511
% of State Total to All India fig.	8	8	7	8	6	8	8	8	7	8	16	2

Key findings :



Rajasthan



Industrial Belt

1. Abu Road
2. Ajmer *
3. Alwar *
4. Bagru *
5. Banswara
6. Beawar
7. Bhilwara *
8. Bhiwadi *
9. Bundi
10. Dungarpur
11. Gunsi
12. Jaipur *
13. Jetpura-Chomu *

* Metal Industry Belt

Industrial Belt

14. Jodhpur
15. Jotwara *
16. Kankroli
17. Khetri *
18. Kota
19. Makrana
20. Marwar
21. Nagpur
22. Pali *
23. Raniwara
24. Saganer
25. Sirohi
26. Udaipur *

Rajasthan

Part – I

An Overview of the State

Chapter - 1

Economic Scenario of Rajasthan

Although the State of Rajasthan is large in area, the total population in the State as per estimates thrown up by 2001 census is *56 million*. The density of population is low as a large part of the land area is in the midst of the Thar Desert region.

Despite such a low density of population, the work participation rate is about 39 %. i.e. much higher than that of Uttar Pradesh and marginally higher than the all-India average participation rate. This implies that, by and large, the people of Rajasthan are more active and committed to States' development. Another important feature is that the participation rate of females is about *27 %*.

In so far industrial development is concerned in Rajasthan, it was initiated in a big way only after the privy purses were abolished. The Royalty did not attach much importance to industrial development and the abolition of privy purses, in effect was the end of Royalty.

The State encouraged enterprises to invest by offering many concessions and as a result many known industrialists including Rajasthanis running industries outside Rajasthan set up industries especially in the small scale sector. To facilitate quick shifting, the State Government had set up many Industrial Estates in important locations for harnessing local talent and, generation of employment.

Overall Industrial Scenario in Rajasthan vis a vis All India

Year	No. of Factories		Productive Capital (Million)		Persons Engaged (000)		Ex Factory Value of Output (Million)	
	Raj. (%D)	All-India (%D)	Raj.. (%D)	All-India (%D)	Raj. (%D)	All-India (%D)	Raj. (%D)	All-India (%D)
1980-81	9573	96503	20865	431200	270	78540		610840
1985-86	4298 (-55)	101016 (4.67)	48781 (133.8)	838940 (94.55)	467 (73)	75840 (-3)		1201550 (96.70)
1988-89	5853 (36)	104077 (3.03)	68428 (3.03)	1163700 (38.71)	530 (13.5)	75580 (3)		1843490 (53,42)
1989-90	5088 (-13)	107992 (3.76)	76152 (12.6)	1407910 (20.98)	549 (3.5)	82570 (5)		2300420 (24.78)

	Raj. (%D)	All-India (%D)	Raj.. (%D)	All-India (%D)	Raj. (%D)	All-India (%D)	Raj. (%D)	All-India (%D)
1990-91	4707 (-7.4)	110179 (2.02)	85993 (12.92)	1761680 (25.12)	570 (3.8)	82790 (0.2)		2705640 (17.61)
1991-92	5192 (10.3)	112286 (1.91)	100181 (16.5)	1963710 (11.46)	594 (4.2)	83200 (0.4)		2991960 (10.58)
1992-93	4818 (-7.2)	119494 (6.41)	114810 (14.60)	2553610 (30.04)	615 (3.5)	88360 (6.20)		3686140 (23.20)
1993-94	4330 (-10.1)	121594 (1.75)	131678 (14.70)	3115220 (21.99)	636 (3.4)	88380 (0.02)		4257440 (15.49)
1994-95	4508 (4.11)	123010 (1.16)	146280 (11.08)	3649410 (17.14)	474 (-25.4)	92270 (4.40)	179460	5179870 (21.66)
1995-96	4960 (10.02)	134571 (9.39)	167470 (14.5)	4561310 (24.98)	516 (8.86)	102220 (10.78)	221380 (23.35)	6705140 (29.44)
1996-97	6233	134556 (-0.01)		4976820 (0.9)		97850 (-4)		6925200 (3.2)
1997-98	6453	135551 (O.7)		5865310 (1.7)		100010 (2)		8254230 (19)
1998-99		8840						

Source: Annual Survey of Industry (Factory Sector), Statistical abstract India, 97, 98, 99)
Sankhiki Rooprekha Rajasthan 1982-83 – 1993-94

* %D – Percentage in respect of the previous year

Mineral Deposits in Rajasthan

Districts	Minerals
1. Ajmer	Copper-ore, Lead, Zinc, Silver, Marble
2. Alwar	Copper-ore, Iron-ore, Lead, Zinc, Silver, Marble
3. Banswara	Copper-ore, Iron-ore, Lead Zinc, Silver, Marble
4. Bharatpur	Copper-ore, Iron-ore, Lead, Zinc, Silver
5. Bhilwara	Copper-ore, Iron-ore, Lead, Zinc, Silver, Marble
6. Bikaner	Marble
7. Bundi	Marble
8. Chittaurgarh	Copper-ore, Lead, Zinc, Silver, Marble
9. Churu	Copper-ore
10. Dausa	Copper-ore, Iron-ore, Marble
11. Dungarpur	Copper-ore, Marble
12. Jaipur	Copper-ore, Iron-ore, Marble

Districts	Minerals
13. Jhunjhunu	Copper-ore, Iron-ore Marble
14. Nagaur	Copper-ore, Marble
15. Pali	Copper-ore, Lead, Zinc, Silver
16. Rajsamand	Copper-ore Iron-ore, Lead, Zinc, Silver, Marble
17. Sikar	Copper-ore, Iron-ore, Marble
18. Sirohi	Copper-ore, Lead, Zinc, Silver, Marble
19. Swai Madhopur	Copper-ore, Lead, Zinc, Karauli, Silver, Marble
20. Udipur	Copper-ore, Iron-ore, Lead, Zinc, Silver, Marble

Export Performance

Rajasthan records a significant increase in exports in value terms in not only total exports but also over the years in respect of machinery, transport and metal manufacture for various States including Rajasthan.

Minerals & Metals

The state of Rajasthan is rich in the four prominent metallic minerals – copper, zinc, iron ore and lead.

Production and value of Minerals and Ores in the States of Rajasthan from 1996 to 1998)
(Metallic Minerals)

Year	Quantity (tonne)	% increase	Value	% increase	Quantity (tonne)	% increase	Value	% increase
Item	**Copper**				**Zinc**			
All India								
1996-97	3896	-17.75	2415870	0.6	276992	-4.17	1684678	-2.56
1997-98	4499	15.47	2583334	6.93	292498	5.59	1882540	11.74
Rajasthan								
1996-97	1232	—	575331	—	276668	—	1647205	—
1997-98	1471	19.39	909471	58.07	292233	5.62	1881501	14.22
Item	**Iron ore**				**Lead**			
All India								
1996-97	68159	1.09	14795799	9.16	60271	-2.13	574044	-3.75
1997-98	73445	7.75	16428361	11.03	60972	1.16	592757	3.25
Rajasthan								
1996-97	22	—	1459	-68.47	48492	—	414108	—
1997-98	6	-72.72	460	—	48820	—	414438	0.07

Part – II

Survey of Metal Industry

Chapter - I

Metal Industries in Rajasthan

The industrial scenario in the State of Rajasthan was analysed at great length and an attempt has been made to analyse enterprise-specific information collected from the chosen metal working industries.

Important Features of Metal Industries in Rajasthan vis-a-vis All India over the years

Name of The Industry/ Year	No. of Factories		Total Persons Engaged		Productive Capital (Million)		Gross Output Exfactory Value	
	Raj.	All India	Raj.	All India	Raj.	All India	Raj.	All India
Basic Metal & Alloys Industry								
1990-91		8620	691947					
1991-92		8675	662913					
1992-93		9020	684463					
1993-94		9222	680230					
1994-95		6373	12622	635929	10438.7	5089678	14852.4	5804091
1995-96	407	6820	741193	4759523		4070078		
1996-97	426	N.A.		N.A		N.A.		N.A.
1997-98	625	6917		670042		7985506		9352370
1998-99	614							
Manufacture of Metal Products & Parts, Except Machinery & Equipments								
1990-91				362942				
1991-92		13252		363897				
1992-93		14668		366637				
1993-94		14810		375242				
1994-95		7287	5377	250036	1491	501928	286.79	107857.9
1995-96	210	7984		284194		731436		149389.3
1996-97	218	N.A		N.A		N.A		N.A |
1997-98	216	8214		283394		920129		184465.1
1998-99	200							
Manufacture of Machinery & Machinery Equipments Other than Trasnport Equipments								
1990-91		11223		556789				
91-92		11299		524383				
92-93		11038		522286				

93-94		11170		969170				
94-95		13663	22106	393825	7925.5	2598657	1316.93	57735.6
95-96	336	14304		104725		3313117		79010.7
96-97	344	N.A		N.A		N.A.		N.A.
97-98	362	13964		905422		4410789		843407.8
98-99	373							
Manufacture of Transport Equipments & Parts								
1990-91		3493		491195				
1991-92		3511		478988				
1992-93		3760		490702				
1993-94		3889		485917				
1994-95		4057	8836	542683	1265.3	1115724	251.62	316168.2
1995-96	53	4106		621880		1855974		476641.4
1996-97	55	N.A		N.A		N.A		N.A
1997-98	58	4011		553585		37096590		494396.6
1998-99	59							
Other Manufacturing Industries								
1990-91		2358		121636				
1991-92		2335		120152				
1992-93		2326		122947				
1993-94		2454		123485				
1994-95		2059	4139	121508	1107.8	323662	174.71	65898.2
1995-96	84	2277		145810		487009		87956.5
1996-97	93	N.A		N.A		N.A.		N.A.
1997-98	112	2244		149592		630140		110668.1
1998-99	132							

Statutory Minimum Wages

Minimum wages is the bedrock of Social Protection and Social justice for the overwhelming majority of 320 million workforces in this country. However the bulk of the workers are exploited mercilessly by the employers, contractors and others by not paying them even the minimum wages fixed by the Government.

Every employer is obliged to pay to every employee engaged in a scheduled employment under him, wages fixed under the Minimum Wages act 1948. The following are the rates as applicable to the Metal Industry in the state of Rajasthan.

Minimum Rates of Wages for Unskilled Workers in Metal Industry fixed under Minimum Wages Act, 1948, for the State of Rajasthan (as on 01 / 07 / 1997)

Name of Scheduled Employment	Minimum wages (p.m) (w.e.f)	VDA if any (p.m) (w.e.f)	Total minimum wages (p.m)
Mechanical Transport Workshops	Rs 32.00	NP	Rs 32.00
Automobile Repair Workshops	Rs 32.00	NP	Rs 32.00
Small Scale Industries	Rs 32.00	NP	Rs 32.00
Engineering Industries	Rs 32.00	NP	Rs 32.00

Source : "Minimum rate of wages"- by R K A Subrahmaya

Functioning of Trade Union

In so far as growth of Trade Unions in Rajasthan is concerned, the trend in the membership of Trade Unions was upward in line with all-India pattern. If we go by the figures supplied by the Registrar of trade Unions, Rajasthan during the years 1993 to 2000 there was continuous increase not only in the number of unions but also in the membership as will be seen in the following Table. The highest number of unions was recorded in Jaipur during 2000 to 2001. Overall cumulative position till the end of 1999, number of unions and their membership was reported to be as 3,793 and 642,973 respectively.

Number of Registerd Trade Unions (Central Unions & State Unions)

S. no.	Year	Rajasthan			
		Central Unions		State Unions	
		On register	Sbmitting Returns	On register	Sbmitting Returns
1.	1992 (P)	15	15	3401	207
2.	1993 (P)	-	9	2693	255
3.	1994 (P)	10	3	2870	147

Source : ASI

Registered Trade Unions in Rajasthan & their Membership (In last 8 years)

S. no.	Year	No. of Regd. Trade Unions	Membership
1.	1993	2694	474138
2.	1994	2885	498785
3.	1995	3054	516033
4.	1996	3206	533788
5.	1997	3405	597045
6.	1998	3581	616889
7.	1999	3793	642973
8.	2000	3972	668060

Registered Trade Unions and their Membership in various Divisions of Rajasthan (2000 - 2001)

Year/Month	Jaipur		Kota		Ajmer		Jodhpur		Udaipur		Bikaner		Office		Total	
2000	**No.**	**Member**	**No.**	**Member**	**No.**	**Member**	**No.**	**Member**	**No.**	**Member**	**No.**	**Member**	**No.**	**Member**	**No.**	**Member**
January	--	--	--	--	1	40	4	5174	2	165	--	--	--	--	7	5379
February	2	49	--	--	1	150	--	--	--	--	--	--	--	--	3	199
March	4	351	1	80	--	--	3	153	--	--	2	80	1	15	11	679
April	7	900	3	33	--	--	6	1081	--	--	3	167	--	--	19	2181
May	4	453	2	427	1	140	1	50	2	695	1	1500	2	54	13	3319
June	4	250	6	341	4	274	3	435	--	--	9	772	2	112	28	2184
July	10	873	4	1365	--	--	4	327	5	1220	--	--	--	--	23	3785
August	6	582	2	23	1	25	5	1050	--	--	1	50	1	88	16	1818
September	6	500	3	21	--	--	10	638	2	96	1	75	3	895	25	2225
October	5	545	1	34	1	140	2	53	2	96	--	--	3	200	14	1068
November	5	446	1	52	1	250	3	575	--	--	--	--	--	--	10	1323
December	6	344	--	--	--	--	1	13	2	90	--	--	1	480	10	927
TOTAL	**59**	**5293**	**23**	**2376**	**10**	**1019**	**42**	**9549**	**15**	**2362**	**17**	**2644**	**13**	**1844**	**179**	**25087**
Registered Trade Unions & their Membership till 31.12.1999 →															3793	642973
Registered Trade Unions & their Membership till 31.12.2000 →															3972	668060
Registered Trade Unions & their Membership from 1999 to 2000 →															7765	1311033
2001																
January	4	477	--	--	--	--	3	425	3	130	2	97				
February	2	525	3	271	--	--	6	642	1	95	1	45				

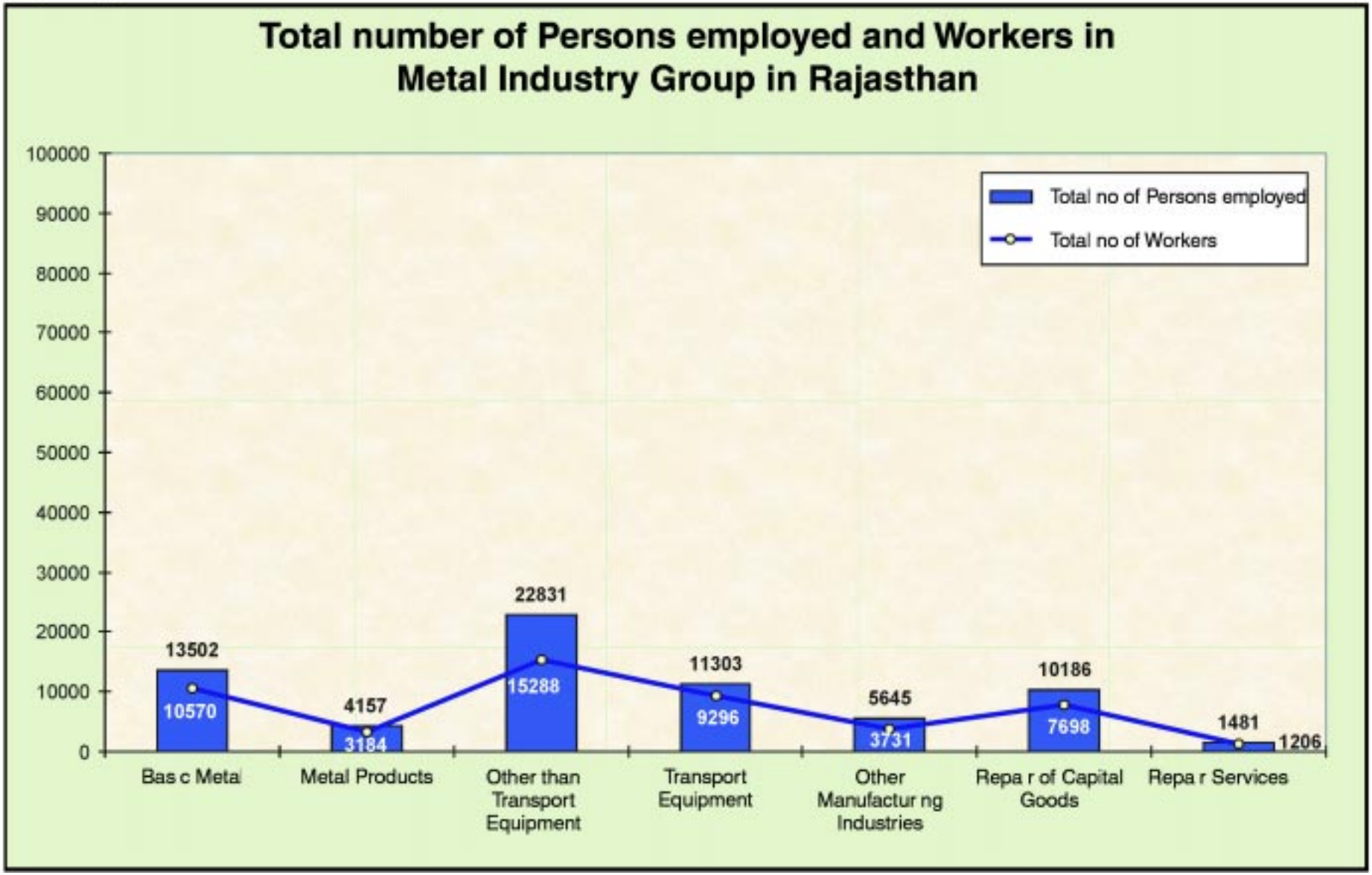
Key findings :

Indian Metal Industries' Characteristics in 1997-98 in *Rajasthan*

(Values in Rs. million*, others in numbers)

Characreristics → Industry group ↓	No. of factories	factories' % in state to all India	Productive Capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs)
				Men	Women							
(1) Basic Metal & Alloys Industries	339	5	8309	9694	13	9707	863	10570	2932	13502	6294	7572
(2) Manufacture of Metal Products & Parts, except Machinery & Equipment	153	2	2187	2724	0	2724	460	3184	973	4157	215	254
(3) Manufacture of Machnery & Equipment Other than Transport Equipment	309	2	15465	13536	483	14019	1269	15288	7543	22831	1665	1958
(4) Manufacture of Transport Equipment and Parts	65	2	1452	8241	42	8283	1013	9296	2007	11303	640	695
(5) Other Manufacturing industries	79	0	2709	3199	338	3537	194	3731	1914	5645	283	318
(6) Repair of Capital Goods	55	0	276	7542	72	7614	84	7698	2488	10186	607	645
(7) Repair Services	53	3	47	1188	9	1197	9	1206	275	1481	80	86
TOTAL	**1053**	**3**	**30444**	**46124**	**957**	**47081**	**3892**	**50973**	**18132**	**69105**	**9783**	**11529**
All India figure	39659	100	1683618	1793383	86836	1880354	232310	2112664	814453	2927117	196089	2382511
% of State Total to All India fig.	3	3	2	3	1	3	2	2	2	2	5	0

Key findings :



Karnataka

Industrial Belt

1.	Bangalore	14.	Bagalkot
2.	Tumkur	15.	Bellary
3.	Kolar	16.	Raichur
4.	Chitradurga	17.	Koppal
5.	Davangere	18.	Belgaum
6.	Dharwar	19.	Mysore
7.	Gadag	20.	Mandya
8.	Haveri	21.	Udupi
9.	Mangalore	22.	Shimoga
10.	Hubli	23.	Hassan
11.	Gulbarga	24.	Chikamangalur
12.	Bidar	25.	Kodagu
13.	Bijapur	26.	Harihar

Karnataka

Part – I

An Overview of the State

Chapter - I

Economic Scenario of Karnataka

Karnataka, India's eighth largest State both in terms of area and population has been in the forefront of industrial development in the country. According to the Industrial Entrepreneurial Memorandum, Karnataka stands 4th (after Gujarat, Maharashtra and Andhra Pradesh) in the list of favoured Indian industrial destinations. The State stands 3rd in the Government of India's foreign direct investment approvals list, after Maharashtra and Delhi. The Karnataka's main stress is on the Information Technology, Infrastructure development, food processing, garments and light engineering, which are State's core strengths. Karnataka stands first in the production of electronic equipment and raw silk. *(Source: "India 2001")*

Statistics of Karnataka

	Karnataka
Geographical Area (Thousand Sq. Km)	192
Total Population (In Millon) 2001 Census	53
Percentage Of Urban Population	33.98
No. Of Factories +	9,780
Factories Employment* (In Thousand) (1999)+	559
% Of Workers To Total Population (2001 Census)	49.1
Female Workers Participation Rates (2001)	39.9
% Share In Total Organised Sector Employment (Mar 1990)	5.4
Invested Capital (In Millon) +	15,654,540
Gross Industrial Output Per Capita (1997-98) (Rs.)	8,469
State Domestic Product At Current Prices (Rs. In Millon) (1997-98)	579,520
Per Capita Income (Rs.)	11,693

Source: + "India 2001" and rest from "Statistical Outline of India 2000-2001"

***** *Figures show average daily no. of workers at work, and not the total no. on payroll*

During the Global Investors' meet in Bangalore in June 2000, 254 projects, accounting for an investment of Rs. 270,500 Million, were cleared. Of the 47 mega industrial projects that were cleared, two have started production, while 11, including Enercon (India) Ltd. (investments worth Rs. 7450 Million), Bharat Mobile optical fibre cable (Rs. 2030 Million) and Cisco Systems Ltd. (Rs. 2200 Million), are in the implementation stage.

Karnataka leads the Indian IT industry and includes global giants like Siemens, Motorola, AT & T, Alcatel, Sony, Sanyo, GE and British Aerospace as well as national biggies like Bharat Electronics Limited, Indian Telephone Industries Ltd., BPL Ltd. and a host of others. With over 925 software companies employing over 80,000 IT professionals, Bangalore is the undisputed IT Capital of India. Apart from Indian IT majors like Infosys, Wipro, Tata Consultancy Services and Microland, the world's leading companies like GE, Texas instruments, CISCO, Digital, IBM, HP, Compaq, Motorola, Lucent Technologies, Microsoft, Sun Micro Systems, Oracle, Novell and several others have made Bangalore their home. In fact, about 50% of the world's SEI CMM Level 5 certified IT companies are located in Bangalore. The State's turnover of US $ 1 billion accounts for 20% of the national output, reports Latha Anand, The Hindu.

Besides leading the IT revolution and emerging as a force in biotech, Karnataka is also well known for its coffee and silk (70% of India's coffee and 70% of silk comes from Karnataka). Processed food exports of Rs 20,000 million, apparel exports of Rs 35,000 million and large output of Steel and Cement are some of Karnataka's industrial high points.

Part – II

An Overview of the State

Chapter - I

Industrial Scenario of Karnataka

The statistical survey establishes that there are about **9780 industries in all registered in Karnataka**, out of which nearly **5500 industries are situated in and around Bangalore** the capital of Karnataka, and the Balance are spread over the remaining parts of the State. The major portion of the **small-scale industries** is in and around Bangalore and they are generally categorized under the schedule employment of *Engineering Industries.* **The total number of employees registered in Karnataka is about 933,000 and out of which almost 534,000 employees are based in and around Bangalore.**

There are number of factories under joint and private sector and small scale industries. Some of the manufactured items include aircraft, rail coaches, telephone instruments, electronic and telecommunication equipment, glass, batteries, spark plugs, electric motors, textiles, silk, sandal oil, electrical goods, capacitors, mining metal tools, cement, motor cycles, fertilizers, etc. **The Visveswariah Iron and Steel Limited, and Bhadravati now owned by SAIL (Steel Authority of India) produces special steel, alloys and Ferro silicon with a rated capacity of Iron – 11,097, Manganese – 134,585, Copper – 87,802 (in tones); Gold – 429 kg and silver – 380 Kg per year.** The another important project of the State is the **Kudremukh Iron Ore Project** at Malleshwara in Chikmangalur district. Most of the **Mining and other Ore** extracting sectors are found in the coastal areas.

Number of reporting Metal Mines in Karnataka (1998-99)

Metallic Minerals									
Bauxite	**Chromite**	**Copper Ore**	**Gold**	**Iron Ore**	**Lead & Zinc**	**Manga-nese Ore**	**Others**	**Total Metallic Mines**	**Total Mines (includ-ing non-metallic mines)**
2	5	-	4	53	-	26	-	64	177

Source: Statistical Abstract India 1999.

Employment in Metal Mines (1997)

Copper	Chromite	Manganese	Gold	Iron Ore	Other Mines	Total
360	951	3213	6101	-	1684	19656

Source: Statistical Abstract India 1999.

Apart from this, about **2000 Contract employees** are also working in each of the below mentioned mining areas -

- Kudure Mukh Iron Ore
- Sandoor Manganese
- Kolar Gold Mines
- Hutty Gold Mines and
- Many other minor quarries / Mines

There are about **9,780 large and medium industries** in the state with an **investment of Rs. 15,654,540 million** providing **employment to about 8,68,932 persons**. There are more than **223 thousand small-scale industrial units** with an **investment of Rs. 28,000 million** providing **employment to nearly 140 thousand persons**.

Estimated Employment in the Public and Private Sectors in Karnataka in 1997-98,
(Figures in '000 No.)

Public Sector				Private Sector			Grand Total
Central Govt.	State Govt.	Quasi Govt.		Local Bodies	Large	Small	
		Central	State				
133.4	521.4	185.2	175.8	70.5	682.0	75	1843.6

Source: Statistical Abstract India 1999.

Average labour cost per Manday, Karnataka (All industries)

Average Labour Cost per Manday (Rs.)			
Census Sector		Sample Sector	
1993-94	1994-95	1993-94	1994-95
182.45	191.25	95.34	98.85

Source: Labour Bureau, Indian Labour Year Book, 1997.

Census Sector: Covers industries employing 50 or more workers with power and 100 or more workers without power.

Sample Sector: Covers industries employing 10-49 workers with power and 20-99 workers without power.

It is observed during the physical verification that some of the industries registered under the Factories Act have been closed and have not submitted the status of closure and cancelled their registration. Roshini Associates, Bangalore could identify nearly 30 to 40 such industries in and around Bangalore.

The reasons quoted for such closures are:

1. Inflation
2. Government Policies, taxation

3. Relaxation on free entry of Multi National Companies

4. Bad debts / exorbitant delay and also non payment from the customers

5. Pilferage and Mismanagement.

6. Cut throat competition and incapability to compete with foreign companies etc.

It is also observed that, the small-scale industries, especially Engineering Industries, are closing down in an alarming way and an **average of 800 to 1000 employees are becoming jobless every year** perhaps in each pocket of industries concentrated areas.

In some of the medium scale industries, the retrenchment and / or partial closures are seen. In addition to that, few industries are offering extra benefit against VRS (Voluntary Retirement Scheme), in order to reduce the strength / manpower.

Chapter - II

Conditions of Work

❖ **Average Working Hours:**

During the physical verification in and around Bangalore and as per the annual returns statistics it is observed that the average working hours in a week, in the organized sectors are about **40 to 45 hours**. This is because of the absenteeism and excess of labour turnover. On the contrary the contract labour in the Unorganized sector works on an average of 50 hours a week. Though the reasons for absenteeism may be plenty, the counseling part has not given any effective result.

❖ **Average Rate of Wages:**

Though the Minimum wages Board has fixed minimum rate of wages for different Schedule Employments **it is observed that most of the small scale industries are either not in a position to pay or incase they pay, the industry would not survive**. On interaction with the entrepreneurs it was elicited that the cost of raw materials are increased. The production cost and other fixed overhead costs inclusive of direct and indirect taxes are increased. On the contrary the buyers, the parent industry is not increasing the cost in purchase of the manufactured goods. In addition to this the high rate of interests to the financers directly affect the survival of the organizations.

❖ **Minimum Wages:**

The metal workers are categorized under the Schedule employment of **Engineering Industry,** in Karnataka. The employees are broadly categorized in to four groups based on their nature of work, which is classified as Un Skilled, Semi Skilled, Skilled and Highly Skilled. The government has constituted a Board consisting of Management Representatives, Trade Union Representatives and The Government representatives who would discuss and decide the rate of wages. The whole of the state has been classified into three Zones and the salaries / wages are paid as per the classified zone to each category of workmen. The Zones are basically derived based on the geographical area and also depending on the population of that particular area.

Zone I : *All City Corporations*

Zone II : *All other District Head Quarters and other towns with population of one lakh (100,000) and above.*

Zone III : *All other areas in the state not covered by Zone I and one II.*

Minimum Wages payable under Engineering Industry for the **year 2001 – 2002** are as follows, based on the government notification No. KAE 186 LMW 93, dated 08.01.1997, Published in Gazette dated 05.02.1997 giving effect from 01.01.1997. This Minimum Wages consists of two factors namely **Basic** and **Dearness Allow-**

ance (DA) [which is also called as Cost of Living Allowance]. The DA is based on the Consumer Price Index [which is also called as Cost of Living Index]. Cost of Living Index of various places is taken into consideration and once a year a state average is derived. Accordingly, depending on the variations, the increase in DA will be ascertained by the Minimum Wages Board. This variation is also called as Variable DA or VDA.

S.no	Class of Employment	Per Day	Zone-I	Zone-II	Zone-III
1.	**Highly Skilled**	Basic	64.00	62.00	60.00
		D.A.	32.95	32.95	32.95
		Total	**96.95**	**94.95**	**92.95**
2.	**Skilled**	Basic	55.00	52.00	49.00
		D.A.	32.95	32.95	32.95
		Total	**87.95**	**84.95**	**81.95**
3.	**Semi Skilled**	Basic	49.00	47.00	45.00
		D.A.	32.95	32.95	32.95
		Total	**81.95**	**79.95**	**77.95**
4.	**Un Skilled**	Basic	47.00	46.00	44.00
		D.A.	32.95	32.95	32.95
		Total	**79.95**	**78.95**	**76.95**

Note: 1. Consumer price index for the calendar year 2000 based on Simla Series (Base year 1960 = 100 points) is 2329 points. List of index neutralized with the basic is 1513 points. Hence the DA has to be paid at the rate of 3.5 paise per point per day, over and above 1513 points. i.e. 2329 – 1513 = 816 points. [816 x 3.5 = 2856 x 30 = 85680 this divided by 26 = 32.95] Therefore, the DA payable per day, for 2001 – 2002, is Rs.32.95/-.

Note: 2. The daily rate of wages and VDA of different categories of employees are Computed by dividing the total monthly wages by 26.

❖ **Statutory Welfare Benefits:**

1. Medical cares and benefits for the employee and his family - Employees State Insurance.
2. Earnings for the evening of his life – Gratuity.
3. Supporting savings for his family and himself – Employees Provident Fund.
4. Benefit as a right – Labour Welfare Fund.

❖ **Contract Labour / Contract Employees:**

During the physical verification of the survey work, it has been observed that in a

considerable section of the organized industries Contract Labourers are engaged. It is further observed that even in Public Sectors, these contractual employees are engaged. In some of the large-scale sectors these contract employees are said to be working on the main shop floor. **Though they perform work either on par with or better than the permanent employees, they are found not paid equally**.

In most of the unorganized sectors the work is being carried out by the contract labour. It is observed that in quite a few cases, that **Contract Labourers are not even paid the minimum wages applicable to the scheduled employment in which they are working**.

Contract Labourers are about 30% to 35% (as per the random survey/ physical verification result) of the total strength of the declared working employment, but their exact statistics are not brought on record, since the same could not be obtained through authentic confirmation.

Chapter - III

Industrial Relation

❖ Trade Unions

The total number of registered Trade Unions in Karnataka as on December 2000, which is figured as **4088** (as per the information given by the Deputy Labour Commissioner's office). Unions in the Karnataka are performing well in the organised sectors however services are also extended to the unorganised sector workers. Recent phenomena of Voluntary Retirement Scheme and massive layoffs and retrenchments are burgeoning concern among the trade unions. Bangalore and adjoining areas are the main industrial belt and especially Rajajinagar Industrial area and Pennya Industrial area need more attention from organising point of view.

❖ Industrial Disputes

Karnataka has the reputation of having very congenial relation among employers and employees. Though trade unions have to play a supportive and positive role in containing the industrial disputes and shouldering the positive welfare activities. The industrial dispute in the state has been 26 in the year 1997, which is relatively lower than other industrialised states.

Industrial Disputes in Karnataka, 1997

Number of Disputes	Number of Workers involved	Number of Mandays lost
26	99,670	428,683

Source: Statistical Abstract India 1999.

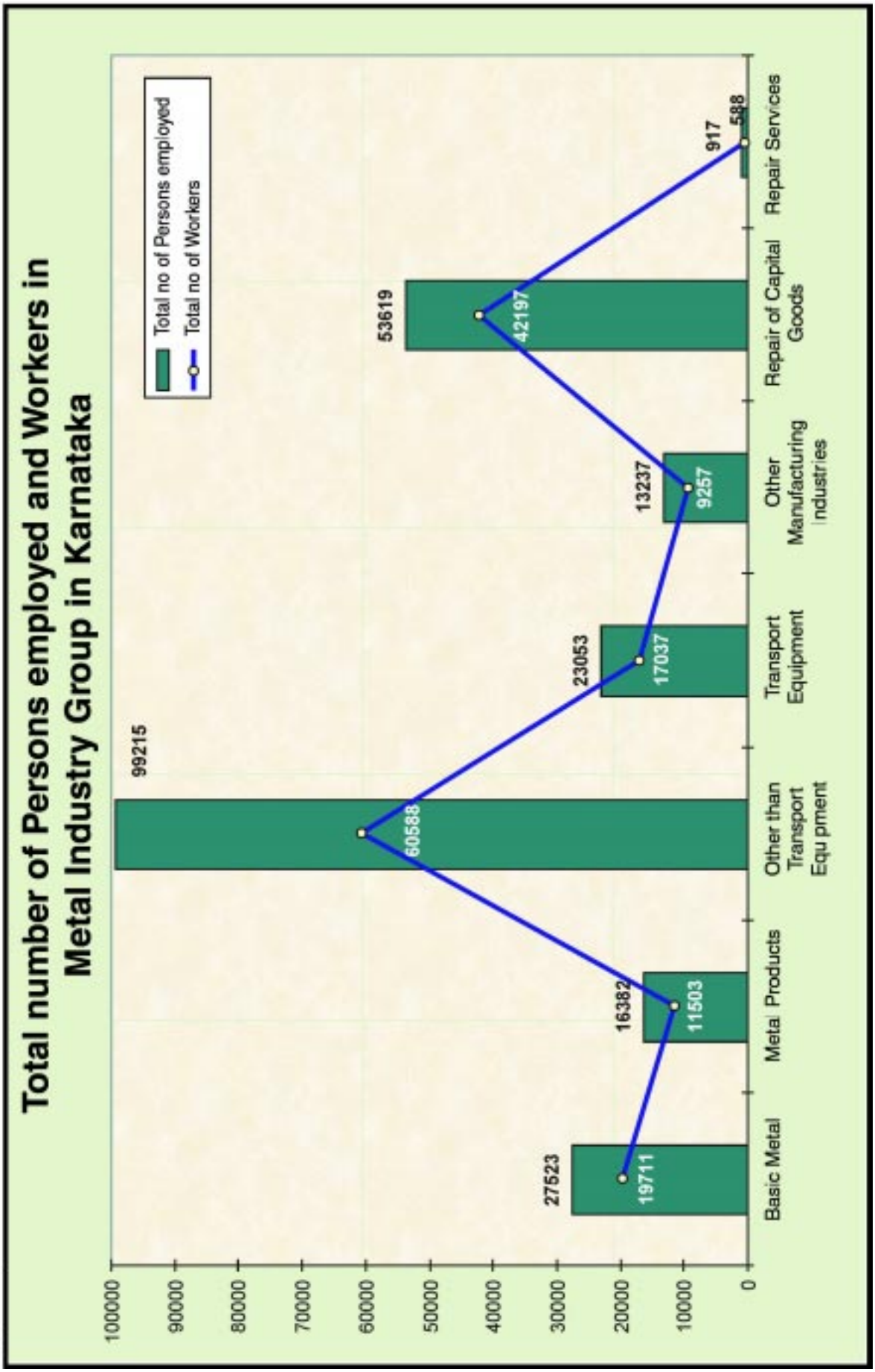
Key findings :

Indian Metal Industries' Characteristics in 1997-98 in *Karnataka*

(Values in Rs. million*, others in numbers)

Characreristics → / Industry group ↓	No. of factories	factories' % in state to all India	Productive capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs)
				Men	Women							
(1) Basic Metal & Alloys Industries	235	3	52688	14277	236	14513	5198	19711	7812	27523	15347	18704
(2) Manufacture of Metal Products & Parts, except Machinery & Equipment	457	6	4326	9758	268	10026	1477	11503	4879	16382	916	1059
(3) Manufacture of Machnery & Equipment Other than Transport Equipment	1129	3	50961	49250	7273	56523	4065	60588	38627	99215	7580	9753
(4) Manufacture of Transport Equipment and Parts	165	4	7684	13160	1557	14717	2320	17037	6016	23053	2015	2735
(5) Other Manufacturing industries	139	6	3522	5546	2976	8522	735	9257	3980	13237	877	1064
(6) Repair of Capital Goods	220	10	5572	41390	146	41536	661	42197	11422	53619	1085	1202
(7) Repair Services	33	2	198	587	1	588	0	588	329	917	34	40
TOTAL	**2378**	**6**	**124950**	**133968**	**12457**	**146425**	**14456**	**160881**	**73065**	**233946**	**27854**	**34557**
All India figure	39659	100	1683618	1793383	86836	1880354	232310	2112664	814453	2927117	196089	2382511
% of State Total to All India fig.	6	6	7	7	14	8	6	8	9	8	14	1

Key findings :



Maharashtra

Maharashtra

Part – I

An Overview of the State

Chapter - 1

Economic Scenario of Maharashtra

Maharashtra with a geographical area of 308 thousand square kilometers has played a pivotal role in the industrial development of the country. The state's focus has consistently been on developing a strong industrial sector, as it could not depend on agriculture alone for its development.

Statistics of Maharashtra vis-a-vis India

	Maharashtra	India
Geographical Area (Thousand Sq. Km)	308.0	3287.0
Total Population (2001) (In Millon)	96.7	1027
Percentage Of Urban Population (2001)	38.7	25.7
Electricity Gerneration (Billion KWH)	42.2	324.1
Working Factories (Thousand)	23.4	205.0
Factory Workers (Thousand)	1163.0	8431.0
Per Capita Gross Output (Rs.)	7859.0	31225.0
Gross Domestic Product (GDP) At Factor Cost (Rs. In Billion)	1014.5	7071.5
Per Capita GDP (Rs.)	12216.0	7963.0

The State Economy, as per the available indications, is expected to grow by 7.1% during 1999-2000. In 1999-2000 the sectoral growth rates of State Income are expected to be 4.7% in Primary Sector, 7.9% in Secondary sector and 7.5% in Tertiary Sector. The estimates of the State Income (i.e. Net State Domestic Product) of Maharashtra at current prices as per (new series 1993-94) prices, the State Income in 1998-99 was estimated at Rs. 1,454,200 million as against Rs 1,323,420 million in 1997-98. Thus the state economy has registered a significant growth of 9.9% in 1998-99 which is more than one and half times of 6.2% growth in 1997-98.

The liberalization process, which commenced in 1991 as part of the country's move towards a global economy, has witnessed an upsurge in industrial activity in the country in the form of increase in foreign as well as domestic investment in industries. Maharashtra has been a

significant beneficiary of this process. Of the total foreign direct investment proposals – amounting to Rs 1291.35 billion cleared between August 1991 and August 1997, Maharashtra has attracted a whopping Rs. 155.98 billion. This represents a 12.07% of the total foreign direct investment in the country. In terms of domestic industrial investment, Maharashtra remains in the forefront with a impressive investment of Rs. 1692.1 billion (23.20%) between August 1991 and October 1997.

In the industrial sector, it is incontestable that manufacturing is an integral segment and the results of the Annual Survey of Industries (ASI) reveals that the share of the state in the country's gross value of output from registered manufacturing sector during 1997 – 98 was 21% which is unmatched in the country.

Chapter - II

Industrial Scenario of Maharashtra

In the last three decades, the number of factories registered in Maharashtra increased from 8,233 to a staggering 27, 982. Employment rose from 7,87,000 to about 12,60,000. The productive capital has gone up more than 23 times and gross output by over 27 times during this period.

Almost 15% of the total number of manufacturing units is located in the region. The growth in the number of Factories and the labour employed in the state is testimony to the fact that it is considered a prime location for a wide range of industrial ventures.

The principal industrial zone in Maharashtra, is the Mumbai-Thane-Pune- belt, accounting for almost 60% of the state's total output. A sustained effort is being made to promote other industrial areas such as **Nagpur, Aurangabad, Solapur, Jalgaon, Raigad, Amravati and Ratnagiri**, by building the necessary infrastructure and creating an environment conductive to development. As of March 1997, the state had 125 co-operative industrial estates with 74 new units being facilitated. Further MIDC (Maharashtra Industrial Development Corporation) has planned 270 industrial areas of which 195 are already functional.

In terms of total domestic industrial investment, Maharashtra remains in the forefront. Between August 1991 and October 1997, the estimated domestic investment was Rs.7292.12 billion, of which Rs 1692.1 billion (23.20%) was in Maharashtra.

Out of the total 24 industry divisions covered under ASI, ten industry divisions contributed substantially to the industrial production in the State. These divisions are :

1. Chemical & chemical products
2. Machinery and equipment
3. Transport equipment
4. Rubber, plastic, petroleum and coal products
5. Food products
6. Basic metals
7. Metal products
8. Cotton Textiles
9. Synthetic fibre textiles and
10. Other manufacturing industries

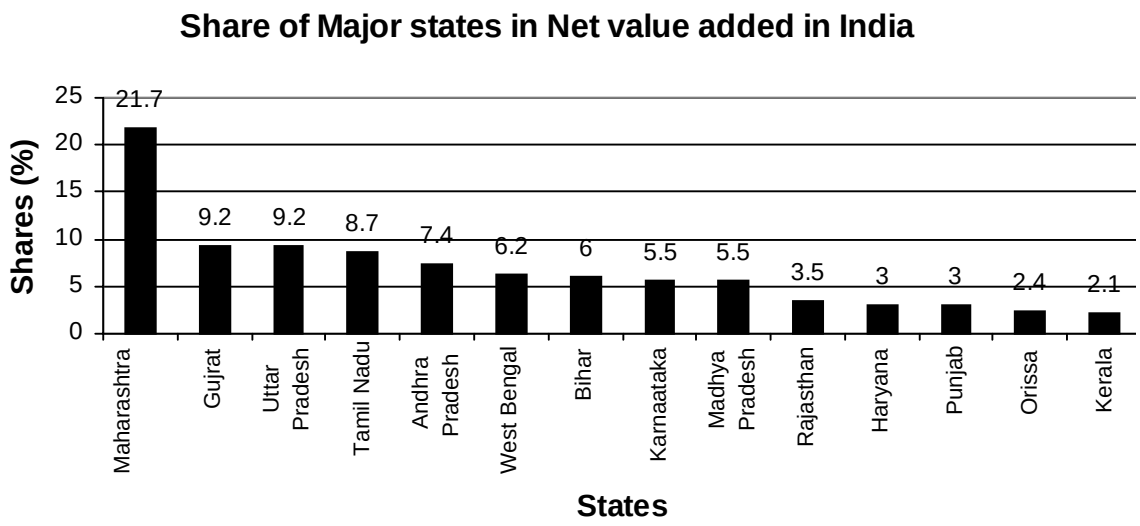
These industry divisions account for 74% and 68% of the net value added in the manufacturing sector in the State and at the All-India level respectively. In as many as 19 industry divisions, Maharashtra is one among the first 3 leading states in the country in respect of value output. Out of these 19, Maharashtra occupied the first position in 12 industry divisions.

The state had a major share in the value of output and value added in the country, in respect of each of the 9 industry divisions and 7 industry divisions respectively. The per capita net value added in the state was more than 2 times of All-India per capita net value added.

The industry divisions and its share are shown in the graph below

Out of total 24 industry divisions covered under Annual Survey of Industries (ASI), the ten previously mentioned industry divisions contributed subsequently to the industrial production in the state.

These ten industry divisions together accounted for 74% and 68% of the net value added in the manufacturing sector in the state and at the All-India level respectively. Based on the average Index Number of industrial production in India in respect of this industry division, it is surmised that the industrial production (manufacturing) in the state in the first nine months of 1999-2000 was higher by 6.9 % than that for the corresponding period in 1998-99. Maharashtra continues to be in the leading position on the industrial scene in India.



Industrial Policy of the State Government

The new 'Industry, Trade & Commerce Policy of Maharashtra' was announced in December 1995. The basic approach of the new policy is

a) Strong support to liberalization

b) Transparency & simplification of procedures

c) Private sector participation in development efforts and

d) Thrust on infrastructure in developing regions.

Steps decided to be taken under this policy are as follows:

1) To develop industrial township with excellent infrastructure at nine different locations in the state namely: Butibori (Nagpur), Sinnar (Nasik), Nandgaon Peth (Amravati), Waluj-Shendre (Aurangabad), Kushnur (Nanded), Kagal-Hatkanagle (Kolhapur), Mahad (Raigad), Nivali Phata (Ratnagiri) and Indapur (Pune). The area of these industrial townships will range from two to seven thousand hectares.

2) Single window system : - to create a suitable administrative nucleus in each of the industrial area where officers from different departments that are involved in setting up of the industrial units and are vested with necessary power would remain present and give time bound clearances to projects

3) To encourage privatisation of Government undertakings

4) To introduce certain modifications in Industrial location policy of Mumbai Metropolitan Region (MMR), 1993 so as to allow permission to industries which fall in Schedule II category in Zone-I to expand or change the product or progress, provided that the industries do not require any additional electricity or built up area for manufacturing purposes and that the overall pollution decreases as a result of such change.

5) For Micro enterprises (a) – to provide assistance to about Rs 0.12 million to small entrepreneurs through seed capital and bank finance to start ventures

   (b) – to exempt small scale sector in B, C, D and D+ areas from payment of stamp duties and registration fee or mortgage – deeds and (c) – to make imported (second hand) machinery of value less than Rs 10 million to qualify for benefits under package scheme of incentives.

6) To strengthen Maharashtra state Khadi & village industries board to implement new changes in interest subsidy scheme of the Central Government implemented through Khadi & Village Industries Commission.

7) An independent policy for agro- industries

8) To develop aqua parks along the coast through MIDC where the necessary infrastructure like cold storages, packaging, warehousing and ponds pisciculture would be provided to entrepreneurs.

So far under new industrial policy-

(a) The work of developing industrial township at Mahad (Raigad), Butibori (Nagpur) has been completed and work at Nandgaon Peth (Amravati), Waluj-Shendre (Aurangabad) and Kushnur (Nanded) is nearing completion. At the remaining 4 places the work is in progress.

(b) Single Window system has been started at 12 industrial township in the state.

(c) Under this policy, upto the end of December 1999, financial assistance was provided to 106,085 small entrepreneurs

(d) The State Government has introduced 'Agro industries Incentives scheme' for Agro industries established after 1st June 1999.

New Investment

The advent of liberalization has already given an impetus to the rapid industrial development of the state. Since liberalization (August 1991 – August 1999), 8283 projects involving an investment of Rs 1,741,190 million to be set up in Maharashtra have been registered with the Government of India. These projects are expected to generate 1,484,520 employments. Major part of this proposed investment would be in Konkan (47%), followed by Pune region (24%) and Nasik region (11%). Out of 8283 projects with an investment of Rs 527,470 million have started their production and 301491 employments generated. The remaining projects are at different stages of implementation.

The industrial development after liberalization is also characterized by the participation of Non- Resident Indians.

Newly Registered Factories in Maharashtra

During 1998, the number of factories newly registered in the State under the Factories Act, 1948 was 2,347. The employment in these factories was 72,000. Amongst the newly registered factories 82 % were employing less than 50 workers each. Among the newly registered factories higher proposition is accounted for the industry groups cotton textiles (28.4%), food products (10%), Wood & wood products (8.1%) Basic metals and alloys, metal products and parts (except machinery and equipment) (8.1%) and Chemical & chemical products (6.7%).

The thrust of the government policies is on encouraging the industries in areas other than the industrially advanced Mumbai-Thane belt. The total share of districts other than Mumbai and suburban districts, Thane and Pune in the factory employment went up to 44% in 1998 from 23 % in 1975. The remaining districts also accounted for a large factory employment (excluding cotton textiles industry which was affected by strikes in Mumbai) between 1975 and 1998.

Import - Export

During 1999-2000, the exports showed a strong recovery growing by 12.9 % in April-December 1999 in American dollar value. The export during the same period in 1999 was approx. US$ 27,419 million. During the same period imports estimated at US$ 34,458 million were higher by 9.0% than the corresponding imports of the previous year. The estimated trade deficit during this period in terms of US dollars, the trade deficit was US$ 7,039 million. The foreign currency assets with Reserve Bank of India stood at US$ 31,941 million by the end of January 2000 as against US$ 29,522 million by the end of March 1999.

Export from Maharashtra state and India, (Rs. in million)

Year	**India** (Rs.)	**Maharashtra** (Rs.)	**Share of Maharashtra** (%)
1995-96	1064640	356510	33
1996-97	1175250	413570	35
1997-98	1410300	438840	31
1998-99	1428000	390420	27

During January to December 1999, the government of India issued 36 letters of intent and 8 industrial licences for establishing industries in the state. The letter of intent issued to industries during 1999 were mainly for Engineering (5), Electrical Machinery (4) and textile (3). The industries to which letters of intent were issued belong to Mumbai, Thane, Raigad, Pune and Nasik districts. In addition , from January to August 1999, the Government of India received 721 industrial entrepreneurs memoranda for setting up industrial units in Organic Chemical (102), Electrical machinery (94), Engineering (45), Iron and Steel (35), Plastic (31) and Textiles (28).

Industrial Production

The estimates of 1999-2000 surmised that the industrial production (manufacturing) during this period registered an increase of about 6.9%. as compared to 5.4% in 1998-99.

Industrial Relations

The number of work stoppages in the factories due to strikes and lockouts in 1999 was 63 and was lower than of 82 in 1998. The number of mandays lost due to work stoppages including continuing work stoppages was 4.9 million mandays during 1999 as against 5.4 million mandays in 1998.

Industrial Disputes in Maharashtra State

Items	1981	1986	1991	1996	1998	1999*
Textile Mills:						
1. No. of strikes & lockouts	66	28	10	15	9	18
2.workers involved	564	108	61	304	57	105
3. mandays lost	47,365	5.920	2.368	5,313	8,050	8,725
Engineering Factories:						
1. No. of strikes & lockouts	119	65	59	30	22	20
2. workers involved	412	140	110	97	39	34
3. mandays lost	16,209	10,927	14,462	15,603	22,470	22,090
Miscellaneous						
1. No. of strikes & lockouts	451	207	148	56	51	25
2. workers involved	1,031	584	423	1,313	260	90
3. mandays lost	31,489	36,131	29,663	13,112	23,395	18,280
Total						
1. No. of strikes & lockouts	636	300	217	101	82	63
2. workers involved	2,007	831	594	1,715	356	229
3. mandays lost	95,054	52,978	46,493	34,028	53,915	49,095

Development in Small Scale Industries (SSI) Sector

The SSI sector plays a vital role in economic development of the country and is an important channel for creating low capital cost employment opportunities. For speedy growth of SSI, the State Government has already brought about simplifications in the SSI registration procedures and accordingly reduction in documents has been brought about. The state government has modified the scheme of SSI unit in lines of the central Government. Accordingly to this, the investment limit for SSI units has been reduced from Rs. 30 million to 10 million. For tiny sector, the investment ceiling has been increased to Rs. 0.2 million from Rs. 50,000. The total number of small scale units in the state as on 31st December 1999 was 287,712. The total capital and employment of these SSI units was RS. 536,960 million and 2.132 million respectively. The corresponding figures up to end of December 1998 were Rs. 337,320 million and 1.892 million respectively.

Maharashtra Industrial Development Corporation (MIDC)

To accelerate the process of industrialization in the state, the state government is implementing following important programs through MIDC.

1. Establishment of 63 Growth centres covering entire state.
2. Establishing mini industrial areas to cover all the talukas in the state.
3. Establishment of 5 central government Growth centres.
4. Setting – up of 'Five Starred' Industrial Area at 9 centres as declared in the 'Industrial Trade and Commerce Policy, 1995' of the State.

The MIDC provides developed plots with necessary infrastructure facilities like internal roads, water, electricity and other internal services to entrepreneurs in the industrial area to promote rapid, orderly growth and development of industries in the state. The MIDC has also constructed sheds in the selected industrial areas. The number of areas entrusted for development to the MIDC was 270 at the end of March 1999. Of these 270 industrial areas, 94 were large, 67 were growth centres (62 of the state government and 5 of the central government) and 109 were mini-industrial areas.

Performance of MIDC in 1997-98 and 1998-99 :

Items	**1997-98**	**1998-99**	**Cumulative as at the end of 1998-99**
Plots carved out	2,935	2,338	48,552
Plots allotted	2,254	1,100	40,783
Sheds constructed	10	—	3,891
Sheds allotted	20	—	3,646
Units in production (new)	1,133	1,545	21,330
Units under construction	581	596	3,857
Total Investments in Units (Rs. Million)	**35,830**	**3,670**	**248,830**

Employment

According to Factories statistics the average daily factory employment in the state at the end of June 1999 was 1.236 million. Employment provided under the Employment Guarantee Scheme (EGSS) during April-December 1999 was 78.2 million mandays as against 63.2 million mandays provided during the corresponding period of the previous year. In addition to this, under the Jawahar Gram Saamrudhi Yojana and Employment Assurance Scheme, employment of 31.2 million mandays was provided during the period April to December 1999. The number of new registrations in Employment and Self employment Guidance centre in 1998-99 was 0.785 million showing an increase of 12.6 % over that of the previous year. The number of persons on live register of the Employment and self Employment centres as at the end December 1999 was 4.184 million.

PART – II

Survey of Metal Industry

Chapter - I

Factory Employment

The factory employment covers the employment in the factories registered under section 2m(i), section 2m(ii) and section 85 of the Factories Act, 1948. The latest available data on factory employment at All-India level, which relate to the year 1997, indicate that, Maharashtra state continued to occupy the first position in respect of the average daily factory employment amongst all the states in the country.

From the available data on factory employment for Maharashtra State, which pertain to the year 1998, the average daily factory employment was 1.252 million, which was less by three percent than that in 1997. The manufacturing sector, which accounted for 91 % of the total factory employment, comprised of consumer goods industry, intermediate goods industry and capital goods industry. The major industry division wise employment is shown in following table.

Factory Employment in Major Metal Industries in Maharashtra State

Industry Division	Average Daily Employment			Percentage to total		
	1961	1997	1998	1961	1997	1998
Basic Metal & alloys industries, metal products and parts (except machinery and equipment)	49,853	152,126	146,963	6.3	11.8	11.7
Capital goods	121,920	323,355	296,784	15.5	25.0	23.7
Machinery and equipments (other than transport equipment)	59,396	183,696	171,938	7.5	14.2	13.7
Transport equipment 7 parts	46,867	104,529	93,299	6.0	8.1	7.5
Other manufacturing industries	15,657	35,130	31,547	2.0	2.7	2.5

Unlike the decline in employment in consumer goods industry, the employment in intermediate goods industry and capital goods industry registered a sizeable growth in the last 38

years. In intermediate goods industry the employment increased from 0.13 million to 0.37 million. Similarly the employment in capital goods industry also increased substantially from 0.12 million in 1961 to 0.3 million in 1998.

The average daily factory employment in state increased at an annual rate of 1.9% during the period 1961 to 1981. However, thereafter, the growth in factory employment in the state declined mainly due to strikes in the cotton textile industry in Mumbai in 1981-82 and in other factories in Thane and Pune belt in 1984. There has been some recovery in total factory employment in the recent year and it has surpassed the pre-strike period level of 1.192 million in 1981, in the year 1993. During the period 1961 to 1998 the factory employment registered an annual growth rate of 11.115 %. However, the annual growth rate in the total number of factories for the same period was much higher being 3.85%.

Employment in Metal Industries in Maharashtra State

Industry Group	Average Daily employment					
	1981	1986	1991	1996	1998	Halfyearly 1999
Basic Metal & alloys industries, metal products and parts (except machinery and equipment)	1,310	1,181	1,301	1,448	1,470	1,435
Machinery and equipments (other than transport equipment)	1,786	1,728	1,614	1,773	1,719	1,676

Workers as per Population Census

According to the 2001 population census the portion of workers in the total population of the state was 51%, which is higher than 43% in 1991. The proportion of the workers was subsequently higher in the rural areas (49.7%) than that in urban areas (32.3%).

Male Workers

The proportion of male workers to the male population in the state marginally declined from (53.7%) in 1981 to 52.2 % in 1991. This proportion in the rural areas (53.2%) of the state was higher than that in the urban area (50.6%). The proportion of male workers to total workers in the state was 62.8%.

Female Workers

Unlike the decline in the proportion of the male worker, the proportion of female workers to the female population in the state increased from 30.6%) in 1981 to 33.1 % in 1991. This proportion in the rural areas of the state was 46.0%, which was significantly higher than the proportion of female workers to total workers in the state, was 37.2%.

Employment Market Information

Under the Employment Market Information (EMI) program, data are collected for public and private sector establishment in Mumbai employing 25 or more workers and in the rest of the state establishments employing 10 or more workers. The total employment in these establishments at the end of March 1999 was 3.81 million as against 3.85 million at the end of March 1998, showing a marginal decrease in employment by one percent over the last year.

Of the 3.81 million employment at the end of March 1999 reported under EMI program, 2.3 million employment was in the public sector. In the public sector employment, the share of employment in Local Bodies was 29 % than 23%, Central Government 19%, Quasi Central Government 18% and Quasi-State Government 11%. Of the 3.81 million employment, the employment in the private sector in the state at the end of March 1999 was 1.51 million against 1.52 million as at the end of the previous year.

Chapter - II

Statutory Minimum Wages in Metal Industry

The State of Maharashtra has projected distinct minimum rate of wages for the Skilled, Semi-Skilled and Unskilled employees in the metal industry. The Definition of Skilled, Semi-Skilled and Unskilled employees present a slight variation from segment to segment as per the characteristics of each segment.

For purpose of clarity while fixing the minimum rate of wages payable to the employees in the metal industry, the state has also been divided into Zones for each segment of the industry.

Watch Strip Manufacturing

- ❖ Zone I comprises of all areas, within the limit of Municipal Corporation and adjoining MIDC areas.
- ❖ Zone II comprises of all the other areas in the State Of Maharashtra not included in Zone I.

Schedule of Minimum Wages Payable in Watch Strip Manufacturing Industry

Class of Employees	Minimum Rates of Wages per Month	
	Zone I (Rs.)	**Zone II** (Rs.)
Skilled	1,300.00	1,200.00
Semi - Skilled	1,200.00	1,150.00
Unskilled	1,150.00	1,100.00

Cycle Mechanic Workshops

- ❖ Zone I comprises of all areas, falling within the limit of Municipal Corporation of Greater Mumbai, New Mumbai, Thane and Kalyan-Dombivili.
- ❖ Zone II comprises of all the other areas in the State Of Maharashtra not included in Zone I.

Schedule of Minimum Wages payable in Cycle Mechanic Workshops

Class of Employees	Minimum Rates of Wages per Month	
	Zone I (Rs.)	**Zone II** (Rs.)
Skilled	1,750.00	1,600.00
Semi - Skilled	1,700.00	1,550.00
Unskilled	1,650.00	1,500.00

Automobile Repairing Workshops and Garages

- Zone I comprises of all areas, within the limits of
  - i. Municipal Corporation of Greater Mumbai
  - ii. The Uran, Panvel, Karjat and Khalapur Talukas of Raigad District
  - iii. Thane, Vasai, Bhiwadi, Kalyan and Ulhasnagar Talukas of Thane District
- Zone II comprises of areas within local limits of
  - i. The city of Pune as constituted under the Bombay Provisional Municipal Corporations Act, 1949
  - ii. Nagpur taluka of Nagpur District
  - iii. Karvir taluka of Kolhapur District
  - iv. Solapur North taluka of Kolhapur District
  - v. Nashik taluka of Nashik District

Schedule of Minimum Wages payable in Automobile Repairing Workshops and Garages

Class of Employees	**Minimum Rates of Wages per Month**		
	Zone I (Rs.)	**Zone II** (Rs.)	**Zone II** (Rs.)
(A) Skilled (Grade - I)			
i. Foreman	1593.00	1390.00	1295.00
ii. Service Engineer	1593.00	1390.00	1295.00
iii. Head mechanic	1593.00	1390.00	1295.00
iv. Assistant Mechanic	1593.00	1390.00	1295.00
v. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1593.00	1390.00	1295.00
(B) Skilled (Grade - I)			
i. Fitter	1311.00	1217.00	1170.00
ii. Mechianist	1311.00	1217.00	1170.00
iii. Painter	1311.00	1217.00	1170.00
iv. Tinsmith	1311.00	1217.00	1170.00
v. Carpenter	1311.00	1217.00	1170.00
vi. Electrician	1311.00	1217.00	1170.00
vii. Welder	1311.00	1217.00	1170.00

viii. Upholsterer	1311.00	1217.00	1170.00
ix. Blacksmith	1311.00	1217.00	1170.00
x. Borer	1311.00	1217.00	1170.00
xi. Fuel Pump Injector	1311.00	1217.00	1170.00
xii. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1311.00	1217.00	1170.00
(C) Semi - Skilled			
i. Assistant Fitter	1186.00	1029.00	1045.00
ii. Assistant Tin-smith	1186.00	1029.00	1045.00
iii. Assistant Carpenter	1186.00	1029.00	1045.00
iv. Assistant Electrician	1186.00	1029.00	1045.00
v. Assistant Welder	1186.00	1029.00	1045.00
vi. Assistant Upholsterer	1186.00	1029.00	1045.00
vii. Assistant Blacksmith	1186.00	1029.00	1045.00
viii. Assistant Borer	1186.00	1029.00	1045.00
ix. Assistant Painter	1186.00	1029.00	1045.00
x. Bateryman	1186.00	1029.00	1045.00
xi. Servicemen i.e. employee who besides cleaning the vehicles also attends to tightening of bolts, hanging of oil and or greasing and cleaning of filter	1186.00	1029.00	1045.00
xii. Petrol Pumpman / Petrol pump assistant.	1186.00	1029.00	1045.00
xii. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1186.00	1029.00	1045.00
(D) Unskilled			
i. Cleaner	1030.00	990.00	920.00
ii. Person who washes the vehicles	1030.00	990.00	920.00
iii. Vehicle attendant	1030.00	990.00	920.00

iv. Ramp Serviceman	1030.00	990.00	920.00
v. Hammerman	1030.00	990.00	920.00
vi. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1030.00	990.00	920.00
(E) All other employees (employed in occupation not covered by any of the occupations mentioned above	Not less than minimum rate of wages payable for unskilled employees in this zone	Not less than minimum rate of wages payable for unskilled employees in this zone	Not less than minimum rate of wages payable for unskilled employees in this zone
(F) Employees below 18 yrs of age employed in any of the categ-ories of employment mentioned above in this coloumn	80% of the rates fixed for adults in respect of the same category of employment	80% of the rates fixed for adults in respect of the same category of employment	80% of the rates fixed for adults in respect of the same category of employment

Manufacturing Steel Furniture

- ❖ Zone I comprises of all areas, within the limits of the Municipal Corporations of Greater Mumbai, New Mumbai, Thane, Kalyan-Dombivili and the areas of the Municipal Councils of Ambernath, Ulhasnagar, Bhiwandi.
- ❖ Zone II comprises of all other Municipal Corporations in the State Of Maharashtra not included in Zone I.
- ❖ Zone III comprises of all other areas in the State Of Maharashtra not included in Zone I.
- ❖ Zone IV comprises of all other areas in the State Of Maharashtra not included in Zone I, II and III.

Schedule of Minimum Wege Payable in Manifacturing Steel Furnitures

Class of Employees	**Minimum rates of wages per month**			
	Zone I (Rs.)	**Zone II** (Rs.)	**Zone III** (Rs.)	**Zone IV** (Rs.)
Skilled (Per day)	73.00	70.00	65.00	61.00
Semi - Skilled (Per day)	63.00	60.00	55.00	51.00
Unskilled (Per day)	53.00	50.00	45.00	41.00
Clerk (Per month)	1638.00	1560.00	1430.00	1326.00

Engineering industry

- ❖ Zone I comprises of all areas, within the limits of the Municipal Corporations or Municipal Councils or Gram Panchayat as the case maybe, of

Brihan Mumbai, New Mumbai, Thane, Kalyan-Dombivili, Khopoli, Pune Kirkee, Pimpri, Chinchwad, Bhosari, Lonikalbhor, Hadapsar and Cantonments of Pune and areas falling within 10 kilometers from the limits of such Corporation, Municipal Council, Gram Panchayat or Cantonments as the case may be.

- ❖ Zone II comprises of all areas within the limits of the Municipal Corporations of Nagpur, Kolhapur, Aurangabad, and Nasik and the MIDC areas surrounding thereof.
- ❖ Zone III comprises of all areas within the limits of the Municipal Corporations of Amravati and Sholapur and Municipal Council of Akola, Bhandara, Chandrapur, Jalna, Jalgaon, Ahmednagar and cantonemnt areas and MIDC areas surrounding the said Corporations or Municipal Councils.
- ❖ Zone IV comprises of all other areas in the State Of Maharashtra not included in Zone I, II and III.

Schedule of Minimum Wages payable in Enginering Industry

Class of Employees	Minimum rates of wages per month			
	Zone I (Rs.)	**Zone II** (Rs.)	**Zone III** (Rs.)	**Zone IV** (Rs.)
Skilled	2300.00	2275.00	2225.00	2200.00
Semi - Skilled	2250.00	2225.00	2175.00	2150.00
Unskilled	2200.00	2175.00	2125.00	2100.00
Clerk	2300.00	2275.00	2225.00	2200.00

Manufacturing Household Articles / Utensils with Metals

- ❖ Zone I comprises of all areas, falling within the limit of Municipal Corporation of Greater Mumbai, New Mumbai, Thane, Kalyan-Dombivili Nagpur, Pune, Pimpri - Chinchwad areas within the limits of Ambernath, Bhainder, Virar and Vasai Municipal councils or Grampanchayat and areas falling within the 30 kilometres from the limits of such Corporations or Municipal council or Grampanchayat.
- ❖ Zone II comprises of all the other areas in the State Of Maharashtra not included in Zone I.

Manufacturing Utensils/ Household Articles with Metals

Class of Employees	Minimum rates of wages per month	
	Zone I (Rs.)	**Zone II** (Rs.)
(I) Supervisor		
i. Technical Supervisor	1813.50	1787.50
ii. Foreman	1813.50	1787.50

(II) Clerical Staff		
i. Store / Godown Clerks	1888.50	1838.50
ii. Clerk/ Typist Clerk	1888.50	1838.50
(III) Skilled - A		
i. Turner / Machinist	1761.50	1735.50
ii. Fitter	1761.50	1735.50
iii. Spinner cum Pattern maker	1761.50	1735.50
iv. Melter - Grade I	1761.50	1735.50
v. Moulder - Grade I	1761.50	1735.50
vi. Welder- Grade I	1761.50	1735.50
vii. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1761.50	1735.50
(IV) Skilled -B		
i. Spray Painter	1735.50	1709.50
ii. Chemical coater	1735.50	1709.50
iii. Melter - Grade II	1735.50	1709.50
iv. Rolling machine Operator hot front	1735.50	1709.50
v. Spinner	1735.50	1709.50
vi. Charak / Buff polisher	1735.50	1709.50
vii. Electro plater	1735.50	1709.50
viii. Andizer	1735.50	1709.50
ix. Moulder - Grade II	1735.50	1709.50
x. Welder- Grade II	1735.50	1709.50
xi. Employees doing the work of “hath ghadai”	1735.50	1709.50
xii. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1735.50	1709.50

(V) Skilled -C		
i. Hot Rolling Machine Operator back	1683.50	1657.50
ii. Cold Rolling Machine Operator front	1683.50	1657.50
iii. Turner die polisher	1683.50	1657.50
iv. Pressman / Press operator	1683.50	1657.50
v. Wireman	1683.50	1657.50
vi. Billet heating furnace man	1683.50	1657.50
vii. Annealing furnace men rolling	1683.50	1657.50
viii. Handicraftsman / naxiwala	1683.50	1657.50
ix. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1683.50	1657.50
(VI) Semi - Skilled		
i. Cold Rolling Machine Operator front	1657.00	1631.00
ii. Cold Roll Pressure man	1657.00	1631.00
iii. Rolling Cutting	1657.00	1631.00
iv. Circle Cutter	1657.00	1631.00
v. Shearing Machine Operator	1657.00	1631.00
vi. Hand Cutter	1657.00	1631.00
vii. Bidding Machine Operator	1657.00	1631.00
viii. Annealing Furnaceman (utensil)	1657.00	1631.00
ix. Assembling (revitting, fitting and similar handiwork)	1657.00	1631.00
x. Driller	1657.00	1631.00
xi. Kalaiwala	1657.00	1631.00
xii. Grinder	1657.00	1631.00
xiii. Employees by whatever name called doing the work of		

the nature done by persons falling under the foregoing entries	1657.00	1631.00
(VII) Unskilled adult employees		
i. Helper	1631.50	1605.50
ii. Watchman	1631.50	1605.50
iii. Mazdoor	1631.50	1605.50
iv. Peon/Office boy	1631.50	1605.50
v. Picking/Cleaning/Dhulai Mazdoor	1631.50	1605.50
vi. Sweeper	1631.50	1605.50
vii. Packer	1631.50	1605.50
viii. Scapper	1631.50	1605.50
ix. Oil man	1631.50	1605.50
x. Employees by whatever name called doing the work of the nature done by persons falling under the foregoing entries	1631.50	1605.50
Apprentices		
Apprentices employed in any of the categories of employment	75% of the rates fixed for adults in respect of the same category of employees	75% of the rates fixed for adults in respect of the same category of employees

The average Consumer Price Index Number (1982 = 100 New Series) of ten centres in the State of Maharashtra for working class is the cost of living index number applicable to the employees employed in the scheduled employment. The competent authority appointed by the Government of Maharashtra, after the expiry of every six months calculates the average of the cost of living index number of ten centers applicable to the said employees for these six months and certain the rise of such average over 375 points for *Watch Strip Manufacturing*, 445 points for *Cycle Mechanic Workshops*, 279 points for *Manufacturing Steel Furniture*, 375 points for the *Engineering Industry*, 279 points for *Manufacturing Utensils and/or Other Household Articles With Any Metals*. For such rise of every point special allowance or the **cost of living allowance** payable to the employees for each of the six months immediately following the six months in respect of which such average has been calculated, shall be at the rate of Rs. 3.85 for *Watch Strip Manufacturing*, Rs. 3.25 for *Cycle Mechanic Workshops*, Rs. 3.90 for *Manufacturing Steel Furniture*, Rs. 3.85 for the *Engineering Industry*, Rs. 5.00 for *Manufacturing Utensils and/or Other Household Articles With Any Metals* per month in respect of all zones.

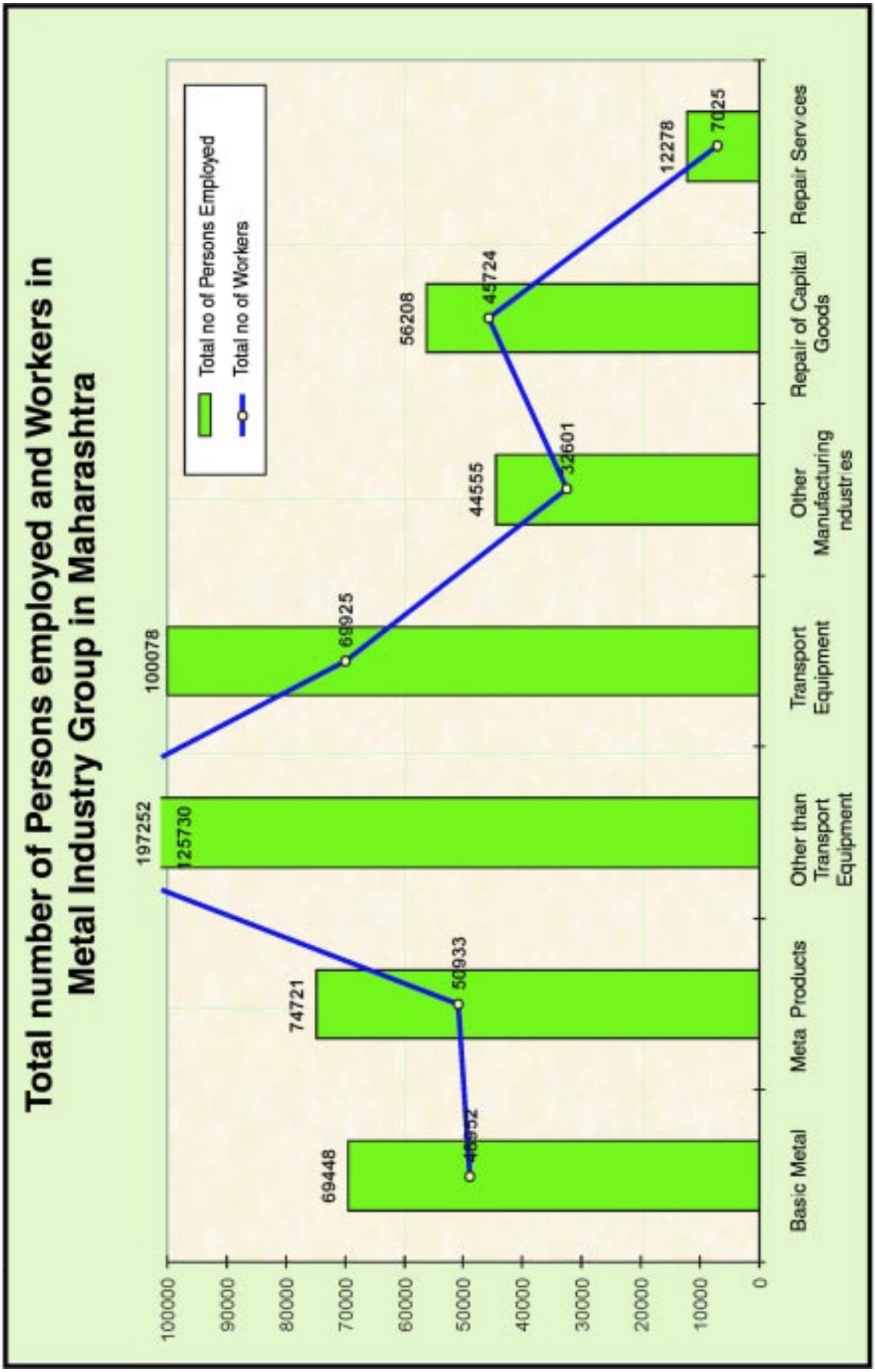
Key findings :

Indian Metal Industries' Characteristics in 1997-98 in *Maharashtra*

(Values in Rs. million*, others in numbers)

Characreristics → Industry Group ↓	No. of factories	factories' % in State to all India	Productive Capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs)
				Men	Women							
(1) Basic Metal & Alloys Industries	983	14	118693	36485	102	36587	12365	48952	20496	69448	46166	58075
(2) Manufacture of Metal Products & Parts, except Machinery & Equipment	1833	22	36722	43234	1347	44581	6352	50933	23788	74721	5254	6605
(3) Manufacture of Machnery & Equipment Other than Transport Equipment	3021	22	122498	97885	10471	108356	17374	125730	71522	197252	19293	24291
(4) Manufacture of Transport Equipment and Parts	689	2	80979	64740	900	65640	4285	69925	30153	100078	12536	15164
(5) Other Manufacturing industries	746	33	29673	21307	7095	28402	4199	32601	11954	44555	2737	3227
(6) Repair of Capital Goods	458	20	2810	44890	628	45518	206	45724	10484	56208	4495	4887
(7) Repair Services	280	14	2660	6914	54	6968	57	7025	5253	12278	842	947
Total	**8010**	**20**	**394035**	**315455**	**20597**	**336052**	**44838**	**380890**	**173650**	**554540**	**91323**	**113197**
All India figure	39659	100	1683618	1793383	86836	1880354	232310	2112664	814453	2927117	196089	2382511
% of State Total to All India fig.	20	20	23	18	24	18	19	18	21	19	47	5

Key findings :



Gujarat

Industrial Belt
1. Ahmedabad
2. Alang
3. Anand
4. Ankleshwar
5. Palanpur
6. Bharuch
7. Bhavnagar
8. Bhuj
9. Bilimora
10. Dhrangadhra
11. Gandevi
12. Gandhidham
13. Hajira
14. Halol
15. Jamnagar
16. Junagarh
17. Navsari
18. Kandla (EPZ)
19. Koyalio
20. Mithapur
21. Mory
22. Patan
23. Rajkot
24. Sikka
25. Surat
26. Surendranagar
27. Umergaon
28. Unjha
29. Vadodara
30. Wankaner

Gujarat

Part – I

An Overview of the State

Chapter - 1

Economic Scenario of Gujarat

GUJARAT- on the western most tip of India with a varied climate, on abundance of mineral wealth, the longest coastline and the inherent entrepreneurship had taken on the challenge to become a model state. From the 60's when it achieved statehood to today, there has been an all round growth of the state.

Gujarat has come to be reckoned as one of the **leading industrialised states in India today.** Over a period of last four decades the state has **reduced its dependence on agriculture** and recorded an impressive performance through **accelerated pace of overall economic development.**

The credit for right kind of evaluation and subsequent execution of infrastructure projects benchmarked with the best in the world including roads, rail and ports goes not only to the successive bureaucrats but also to the people of this land who crystallised economic development with -

- Pragmatic planning
- Even distribution of funds
- Apt fiscal policies
- Resurgence of technology-oriented agricultural growth

Discovery of the oil basins, the emergence of the golden corridor, the provision of **equal opportunities to the tribal, the backward classes, education to the girl-child** and 'n' number of other visionary policies have led this state from achieving one success to the other.

Although the population of Gujarat is only 4.93% of that of India, it accounts for 10% of India's consumption, 16% of total exports and 30% of stock market capitalization. The people of Gujarat known for their entrepreneurial skill, keen business sense and professional attitude, provides a strong incentive to do business in the state. In addition, the pro-business approach of the state government has further facilitated Gujarat's relentless drive towards industrialization by making it to emerge as the choicest location for entrepreneurs to set up their ventures.

	Statistics
Area	196,024 sq.km. (5.96 % of India)
Capital	Gandhinagar
Climate	Tropical

Population (2001)	50.5 million
Urbanization	34.49% (compared to national average of 25.72%)
Population Density (2001)	258 persons per sq.km. vis-a-vis 324 national average
Official Language	Gujarati
Contribution to GDP	11%
Net State Domestic Product (1998-99)	Rs. 888,220 million
Share of Manufacturing in SDP	40.7% in 1997-98 at current prices
Income per capita (1998-99)	Rs. 18,792

Advantages in Gujarat

- Strategic location giving easy accessibility to the western, Middle East and African markets.
- Longest coastline in India – 1600 Kms. Dotted with 41 ports –1 major, 11 intermediate and 29 minor. Mundra, a recently commissioned port offers 15 metres of permissible draft, the maximum in the country.
- Rich heritage of entrepreneurial skill.
- High level of industrialization: Investment equivalent to US$ 26 billion underway.
- Offering a highly productive and peaceful workforce.
- Present power generating capacity 8,017 MW- plans afoot to raise it to 11,281 MW by 2002 AD.
- Excellent road network –length exceeding 72,00 Kms linking all the regions of the State.
- An efficient rail network connecting all important centers in the state –rail length 5,227 Kms.
- Highest number of Airports – 10 – amongst all the state in India with Ahmedabad – an international airport.
- Second highest in India in terms of industrial production, lignite, petroleum and moulding sand.
- Fourth largest in India in overall mineral production.
- Quality network of educational institutions.
- Excellent law and order situation.
- Professional approach of the Government and civil service.

While various states in India are repositioning themselves in the wake of the process of economic reforms, Gujarat today has attained the status of **the most favoured location for industrial investment in the country.** Of all the Indian states, Gujarat accounts for a

sizeable chunk of investments approved through Industrial Entrepreneurs Memoranda and letters of Intent. As per the statistics published by NIC, **Gujarat accounts for over 18% of the total investments approved from August '91 to March '99 (post-liberalisation period) in India.**

Chapter - II

Industrial Scenario of Gujarat

Over last 39 years, Gujarat has been **successful in diversifying its industrial base.** At the time of its formation as a separate state in 1960, textile was the only major industrial sector developed in Gujarat. The state has now emerged as a major manufacturer of cotton textiles, man-made textile fabrics, inorganic chemicals like soda ash and caustic soda, organic chemicals, agro chemicals like fertilizers and pesticides, detergents and cosmetics, dyes and dye-intermediates, drugs and pharmaceuticals, petroleum and petrochemical products including plastics, food processing especially dairy products, sugar, edible oil and vanaspati, paper and paper boards, cement, steel re-rolled products, industrial machinery including machine tools and so on.

Industrial Park

In order to ensure planned industrial development, the concept of industrial park has evolved in Gujarat since last four decades. At potential growth centers, industrial infrastructure for optimum utilization. For the purpose, Gujarat industrial Development Corporation (GIDC) which is a nodal agency for providing land factory sheds to the industries coming up in Gujarat has over the years development 257 industrial estates, where apart from the industrial infrastructure, the Corporation also provides other amenities like fire stations, banks post offices, housing schools, hospitals, hotels and canteens, shopping centers etc. in major developed industrial estates. To check the mean ace or pollution, GIDC has also taken specific measures such as developing effluent collection network, common effluent treatment plants, disposal systems for the treated effluents and tree plantation. GIDC is setting up 10 mega industrial estates. Proposals for industrial parks with private sector investment and international collaboration are welcome.

Engineering Industry in Gujarat

Engineering is the backbone of all the sectors of industry and therefore is rightly reckoned as the Mother Industry, as it supplies plant and equipments to all the industries. Gujarat over the years, has witnessed an **impressive development in engineering sector,** especially in the manufacture of foundry products, electrical equipments, machine tools and precision engineering products.

Industrial machinery is another important segment, which has also recorded a **sizeable growth** especially in the sectors like chemical machinery, textile machinery, dairy machinery, paper machinery, material handling equipments, plastic procession machinery, packaging machinery, Pharmaceutical machinery and so on. Another important sector that had emerged in Gujarat is ship-breaking yard at Alang, near Bhavnagar. Alang can boast of being the largest ship-breaking yard in Asia.

Being a maritime state, the **potential for shipbuilding and ship-repairing** also exist in Gujarat. With the large investment in pipeline, the engineering industry has immense potential in industrial machinery, construction and fabrication work. Bright potential also exists for

setting up engineering ancillaries. With the development of chemical and petrochemical sector in the state, pollution control equipments also offer investment opportunities.

Gujarat State's Industrial Policy

Gujarat State has taken rapid strides in industrial development, and as a result, its rank among the states has steadily risen from 8th in 1960 and it is now vying for the top slot. From its traditional textile base, it has diversified into fields like Chemicals, Petrochemicals, Engineering, Pharmaceuticals, Dyes & Dyes Intermediates, Food Processing, Agro-based Industries, dairy, Edible Oils and a host of other sectors. The economic reform process has provided a boost to the efforts of the State towards rapid industrialisation.

In terms of the new investments, Gujarat topped the list among the States in the country in 1994. Through the successive incentive policies and other investor-friendly measures the State has been striving not only to accelerate the total flow of investment into industrial sector, but also to attract more and more flow to the backward regions with the aim of achieving equitable development of the State.

The policies pursued by the State have resulted in increasing employment opportunities, promoting entrepreneurs belonging to the weaker section and also in improving the export performance of the State. Besides visible and notable success in promoting investments in general, dispersal of growth to neglected regions and removing regional imbalances have also been achieved.

The **diversified base of industry** in the State has the **capacity to sustain long-term growth.** Industrial Development in the State has also resulted in a structural change in the occupational pattern with share of primary sector in State Domestic Product going down and the contribution of secondary and tertiary sector growing substantially. Another heartening development in this regard in that those who started small ventures in the 60's and 70's capitalizing on the support provided by the State, have grown very fast, entering into the big league and thereby widening the entrepreneurial base of the State.

The industrial policy of the State has to adequately dexterously deal with all factors which have a symbiotic relationship with the industrial development. To pinpoint these factors, it is necessary to identify the areas of concern emerging as a sequel to the process on so far, and take appropriate corrective and curative measures, lest they should hinder growth in future. Briefly, the areas of concern are as follows

1. The State has been able to attract substantial flow of investment to the industrial sector during last couple of decades. But, although a significant part of this investment has gone to backward talukas, **quite a few of the backward areas have been left out from the process of industrial development.**

2. As result of massive investments in the petrochemical, chemical and pharmaceutical industries, the State is facing problem of **pollution in the major industrial growth centers.** The problem is mainly confined to the older industrial estates, which were set up prior to the enactment of various pollution control and environmental protection legislations.

3. The State Government's effort at Human Resources Development, particularly in

imparting vocational and technical education to its youth, are proving inadequate to meet the requirement of rapid industrialization of the state. Unless corrective action is taken in time, **there may soon be shortages of skilled and professional manpower in the State.**

4. Gujarat enjoys comparatively better infrastructural facilities but even these are proving to be inadequate to meet the requirement of new investments. **Significant investment has to take place for improving infrastructure** including social infrastructure.

5. One of the main objectives of the New Industrial Policy introduced by Government of India is to make Indian industry globally competitive. **Existing industrial sectors will have to undergo substantial restructuring through technological up gradation and modernization in order to improve productivity, quality or products, designs, consumer satisfaction and cost-effectiveness in order to survive.**

6. The State enjoys an enviable record of industrial peace and harmony in industrial relations. However, **overall productivity and quality consciousness need significant improvement** in order to ensure that the local industry not only survives international competition but also gets established in markets abroad.

7. In order to ensure competitiveness of the local industry, the gestation period of a project going into commercial production has to be kept to the minimum. To achieve these, statutory provisions, rules regulations and procedures relating to grant of approvals at the State level for setting up and running of industrial units will have to be comprehensively reviewed. **Routine and irrelevant restrictions will have to be removed to ensure** necessary clearances without any delay.

8. The organization set up by the State Government to promote and facilities the process of industrialization of the State has played a significant role in the rapid industrialization of the State. However, their objective and functioning need to be reoriented to conform to the requirements of era of liberalization.

Objectives

While employment generation and balanced regional development will continue to be among the objectives of the new industrial policy of the State, it is necessary in the present context to have wider focus while determining the objectives in view of the concerns expressed. Investment in industry has a multiplier effect on employment generation as rapid industrialization can create large-scale employment directly and indirectly and this can absorb the under- employed of primary sector as also provide employment to the educated unemployed. Parameters of sustainable development should underscore our efforts of industrialization in future. Environmental protection and pollution mitigation are most important in this regard. Priorities in investment should be guided by the goal of achieving equity in development. To achieve this, there has to be a profound bias in favour of the backward regions and backward and poor people. With these considerations, the objectives of the new industrial policy are enumerated below:

1. Accelerate **development of the backward areas of the State.**

2. **Creation of large-scale employment opportunities** to absorb the swelling ranks of unemployed.
3. **Increase** the total flow of **investment** to industrial sector.
4. Accelerating **the development of infrastructure and human resources** to sustain the long-term growth
5. Achieving **sustainable development.**
6. Encouraging entrepreneurship and developing technology to promote "Swadeshi Spirit"

Gujarat Industrial Development Corporation(GIDC)

Gujarat Industrial Development Corporation (GIDC) was established in 1962 to cater to an important requirement of industries, the infrastructure facilities. Over the years, the Corporation has approved 271 industrial estates through out the length and breath of the State. The corporation, as **a premier infrastructure development agency in the country** today, identifies location suitable for industrial development and provides infrastructure services, by way of acquiring land, constructing internal roads and effluent disposal facilities, providing water and power in the industrial estate and amenities like Fire Stations, Canteens, Banks, Post-offices, Housing School, Hospitals, Shopping Centres, etc. in major industrial estates. Within each estate, normally various size of plots are available with a minimum plot of area of 500 sq. Even plots of large sizes are made available as per the requirement of mega projects. The sheds offered are also of various sizes and all these are available in easy installments.

The GIDC is constantly striving to improve upon and update the facilities offered, in anticipation of the needs of new and advanced industries and to make sure that a new industry has everything it needs to be a tremendous success.

Gujarat Small Industries Corporation Ltd. (GSIC)

Gujarat Small Industries Corporation Ltd. (GSIC) was also set up in 1962 with the specific purpose of encouraging the growth of small-scale industries in Gujarat. Its services include the procurement and distribution of essential raw materials from any part of India or India or abroad at economical rates. It offers credit facilities to eligible units for procurement of pig iron, iron and steel, coke and coal, ferrosilicon, titanium dioxide, rubber, paraffin wax and plastics, Besides pig iron, GSIC has also recently taken up handling of *Stainless Steel Authority of India Ltd*., and authorized stock of *Rashtriya Ispat Nigam Ltd*.

GSIC is also assisting small industries and entrepreneurs for purchase of raw materials either imported or indigenous by assisting for opening of L/Cs or payment of customs duty and purchase of required raw materials by direct payment to the suppliers at a moderate service change and interest rate. GSIC also services requirements of big projects, industries, Government departments and others by way of procuring the required products from SSI units and quoting rates in tenders for various supplies. This enables to promote the activity of SSI sector for higher production without having the botheration for marketing their manufactured products. At the same time, the purchasers receive the material at the most reasonable and competitive price. GSIC committed to make even the smallest entrepreneur's dream come true.

Part – II

Survey of Metal Industry

Metal Industries and Trade Unions

Data was collected on the position of size of the unit, industrial relations, minimum wages, etc. on about 107 companies in Gujarat. The industries were involved in the production of the following –

Auto Assemblies	Capillaries	Grey Iron Castings
Auto components	Cars	Integral Shaft Water pump Bearings
Auto Part-Silencers	Cast Iron Castings	Jeeps
Automotive Castings	Cranes	LCV
Autorikshaws	Cupola	Load Body
Ball Bearings	Fabrication	Machine Shop
Bucket Elevators	Food Processing Plants	Metal Rolling Coils
Metal Rolling Sheets	Scooters	Tapper Roller Bearings
Motorcycles	Scooters-Assembly Units	Tempo
Multispindle Machinery	Separation Engines	Textile Machine Components
Oil Coolers	Shell Moulding Casting	Thermostat Timers
Plant Heat Exchange	Ship Building	Trucks
Press Shop	Ship Repairs	

Enterprises in the Metal Industry

Proprietary/Partnership Units

With regard to actual size, these are very small units employing between 10 to 25 workers. Naturally they are in small-scale industrial sector and hence exempted form most of the labour laws. That is reflected in the minimum wage levels which rage from hardly Rs. 750/- to Rs. 3000/- per month. Industrial relations in these units are fair at some places and bad at others. But very few unions are recognized by the employers.

Private Limited Companies

Units falling into this are mostly in the medium category. Their employment varies from 30 to 250 at most of the places. Yet there are a few which employ between 250 and 500 workers. The maximum number is at 800. The minimum wages paid is mostly between Rs. 3000/- to Rs. 5000/- per month. These are a few places where the wage is above Rs. 5000/- with a maximum of Rs. 7000/- Industrial are fairly good at most of the places. Workers are unionized into one union avoiding internal union rivalry. The Unions practically at all the

places are recognized by the employers and hence relations between the worker and the union are quite cordial.

Public Limited Companies

Units under this type are either in higher medium scale or large-scale category. They employ around 150 to 500 workers on an average. But there are many whose workforce size is between 500 and 1000 while a couple of them cross the figure of 1000. However not much difference is found in the wage scales when compared to those in Private Limited companies. The minimum wages is mostly in the range of Rs. 2500/- to Rs. 5000\-. At some places it goes upto Rs. 7000/- and in a few cases, beyond the same. Industrial relations are not very uniform. They are fair or good at some units. They are while bad at a few places that might be because of multiplicity of unions in some places. There the employers have recognized union in some places. There the employers have recognized unions but only one union out of them.

Multinational Companies

These are large sector units employing more than 500 workers at most of the places. The maximum strength has reached the figure of 1500. the minimum wage level is far higher than the other types of units. The wages is nowhere less than Rs. 6000/- at any place and it goes as high as Rs. 11,000 in some units. At all the places the unions are recognized by the employers and the relations with workers are quite good.

Employment

Strength of the workforce varies considerably. It ranges from just 13 workers to 13,500. ranges wise the position is as follows:

Strength of Workforce	Percentage of Units
Upto 50	27
101-250	7
251-500	25
501-1000	17
Above 1000	12
Total	**100**

Contract Workers

It is found that in about one third of the units, contract system has been prevalent. Surprisingly the ration of contract workers to the total workforce is quite high in large-scale Public Ltd. Companies. In one or two high profile units, it is as high as one and half times the permanent workers. And these contract workers are paid even less than half of the wages payable to regular workers. Hence, the industrial relations in such units are not satisfactory despite their big size and high public image.

Minimum Wages

Minimum wages in small industries are fixed under the Minimum wages Act through state

wise and industry wise **Minimum Wage Tripartite Committees.** In other industries, it is settled either through negotiations between the employer and the trade union or through an award from the Tribunal. In most of such cases, it is settled unit wise rather than industry wise. The wage wise position of minimum is as follows:

Monthly Minimum Wage (in Rupees)	**Percentage of Units**
1000-2500	26
2501-5000	41
5001-7500	21
Above 7500	12
Total	**100**

Industrial Relations

Despite the diversity in the size of the undertaking and the type of the units, the industrial relations are good in most of the units. They are bad in a few cases in medium sized and low minimum wage units. The break up shows the following position:

Industrial Relations	**Percentage of Units**
Excellent	7
Good	69
Fair/Satisfactory	12
Bad	12
Total	**100**

Trade Unions

On the whole, workers are organized into unions irrespective of the size of the type of the unit. Out of units for which data was available on this count, **88% of units have trade union, 79% being recognized by the employer.** Further break up shows that **52% of the units are affiliated to one of the central federations of trade unions** while the remaining are non-affiliated. The central trade union organizations to which the 52% of unions are affiliated are AITUC, Kamgar Sena, HMS and Sarva Shramik Sangh. The relations between the central trade union organization seem to be cordial since except for 12% units, there is only one union thus avoiding intra union rivalry. The percentage of membership position of the unions on which data is available is as follows:

Membership	**Percentage of Units**
Below 100	32
101-250	13
251-500	23
501-1000	19
Above 1000	13
Total	**100**

In addition to units studied for the above purpose, data was collected on 50 trade unions though it was available only on the membership figures and their affiliation or otherwise. The membership wise percentage break up shows the position as follows:

Membership	Percentage of Units
Below 100	54
101-250	16
251-500	16
501-1000	6
Above 1000	8
Total	**100**

Out of these unions, as many as 78% are not affiliated to any central trade union organization. Mostly because the inside leadership is managing the unions. Such unions are generally called independent or internal.

Percentage Distribution of Enterprises in Informal Sector (July- December 1999)

Types of enterprises	Percentage Distribution of Enterprises					
	Own account enterprise	Establishment	All	Own account enterprise	Establishment	All
Manufacturing	30.3	20.7	29.4	18.0	30.0	21.0
Construction	0.5	3.5	0.8	2.8	3.1	2.9
Trade and repair services	49.1	44.5	48.6	46.6	35.7	43.7
Hotel and Restaurants	4.3	15.6	5.4	3.6	9.0	4.9
Transport, storage and communication	4.4	5.6	4.5	13.6	4.1	11.2
Other services	11.4	10.1	11.3	15.7	18.1	16.3
All	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

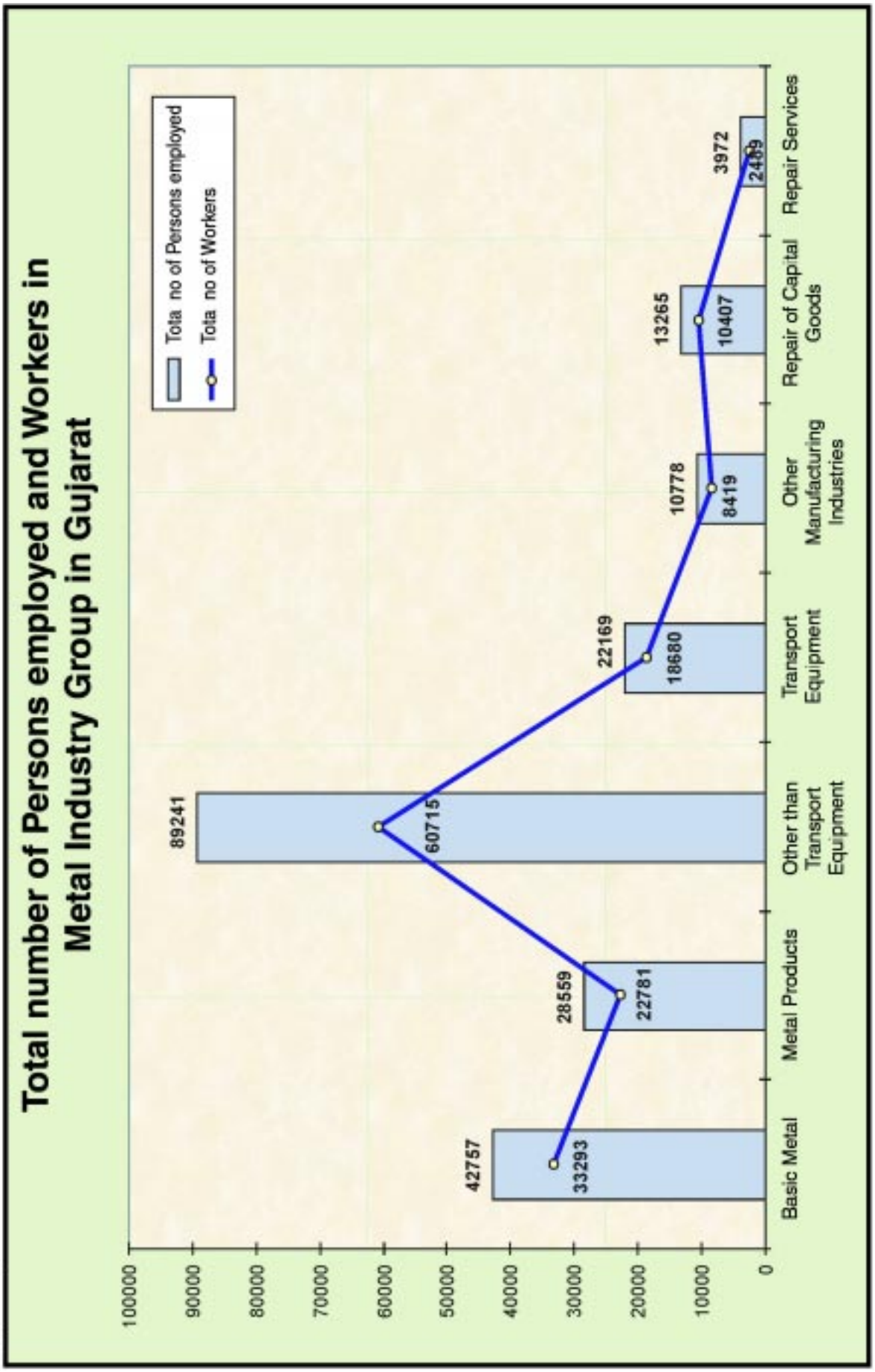
Key findings :

Indian Metal Industries' Characteristics in 1997-98 in *Gujarat*

(Values in Rs. million*, others in numbers)

Characreristics → Industry Group ↓	No. of factories	factories' % in state to all India	Productive Capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs)
				Men	Women							
(1) Basic Metal & Alloys Industries	884	13	97699	20183	207	20390	12903	33293	9464	42757	16436	19022
(2) Manufacture of Metal Products & Parts, except Machinery & Equipment	950	2	6796	18430	831	19261	3520	22781	5778	28559	1009	1148
(3) Manufacture of Machnery & Equipment Other than Transport Equipment	1987	14	39386	51966	3045	55011	5704	60715	28526	89241	4933	5907
(4) Manufacture of Transport Equipment and Parts	256	6	6709	14520	234	14754	3926	18680	3489	22169	750	876
(5) Other Manufacturing industries	233	10	1681	7101	854	7955	464	8419	2359	10778	544	598
(6) Repair of Capital Goods	129	6	1011	10377	10	10387	20	10407	2858	13265	992	1111
(7) Repair Services	146	7	718	2110	0	2110	379	2489	1483	3972	175	201
Total	**4585**	**12**	**153999**	**124687**	**5181**	**129868**	**26916**	**156784**	**53957**	**210741**	**24838**	**28863**
All India figure	39659	100	1683618	1793383	86836	1880354	232310	2112664	814453	2927117	196089	2382511
% of State Total to All India fig.	12	12	9	7	6	7	12	7	7	7	13	1

Key findings :



Key Findings:

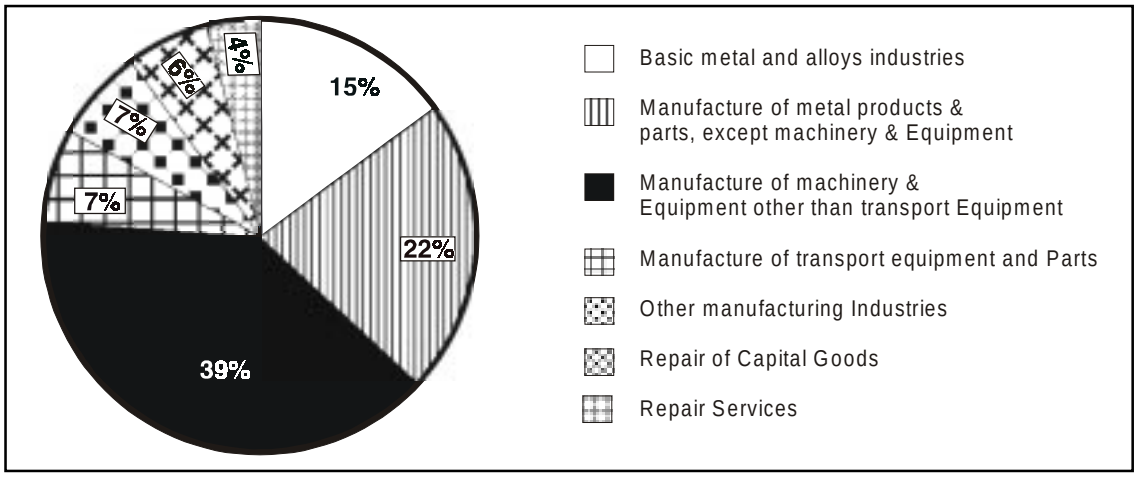
Characteristics of Metal Industries

India, exhibiting a spectacular perpendicular advancement in the growth of metal industries already contained 39,659[++] factories by 1997-98. Statistics reveal that there has been a substantial increase of 3,541 factories during the period from 1992-93 to 1997-98.

Metal industries of India have been grouped in seven categories (following Annual Survey of Indian Industries) and here we are following the same. While taking into account, the number of factories in a specific groups in the entire metal industry in India **Manufacture of Machinery and Equipment other than Transport Equipment** has the maximum number of factories i.e. **13991.** This is followed by **Manufacture of Metal Products and Parts except Machinery and Equipment (8,259)** and **Basic Metal and alloys Industries (6,931)**. With reference to the growth element, in the five years from 1992-93 to 1997-98, the **Manufacture of Metal Products and Parts except Machinery and Equipment** has expanded faster in terms of number of factories. It shows an increase of 17.34% i.e. 1221 factories.

Among all the project states* Maharastra has the largest number of metal industries (8,010). Among all groups of industry **Manufacture of Machinery and Equipment other than Transport Equipment** has highest 3,021 factories in Maharashtra. Gujrat (1987) and Karnataka (1129) come next to Maharashtra in the same group of industry

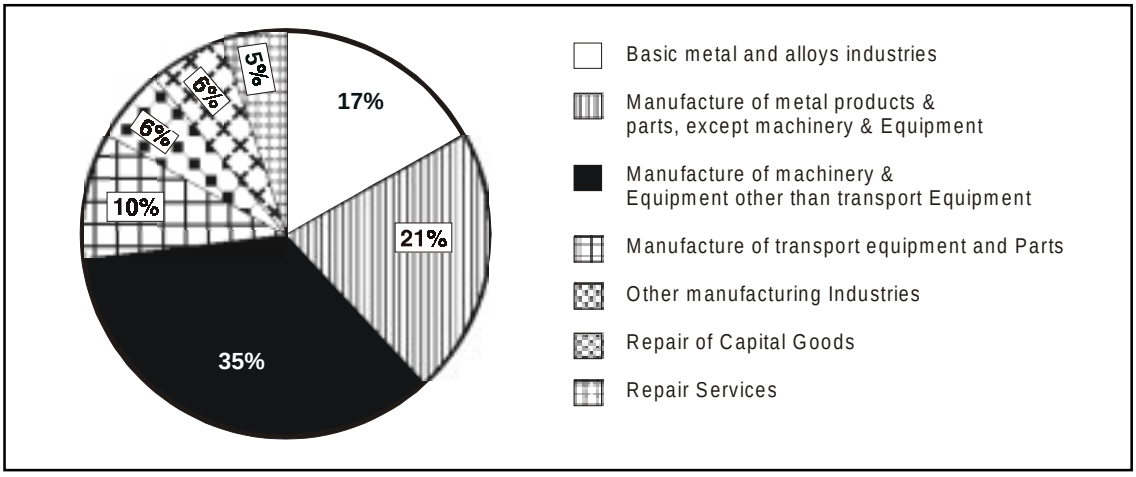
The following charts show the percentage distribution of different groups of the metal industries in India as well as in project states.



Industries' % in Different Metal Industries Group (All India)

++ *All the data in this Chapter including Charts and tables cover all factory units employing 10 or more workers using power and 20 or more workers not using power based on Annual Survey of Industries, 1997-98. Workers engaged in mining and quarrying and self-employed are not included in any figure occurring anywhere in his chapter unless specially mentioned.*

★ *Uttar Pradesh, Andhra Pradesh, Karnataka, Rajasthan, Maharashtra & Gujarat.*



Industries' % in Different Metal Industries Group (in Six Project States)

Basic Metal and Alloys Industries has the highest capital investment of Rs. 806,738 Million in India and second favoured group is **Manufacture of Machinery and Equipment other than Transport Equipment** with a productive capital of Rs. 434,904 Million. In Project state comparision Maharashtra has highest productive capital in total and among all group of industries **Manufacture of Machinery and Equipment other than Transport Equipment** leads with Rs. 122,489 Million followed by **Basic Metal and Alloys Industries** with Rs. 118,693 Million. Gujarat and Andhra Pradesh comes next to Maharashtra in terms of productive capital and among all metal industry groups Gujarat has the highest productive capital of Rs. 97,699 million in Basic Metal and Alloy Industries whereas Andhra Pradesh has an investment of Rs.71,424 million in same group of industries.

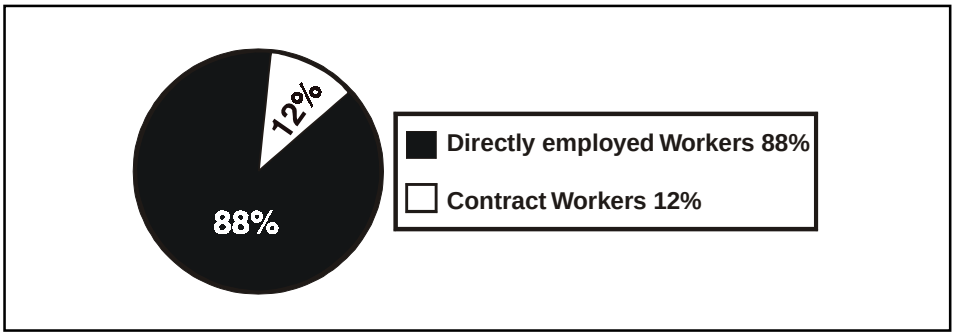
Employment in Metal Industry

The total number of persons employed in metal industries in India in 1997-98 figures around 2,927,117 as compared to 2,547,699 in 1992-93. It shows an increase of **14.89%** i.e. an increase of **379,418** employees over a period of five years whereas increase in number of **workers** in the same period ('92-93 to 97-98) is **310,982** (**17.26%**).

	1992-93	1997-98	Increase
Total Employees	2,547,699	2,927,117	379,418 (14.89%)
Workers	1,801,692	2,112,664	310,982 (17.26%)

The total number of workers in the metal industries in India in '97-'98 was estimated at 2,112,664 and the maximum number of workers was noticed in the Manufacture of machinery and Equipment other than Transport Equipment at around 594,909. On close heel Basic metal and alloys Industries comes with a figure of 5,06712 followed by 409,764 workers in the Manufacture of Transport Equipments and Parts. **Maximum growth in number of workers has been noticed in the manufacture of transport Equipment and Parts over a period of five years (1997-98 to 1992-93).** It figures around 1,56,965 i.e. an remarkable increase of 62.09%.

Workers' % in Metal Industries Group (All Indian)



Workers' % in Metal Industries Group (in Six Project States)

The six Project States have a combined total workforce of 1,048,867, which is 34% of metal-workers of India. Total number of metalworkers in different states are given below:

States	Total no. of workers '97-'98*
Maharashtra	380,890
Uttar Pradesh	167,208
Karnataka	160,881
Gujrat	156,784
Andhra Pradesh	132,131
Rajasthan	50,973
Total	**1,048,867**

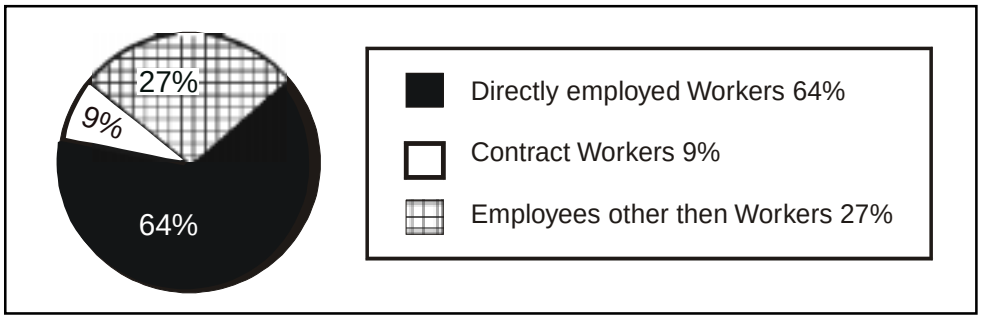
Maharashtra leads among all the group of industry as far as workers, employees, investment and number of factories are concerned.

The total number of contract workers in the Metal Industries is 232,310, which is 12.35% of the total directly employed workers and 10.99 % of the total number of workers. The workers employed through contractors have the largest presence in Basic Metal and Alloys Industries and workers figure around 98,670 i.e. 24% of the total directly employed workers in the same group of industry, which is followed by Manufacture of Metal Products and Parts except Machinery and Equipments (14%) and Other Manufacturing Industries (14%).

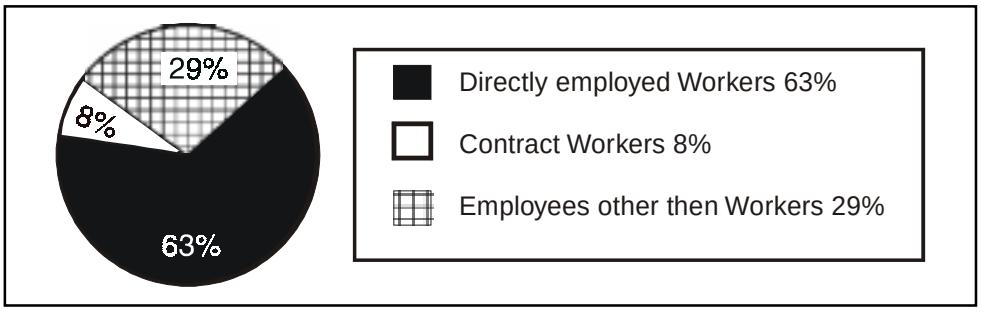
The highest concentration of contract workers is in Maharashtra and Gujarat and Uttar Pradesh. The state wise comparison is given below:

States	Total No. of Workers '97-'98*
Maharashtra	8,010
Gujrat	4,585
Uttar Pradesh	3,169
Karnataka	2,378
Andhra Pradesh	2,356
Rajasthan	1,053
Total	**21,551**

The following chart shows the percentage of directly employed workers, contract workers and that of employees other than workers.

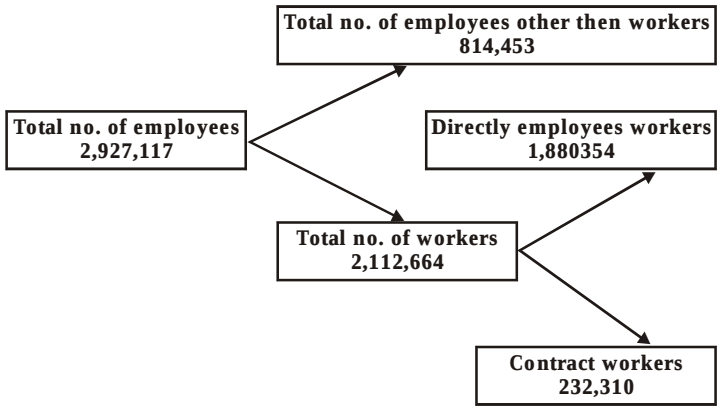


Employees % in different Metal Industries Group (All India)



Employees % in different Metal Industries Group (in Six Project States)

The overall employee's population presentation in the metal industries in the year 1997-98 is as follows:



Employees Configuration in All India Metal Industries (1997-98)

The share of major metal industry group in factory sector is as follows:

Share of Major Metal Industry Group in Factory Sector

Different Industry Groups	% Share				
	Factories	Employment	Invested capital	Grooss output	Value added
Basic Metal & Alloys Industries	5.5	6.8	13.4	10.1	9.7
Manufacture of Metal Products & Parts, except Machinery & Equipment	6.1	3.1	1.7	2.2	2.1
Manufacture of Machinery & Equipment other than Transport Equipment	11.1	9.9	7.7	11.0	12.3
Manufacture of Transport Equipment & Parts	3.1	6.3	5.0	7.5	8.1
Repair Services	1.4	0.6	0.2	0.2	0.4

Source: Statistical Outline of India

The population of workers in six project states shows a relatively good participation of the female workers.

Total Workers-Population Figure by States

States	Total Population		Total Population 2001	Workers Population 2001	Workers' % to Corresponding Total Population
Andhra Pradesh	75,727,541	Male	38,286,811	22,397,784	58.5
		Female	37,440,730	16,174,395	43.2
Gujarat	50,596,992	Male	26,344,053	14,647,293	55.6
		Female	24,252,939	9,458,646	39.0
Karnataka	52,733,958	Male	26,856,343	15,657,247	58.3
		Female	25,877,615	10,325,168	39.9
Maharashtra	96,752,247	Male	50,334,270	27,281,174	54.2
		Female	46,417,977	21,584,359	46.5
Rajasthan	56,473,122	Male	29,381,657	14,925,881	50.8
		Female	27,091,465	11,026,226	40.7

Uttar Pradesh	166,052,859	Male	87,466,301	41,808,891	47.8
		Female	78,586,558	15,402,965	19.6
India	1,027,015,247	Male	531,277,078	236,418,299*	44.5*
		Female	495,738,169	82,788,274*	16.7*

Source: Census of India 2001 (Provisional total population including metalworkers)

* *Workers' percentage and workers populations are not total workers' population but that of main workers.*

On the Trade Union side **8% of the India's workforce of 402.51 million workers are unionised** and represented by 16 National Labour centers. As few as 7 workers can form a trade union, and India has 59,964 registered unions, averaging 710 members.

Numbers of Registered Trade Unions (workers & employees) and their Membership

Year	No. of Registered Unions (Estimated)	No. of Unions Submitting Returns	Membership of Union Submitting Returns (000)			Average Membership Per Union Submitting Returns
			Men	Women	Total*	
1952	4623	2556	1847	136	1996	781
1961	11,312	6813	3618	395	4013	589
1971	22,484	9,029	5,083	387	5,410	606
1981	37,539	6682	5012	385	5397	808
1982	38,313	5,044	2,822	177	2,999	595
1983	38,935	6,844	5011	406	5417	792
1984	42609	6451	4707	433	5150	798
1985	45067	7815	5831	602	6433	823
1986	48030	11,365	7,368	819	8,187	720
1987	49,329	11,063	7211	748	7959	719
1988	50,548	8,730	6334	739	7073	810
1989	52,210	9758	8207	1088	9295	953
1990	52,016	8828	6181	838	7019	795
1991	53,535	8,418	5,507	594	6,101	725
1992	55,680	9,165	5,148	663	5,746	627
1993	55,784	6,806	2,636	498	3,134	460
1994	56,872	6,277	3,239	855	4,094	652
1995	57,952	8,162	N.A.	N.A.	6,538	801
1996 (Provisional)	58,805	7,309	NA	NA	5,613	768
1997 (Provisional)	59,964 Estimeted	10,0016	NA	NA	7,408	740

Source: Pocket Book of Labour Statistics, 1999

* Total may not tally to sex-wise break up because information in respect of certain union is not avilable by sex.

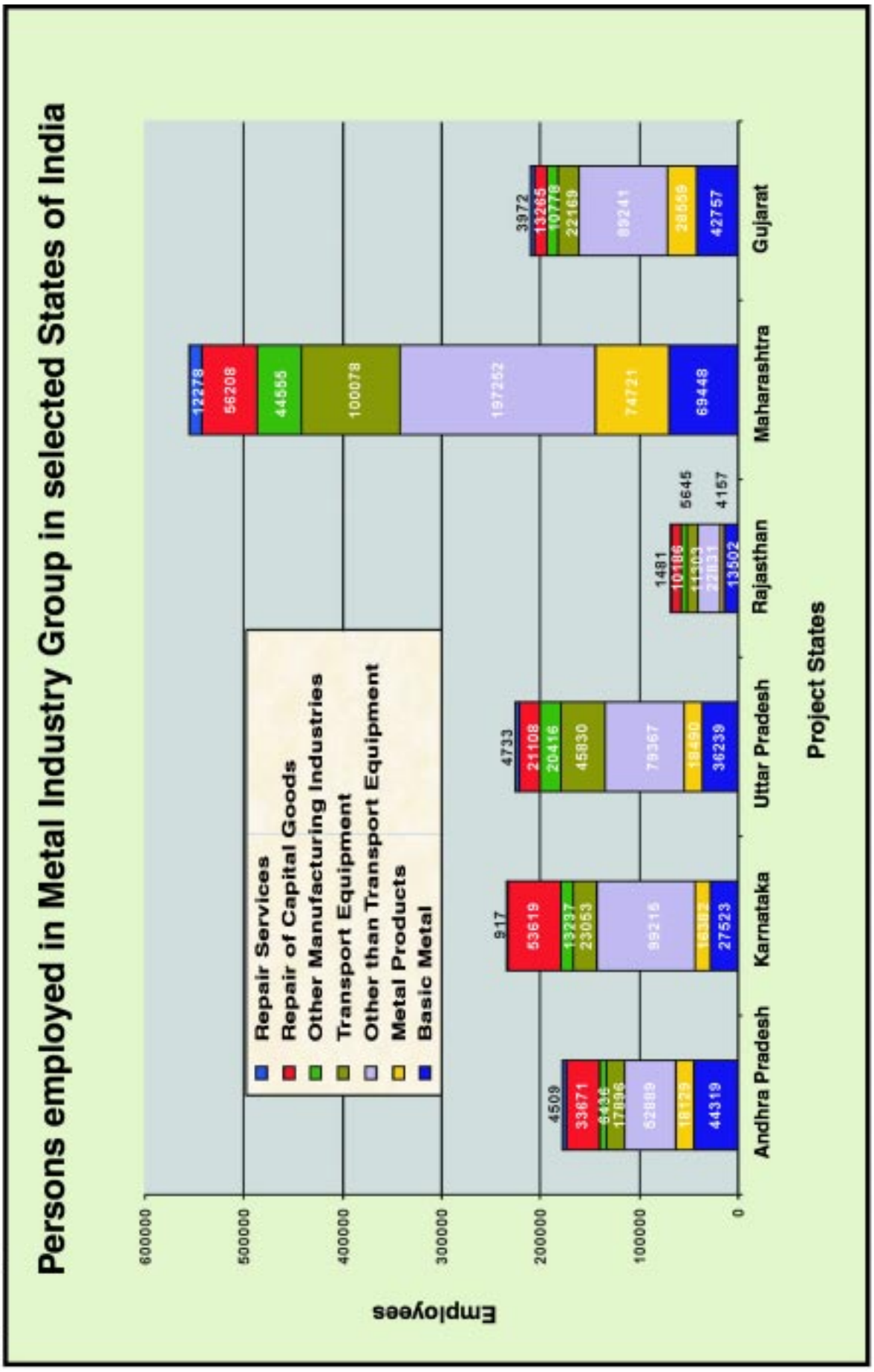
Key findingS :

Indian Metal Industries' Characteristics in 1997-98 in six Selected States of India

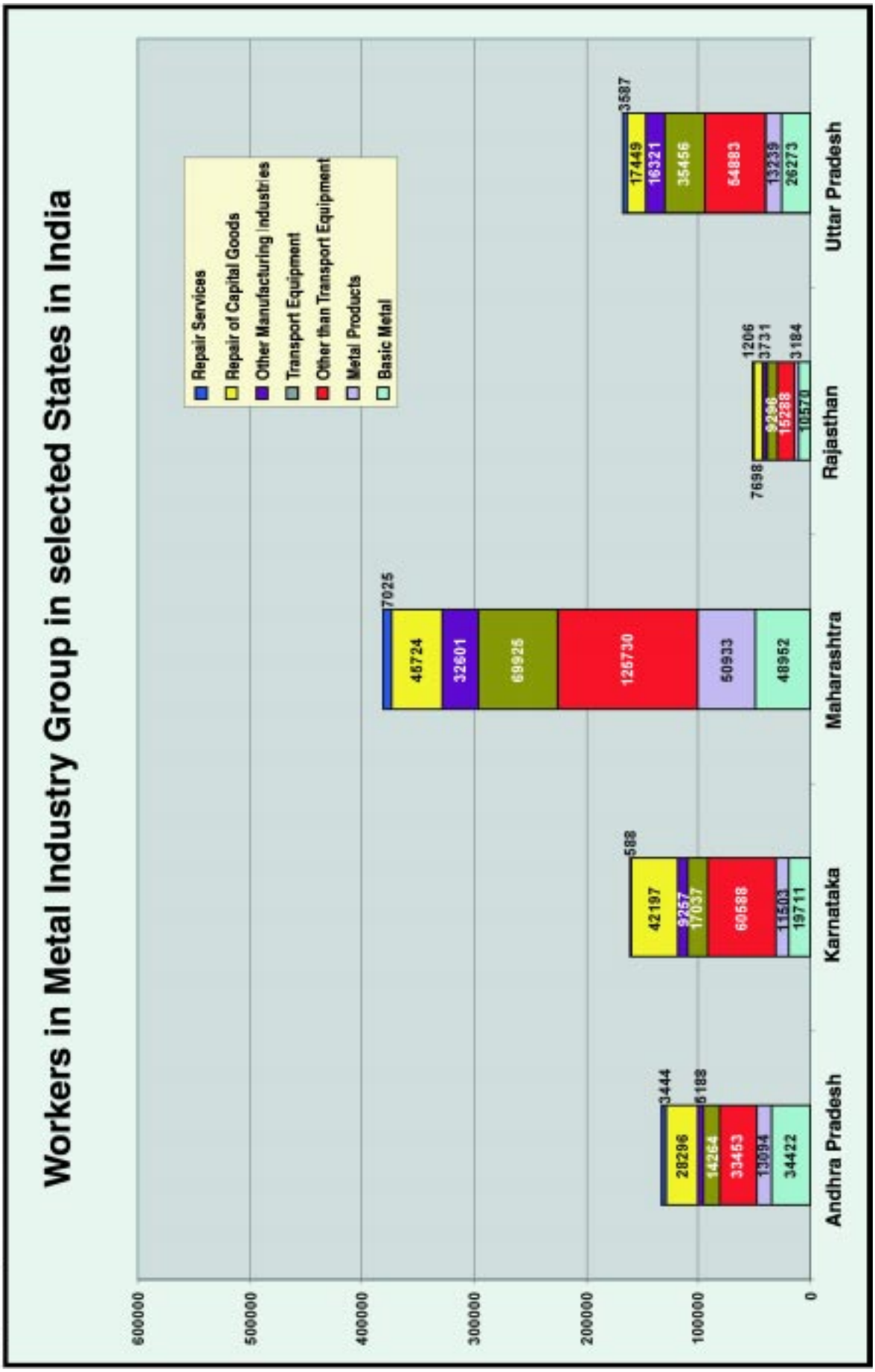
Statewise comparison (Values in Rs. million*, others in numbers)

Characreristics → / States ↓	No. of factories	factories' % in state to all India	Productive Capital[1] (Rs)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs)
				Men	Women							
(1) Andhra Pradesh	2356	6	1061519	114022	4718	118750	13411	132161	45688	177849	109546	130261
(2) Gujarat	4585	12	1539990	124687	5181	129868	26916	156784	53957	210741	100460	117430
(3) Karnataka	2378	6	1249493	133968	13085	146425	14456	160881	73065	233946	140417	177227
(4) Maharastra	8010	20	3940350	315455	20597	336052	44838	380890	173650	554540	497727	609295
(5) Rajasthan	1053	3	304438	46124	957	47081	3892	50973	18132	69105	41184	47144
(6) Uttar Pradesh	3169	8	1169003	142271	5262	147533	19675	167208	58975	226183	144930	160323
Total	**21551**	**54**	**9264793**	**876527**	**49800**	**925709**	**123188**	**1048897**	**423467**	**1472364**	**1034264**	**1241680**

Key findings :



Key findings :



Conclusion & Recommendation

Conclusion & Recommendation

The concise and comprehensive data furnished within the preceding chapters lead to the apparent and irrefutable conclusion that there is a colossal army of much-neglected and much-exploited workers in the unorganised sector, constituting around 90% of the workforce. Without the essential security of employment and social security benefits, they are compelled to work in unhealthy conditions without being paid even the statutory minimum wages.

The axiomatic objective of this research, requisitioned by the **International Metalworkers Federation**, South Asian Office, was to collect comprehensive information on the Metal Working Industry, the enterprises and the Trade Unions functioning therein, with the express targets of building up a data base of workers in the Indian Metal Industry and forging a perceptive summation on the condition of the metal industry workers and with a parallel mission of studying and understanding the factors that will assist in initiating the preliminary procedures to "Organise the UnOrganised".

Based on a thorough study of the above discussed chapters, facts, figures, views and opinions in the report from the six Indian states of Andhra Pradesh, Karnataka, Maharashtra, Gujarat, Uttar Pradesh & Rajasthan, the ensuing conclusions and recommendations have been arrived at on the following –

Trade Unions

"Labour Organisations' first duty is the welfare and security of their fellowmen and the organisation of workers should view their problems in the context of the Indian nation as a whole"

- Lal Bahadur Shastry

In the post 1991 era, the stabilisation and structural adjustment programmes led to demands for increased labour market flexibility, especially employment flexibility. The wage earning workers and salaried employees as well as their unions are confronted with these numerous challenges resulting from the economic reforms, the thrust of which are on liberalisation, globalisation, privatisation and labour market flexibility leading to a recruitment freeze in many public sector. As a result, the following features are perceptible in the trade unions in the metal industry-

- In most of public enterprises, unions are coming to terms with **"voluntary" retirement schemes (VRS)** that have resulted in the substantial reduction of memberships. **The unions now have to cope with competition at local level.**
- The number of plant-based independent which are not affiliated to any central trade unions has risen, which has caused **a decline in the power of centralised affiliated unions, especially in the private sector and MNCs.**
- **Trade unions have performed well in profitable industries**, mainly in private (multinational to some extent) enterprises and also in some public sector firms with decentralised bargaining structures. Whereas workers and **unions in marginal**

public enterprises are facing closure and an uncertain future, **centralised unions representing employees in public services remain strong** due to the fact that they are fundamentally more organised in nature. However, they **lack new strategies in the older and declining sectors of production** where industry-wise bargaining structures are typically the norm.

- Competitive market pressures, especially since the beginning of economic reform, have forced **bargaining outcomes to be decided at local level**.
- In both the public and private sectors, employment in industry has substantially declined, due to various factors like VRS etc especially since the economic reforms. This has resulted in a substantial **shift in employment from organised to unorganised sectors and from big private limited companies to small sectors**.

Subsequently, the country's metal industry trade union movement is under tremendous pressure. Trade unions in India today face the challenge of convincing their members and the public that they can act on behalf of all employees, unionised or not. This requires the formation of strategic alliances with community bodies, social movements, and other non-governmental organisations.

Recommendations:

- The actual medium to "Organize the unorganised" process are the trade unions and it is recommended that the various trade unions strive with renewed vigour to **increase the membership aggregates**. It is also imperative that they have **documented accountability for their paid membership**.
- The concentration of the workforce in the metal industry has now shifted from formal to the informal sector. So is extremely important for the survival of the Trade Unions that in order to counter this reduction in membership in the formal sector, the Trade Unions ought to **concentrate on the workers in the Informal Sector** now.
- The trade unions ought to ensure that the Contract labour rights are safe guarded. The status of instability in their jobs should not be a weapon for the employers to exploit them. This can be assured only by ensuring that the **Contract labour force is a part of the trade unions rolls**. This will also eventuate in the obvious increase in the membership levels.
- To be responsive to the emerging challenges and bringing about attitudinal changes in trade unions **educational programs could be the effective tools.**
- It is vital that the trade unions **restructure their policies and programmes and formulate strategies for effectively meeting the challenges** that are presently taxing the Metal industry workers. The following are **strongly recommended** –
  - Building **strong, united, democratic and free trade union movement.**
  - Change in basic structure with **Centralised authority and Decentralised working**
  - Re-focus on the **basic purpose of their being formed** and assure that the **issues distressing the workers are looked into**.

- ◆ Move towards increasing **national and international solidarity**
- ◆ Create solidarity with society to strengthen the image and co-operation towards each other.

❖ Financial instability of National Centers is a major hindrance to the proper and smooth functioning of the trade unions. Hence Trade unions should earnestly deliberate on **increasing the paid membership to ensure the financial stability of National Centres and creating belongingness among members towards unions.**

It is conclusive that, the Metal workers in the country are in need of being organized under effective trade unions, which will protect the workers from the onslaught of government & management and yield good results in the promotion and protection of workers' real interests and that there is considerable scope for the trade union movement to capitalize on potential alliances, and a concrete beginning can be made by first forging alliances among themselves. The future role of the trade union movement is clearly linked with a broader concern for ensuring the social cohesion of working people in this large and diverse country. **It is imperative for the trade union movement to concentrate on organizing the UnOrganized, so as to create secure incomes and safe working conditions for those with irregular and precarious jobs.**

Contract Workers

Contract Labourers who represent 30% to 35% of the total strength of the declared working employment (in the organized industries, the Public Sector and in most of the UnOrganized sectors too) form the major chunk of the workers who have to be brought under the reassuring banner of the 'organised'.

The average number of hours worked by a 'Contract employee' in a week in Karnataka is about 58 to 60 hours against that of 45 to 48 hours of the 'Confirmed' employee. The contract workers are not eligible to any welfare and other benefits and in most states though they perform work either on par with or better than the permanent employees, they are paid almost just one-third the wages paid to the regular workers. The report from Andhra Pradesh is an unclouded example of this reality.

Wages paid to the Contract Worker vis a vis that paid to the Regular Worker in Andhra Pradesh (1997)

Name of PSUs	**Min. Wage per Worker per month** (In Rs)	**Min. Wage per Contract Labour per month** (In Rs)
BHEL	4042	1200
HAL	3730	1980
HCL	3730	1410
ECIL	3730	1350
BDL	3730	1100

Contract workers are gradually becoming the biggest work force in the country. In most of the cases the contract system is **used by employers to divide one section of workers against other sections and weaken them all**. Casualisation is intended to strike at the roots of union organisation. This phenomenon is also threatening the security of permanent employees.

As per the reports from the six states, **the contract workers do not have a major role in the trade unions**. They rarely hold memberships in the union. Therefore they remain a most overworked and underpaid lot. They are not even paid the minimum wages applicable to the scheduled employment in which they are working.

Recommendations :

It is recommended after due consideration that

- ❖ immediate and effective operations are commenced by the trade unions to **ensure enrolment of the contract labour in the unions**
- ❖ the trade unions ensure that as many of the contract workers as is reasonably possible are **absorbed as direct employees of the company**.

There is an imperative need for the trade unions to become aware of the potential of inherent organised strength of these workers and bring them into the mainstream of the trade union movement, which is the most effective instrument of socio-economic transformation of the country with equity and social justice. This will have the following advantages -

- ◆ Increases the bargaining power of the unions
- ◆ Provides a practical support system for the contract labours
- ◆ Reduces the chances of their being exploited.

Furthermore, this will directly guarantee that a major chunk of the unorganised labour is directly brought under the purview of 'organized'. Thus adding to the strength of National Trade Unions

Women Workers

India has a **labour force of around 319 million,** of which **26% are women workers** constituting a substantial portion of the work force (Census of India 2001; the workers population and % figure are not total workers' population but that of main workers). With gradual urbanisation and technological innovation the women work force were catapulted from home-based activity to factory work. As per the 'Indian Labour Journal' - September 2000, **women workers constituted 14% of the total workforce in factories and 6% in the mines in the year 1997 and manufacturing Sector employed 21.4% of factory employment.** The following table presents the numbers of women workers in Factories and Mines till 1998.

Employment of Women in Factories, Mines

	1988	1990	1992	1994
Factories	463,000	499,000	524,000	591,000
Mines	59,000	56,000	53,000	49,000

Source: Labour Bureau, Simla and Directorate General of Mines Safety

But the vast majority of them are not recognised in the economic sense of the term. At work, women still encounter discrimination, both legal and social, notwithstanding the constitutional rights of women to equality and non-discrimination.

Women workers are **largely concentrated in the self-employed and unorganised sectors with comparatively very little representation in trade unions**. It is totally needless to point out that as per the reports, there is insufficient information available on the women workers. Though percentage of women members in trade unions that submit returns rose from 7.3% in 1951-52 to 10.3% in 1985; in 1992 it was 11.6%. **The trade unions in the metal sector have negligible participation from the workers segment.** Detailed information on the extent of unionisation among women workers is not available, although there are rich case studies of specific sectors/industries where women workers form a substantial section of the workforce. Hence most of their issues regarding equal payment for equal work, working conditions and other benefits remain unheard and unsolved.

There is also considerable scope for increasing the number of women in leadership roles within the established trade union federations.

Recommendations:

- Trade unions should lobby central and state governments to increase state intervention in favour of women's employment.
- A **gender sensitive perspective must constitute a part of the programmes of the trade unions** as to enlist their active involvement in trade union activities.
- They should be **encouraged to occupy offices of importance** including at the decision making level **in the union set up**.
- It is highly recommended that the trade unions actively involve the women workers of the metal industry in the union activities with the view to –
  - **organising the sector**, **addressing their core issues**,
  - finding sufficient measures to **resolving their grievances**
  - **mobilising them** to be substantially more active **in involving hard bargaining procedures**
  - **involving them in the formulation of its policies and implementation of its programmes**.

The empowerment and enhancement of the women workforce will be the key to strengthening the backbone and nerve center of labour movement in the country.

Workers in Informal Sector

It is indeed a glaring reality that 93% of India's workforce belong to the unorganised or informal sector. A report of the Indian Chamber of Commerce (ICC) reveals that the employment in the organized sector has shrinked by 14% over the past decade. A substantial portion of India's workforce is employed in the informal and unorganised sector with **the fact the provisions of social security, pensions, provident funds and other legitimate benefits of the Organised sector do not cover a vast majority.**

In the light of this information, it is discomforting that a meticulous study of the report unveils the actuality that **the true reach of the trade unions with the workers is restricted to the workers in the formal/organised sector**. This unfortunately accounts only for approximately, a nominal 9% of the workforce in India.

Employment in Organised and Unorganised Sectors

Year	Organised	Unorganised	Total	% Unorganised
1983	240,10,000	2,640,00,000	2,880,10,000	91.67
1993-94	271,77,000	3,089,14,000	3,360,91,000	91.91
1995-96	275,25,000	3,224,26000	3,499,51,000	92.03
2000	280,70,000	368,730,000	396,800,000	93.00

Source: Economic Survey

Recent labour market situation has altered the labour market scenario and as a result, the trade unions are further losing their reach over the workers. Consequently it is high time that the **trade unions in the metal industry extend their attention to the informal sector.**

Recommendations:

- The trade unions in the metal industry should **shift their prime focus from workers in the formal sector to the work force in the informal sectors.** The spotlight should now fall on the small and medium sized workplace where most of the workforce in India is presently concentrated.
- The emphasis should be given to local and workplace related efforts to improve the working and living conditions of the workers and they should be **educated on their occupational safety and health hazards.**
- The workers in the informal sector should be **educated on the strength and right to collective bargaining through more unionisation process.**

Indisputably the collective strength of workers is the sole vehicle through which social and economic justice and dignity of labour can be achieved. **It is therefore a supreme requirement that the Metal Industry trade unions should campaign immediately and ceaselessly to "Organise the Unorganised".**

Annexure-1

Annexure-1

Information Technology – Implication for Employment

The emergence of Information and Communication Technology as a major engine of growth in the Indian Economy has brought with it, considerable hopes for the skilled manpower with those engaged in the traditional industries, unable to grasp the significance of new technology. India has emerged as a major supplier of skilled workers well versed in Information Technology for the developed economies worldwide.

According to the industry estimates, **the global market for IT enabled services was of the order of US $ 200 billion in 1998 with a growth rate of 23% per annum, and expected rapid growth likely to touch the level of US $ 2 trillion by 2008.**

Indian Industry is expected to account for US $ 100 billion by the year 2008, with export content placed at US $50 billion.

According to the Economic Survey (1998-99) published by the Ministry of Finance, **Indian Software Industry has been one of the fastest growing industry in terms of both domestic use and export**.

During Eight-Plan period, (1992-93 to 1996-97) software for domestic use grew from a level of Rs. 3200 million in 1991-92 to Rs. 26000 million in 1996-97, recording an annual rate of growth of 52%. During the same period the value of software exports increased from US $ 174 million in 1991-92 to US $ 1042 million in 1996-97 touching a annual growth rate of 43%. During 1997-98 domestic use grew by 33% to Rs. 34700 million while the export rose by 68% to US $ 1749 million.

This impressive growth led the government of India to appoint a National Task Force on Information Technology and software development. This group submitted 108 points action plan in July 1998 and most of the recommendations have been accepted by the Government of India providing a road map for the future development of the IT Industry. The Ninth Five Year Plan (1997-2002) envisaged that the government will be only a facilitator and a major share, nearly 80% of the electronic IT Industry will come from the private sector. The Ninth Plan targets for the terminal year included the production value of Rs. 1,383,500 million and export of Rs. 489,300 million, e-commerce of Rs. 150,000 million apart from computer penetration of two per thousand.

According to the Planning Commission, the preference of the IT industry during the first three years of the Ninth Plan has been outstanding with the average growth rate of about 25% per annum. According to the mid term appraisal of the Ninth Five Year Plan (Published in Oct 2000) the first three years of the Ninth Plan witnessed an impressive growth of about 66% per annum in software export, with the **hardware exports however recording not so impressive growth of 11% only.**

Official assessment is that India's share in world software market has been rather low with

the country commanding in 1998 only a 16% market share in the segment of customized software services. It has however been felt that India has an excellent opportunity to capture a sizable portion of the world market, by paying proper attention to the development of technology of the technical infrastructure and skilled power.

To provide the necessary infrastructure Govt. of India has established **Software Technology Parks of India (STPI)** in June 19991 with centres at **Pune, Bangalore, Hyderabad, Thiruvananthapuram, Bhuvaneshwar, Gadhinagar and NOIDA (near Delhi)**. Most recent additions of STPI centres are at **Navi Mumbai, Jaipur and Chandigarh**. These centres provide facilities for 100% export oriented scheme for the development and export of computer software using both data communication links and physical media. For providing value added services, an integrated network service called Softnet was designed and established in STPs and several policy changes to encourage the growth of IT enabled services have been adopted by the govt.

While the economic and financial policy reforms have been dominated by considerations for the growth of IT industry to facilitate the achievement of ambitious targets for exports and domestic revenue.

The **National Task Force on IT and Software development** has set a revenue target of 85 billion US dollars to be achieved by 2008 with domestic revenues accounting for 35 billion and export revenue of 50 billion US dollars.

According to National Association for Software and Services Companies (NASSCOM) the industry has grown from US $ 197 million in 1989-90 to US $ 5700 million in the year 1999-2000 and US $ 8750 million in 2000-2001.

Indian Software Industry Revenues and Exports (US $ million)

Year	Total	Domestic	Exports
1989-90	197	97	100
1994-95	835	350	485
1995-96	1224	490	734
1996-97	1755	670	1085
1997-98	2700	950	1750
1998-99	3900	1250	2650
1999-2000	5700	1700	4000
2000-2001 p	8750	2450	6300
2008	85000	35000	50000
	Compound Annual Growth rate		
1994-99 (%)	56.3	46.05	60.71

Employment Potential

The NASSCOM has also indicated that the software industry employment has grown from 0.16 million in 1996 to 0.34 million in 2000 with 70% engaged in software development in 1996 and only 63% in 2000. While the share of those engaged in marketing and relationship development increasing from 10% in 1996 to 14%. The key characteristics of employment in the software industry have shown by the Research and Information System for Non aligned and other development countries as in the following table.

Key Characteristics of Employment in Software Industry

S. No.	Parameters	1996	1999	2000
1.	Software Professionals (including those in non-commercial organisation and used organisation)	160000	280000	340000
2.	Of which engaged in-			
	● Software development (%)	70	67	63
	● Marketing & relationship development (%)	10	11	14
3.	Median age (yrs)	28.4	26.2	25.7
4.	Proportion of IT degree holders	75	n.a	n.a
5.	Proportion of those having 5 yrs experience (%)	60	50	60
6.	Rise in base salary over previous year (%)	21	21+ESO	16+ESO
7.	Attrition rate (%)	17.2	16	14

Source : ILO World Employment - Report on IT

Note: Supplemented by Employees Stock Options (ESOs) 41 companies have offered ESOs to their employees.

NASSCOM service shows that the **employment growth was 28.5% between 1996 and 2000, with nearly 70,000 jobs being created every year.** The National Task Force on IT and Software Development had however projected that **employment will grow to about 2.2 million workers by 2008 with 1.1 million workers created by expansion of IT enabled services.** 0.56 million of these jobs are expected to be in the back office operation and bulk of the employment will be accounted by realtively young people, majority with the engineering degrees with the age level of 25-28.

In the study conducted for the Ministry of Labour, the Indian Institute of Economics has drawn attention to the dominance of small offices and home offices (SOHO) in the IT industry. Even NASSCOM Service indicate that the share of women among software professional is increased from 19% to 27% in 1999 and is 30% in 2001.

According to a study of the structure of the IT industry, the number of firms in the industry are 1200. Of these 545 firms are members of NASSCOM accounting for 95% of all the revenues with top 20 firms accounting for 56% of all exports. Owing to the technological character of the industry there is a bias for location in metropolitan and urbanised centers.

Spatial Expansion and Regional Distribution

In India, software industry developed initially in Mumbai (formerly Bombay). Subsequently especially after the entry of Texas instruments in the mid 1980s, Bangalore emerged as a centre of software industry development. Bangalore enjoyed several attractions for the industry. These included availability of a pool of trained manpower given the existence of Indian Institute of Science, Indian Institute of Management, and many high technology industrial complexes such as Bharat Electronics, Hindustan Aeronautics, Bharat Heavy Electricals, among others. Besides the mild climate also made it attractive. The development of infrastructure under the aegies of Software Technology Park and subsequently private IT Park helped in agglomeration of the industry in and around Bangalore. Besides, Bangalore and Mumbai, Delhi along with its suburbs viz. Noida and Gurgaon has emerged as the third most popular concentration of software units (See Table 16). Hyderabad and Chennai have started to provide alternative location in the South after the saturation of Bangalore in terms of available infrastructure and scarcity of space. The state government's promotional role has also contributed to the emergence of Hyderabad as the fourth most important centre of concentration of software companies. The **top five cities** together account for **80.5 per cent of the 600 top companies**. But other cities such as Calcutta, Pune, Thiruvanantpuram, Ahmedabad, Bhubneswar are coming up as increasingly popular locations. One important factor is the availability of high speed data communication links and built up space provided in the Software Technology Parks (STPs).

Regional Distribution of top 600 Software Companies in India

City	Number of company headquarters located in:	Percentage share
Mumbai	131	21.83
Bangalore	122	20.33
Delhi and around	111	18.50
Hyderabad	64	10.67
Chennai	55	9.16
Calcutta	25	4.16
Pune	23	3.83
Thiruvananthapuram	14	2.33
Others	55	9.16

Source: NASSCOM.

The development of software industry is therefore largely concentrated in select major urban centres and their suburbs. This pattern of concentration owes itself to the clustering tendencies of the knowledge-based industries because of high economies of agglomeration. In India the availability of communication infrastructure and manpower and other facilities have also contributed to it. Since all these centres

have been already well developed compared to other parts of the country, possible spillovers of software industry development for balanced regional development have not accrued.

The Gender Dimension in IT Jobs in India

The **share of women in software professionals has increased steadily from just 10 per cent in 1993 to 19 percent in 1999.** In the IT-enabled services segment, **women account for 37 per cent of jobs.** It is projected to rise to 35 per cent by 2005. Earlier studies on the industry had reported an even higher domination of the industry by men with a share of women ranging between 5-10 per cent. The domination of the workforce by men, however, is not due to a gender bias. Studies have reported that the industry offered a more relaxed and less discriminatory atmosphere than most other occupations and that women stand a better chance of reaching a position of seniority in this industry than others. Among the reasons cited in those surveys for women's observed under-achievements include, a lack of international mobility because of family commitments, regulations against night work preventing companies from hiring them for round-the-clock contracts. The biases against women will decline with decline in companies' dependence on onsite work.

The call centres and back-office services, especially data entry operations for instance, are predominantly staffed by women the worldwide. Quite a large part of these services can be delivered from home. For instance, a home based worker answers a call from her home or enters data that are transmitted electronically to the client. These types of 'teleworking' opportunities, as they have begun to be called, are particularly well suited for self-employed women workers who wish to stay at home for family reasons or because of young children.

Annexure-2

Annexure- 2

Characteristics of Metal Industries in other Important Industrial States of India

Basic metal and alloys industries (Values in Rs. million*, others in numbers)

Characreristics → States ↓	No. of factories	Factories' % in state to All India	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
				Men	Women							
1. Bihar	272	4	121174	68616	2487	71103	3486	74589	24922	99511	11224	13410
2. Haryana	352	5	11770	6372	0	6372	1759	8131	4823	12954	544	652
3. Madhya Pradesh	380	5	91007	44391	238	44629	17860	62489	23891	86380	6726	8854
4. Punjab	556	8	7303	17271	0	17271	2722	19993	5067	25060	907	1065
5. Tamil Nadu	662	10	25483	27357	214	27671	4633	32304	9823	42127	1948	2421
6. West Bengal	696	10	98201	68121	840	68961	12339	81300	19397	100697	6921	8142
7. Delhi	275	4	1861	2769	0	2769	565	3334	940	4274	134	155
Total	**3193**	**46**	**356798**	**234897**	**3779**	**238776**	**43364**	**282140**	**88863**	**371003**	**28405**	**34699**
All India	6932	100	806738	402048	5982	408042	98670	506712	165626	672338	46713	56622
% of total to all India fig	46	46	44	58	63	59	44	56	54	55	61	61

Annexure- 2

Characteristics of Metal Industries in other Important Industrial States of India

Manufacture of metal products & parts, except machinery & equipment (Values in Rs. million*, others in numbers)

Characreristics → / States ↓	No. of factories	Factories' % in state to All India	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
				Men	Women							
1. Bihar	140	2	441	1887	11	1898	272	2170	651	2821	75	84
2. Haryana	477	6	6872	9591	38	9629	2009	11638	4661	16299	704	913
3. Madhya Pradesh	254	3	4771	6969	93	7062	1734	8796	2570	11366	458	549
4. Punjab	648	8	3081	14367	135	14502	398	14900	3641	18541	627	721
5. Tamil Nadu	681	8	6212	15478	1759	17237	2938	20175	4585	24760	1081	1305
6. West Bengal	462	6	3415	13465	222	13687	1462	15149	6491	21640	1012	1198
7. Delhi	288	3	4534	6459	0	6459	0	6459	1790	8249	310	367
Total	**2950**	**36**	**29325**	**68216**	**2258**	**70474**	**8813**	**79287**	**24389**	**103676**	**4267**	**5137**
All India	8257	100	94507	2E+05	6088	182339	24735	207074	74153	281227	13852	16798
% of total to all India fig	36	36	31	39	37	39	36	38	33	37	31	31

Annexure- 2

Characteristics of Metal Industries in other Important Industrial States of India

Manufacture of machinery & equipment other than transport equipment (Values in Rs. million*, others in numbers)

Characreristics → States ↓	No. of factories	Factories' % in state to All India	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
				Men	Women							
1. Bihar	120	1	2117	6668	121	6789	32	6821	3617	10438	674	808
2. Haryana	509	4	22857	26069	1012	27197	2954	30151	17700	47851	3553	4507
3. Madhya Pradesh	332	2	20402	19810	1434	21244	3731	24975	11823	36798	2584	2799
4. Punjab	781	6	15517	18801	1107	19908	1761	21669	7821	29490	1596	1907
5. Tamil Nadu	1612	12	42047	65896	6275	72171	9866	82037	36915	118952	6753	8547
6. West Bengal	865	6	11208	31669	850	32519	1546	34065	20699	54764	3587	4430
7. Delhi	335	2	9595	14155	1281	15438	244	15682	8043	23725	4796	5673
Total	**4554**	**33**	**123743**	**183068**	**12080**	**195266**	**20134**	**215400**	**106618**	**322018**	**23543**	**28671**
All India	13994	100	434904	496711	43298	540127	54782	594909	310169	905078	65514	81348
% of total to all India fig	33	33	28	37	28	36	37	36	34	36	36	35

Annexure- 2

Characteristics of Metal Industries in other Important Industrial States of India

Manufacture of transport equipment and parts (Values in Rs. million*, others in numbers)

Characreristics → / States ↓	No. of factories	Factories' % in state to All India	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of Workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
				Men	Women							
1. Bihar	117	3	21052	15326	570	15896	874	16770	9664	26434	2412	3123
2. Haryana	294	7	35351	26371	293	26669	9692	36356	14698	51054	4118	5053
3. Madhya Pradesh	111	3	5030	9304	0	9304	1605	10909	6211	17120	835	1010
4. Punjab	714	18	14425	40684	100	40784	1291	42075	11930	54005	2355	2655
5. Tamil Nadu	581	14	34041	61325	1619	62944	4764	67708	24938	92646	6710	8066
6. West Bengal	139	3	6412	51048	396	51444	1326	52770	17012	69782	5123	5668
7. Delhi	366	9	3963	6744	232	6976	40	7016	2577	9593	500	612
Total	**2322**	**58**	**120275**	**210802**	**3210**	**214017**	**19592**	**233604**	**87030**	**320634**	**22052**	**26187**
All India	4011	100	254523	365546	7704	373250	36514	409764	147499	557263	42833	51288
%of total to all India fig	58	58	47	58	42	57	54	57	59	58	51	51

Annexure- 2

Characteristics of Metal Industries in other Important Industrial States of India

Other manufacturing industries (Values in Rs. million*, others in numbers)

Characreristics → / States ↓	No. of factories	Factories' % in State to All India	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of Workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salarywith bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
				Men	Women							
1. Bihar	4	0	135	111	4	115	2	117	148	265	18	20
2. Haryana	59	3	3108	4843	298	5141	344	5485	2538	8023	371	456
3. Madhya Pradesh	28	1	457	1275	110	1385	4	1389	404	1793	70	82
4. Punjab	65	3	834	3578	543	4121	616	4737	1580	6317	189	217
5. Tamil Nadu	197	9	3301	4745	4343	9088	87	9175	2455	11630	565	708
6. West Bengal	98	4	1921	5449	201	5650	57	5707	2625	8832	661	779
7. Delhi	107	5	718	2079	539	2618	0	2618	1212	3830	181	207
Total	**558**	**25**	**10474**	**22080**	**6038**	**28118**	**1110**	**29228**	**10962**	**40690**	**2054**	**2468**
All India	**2248**	**100**	**63261**	**76040**	**21283**	**97323**	**13958**	**111281**	**39090**	**150371**	**8122**	**9640**
%of total to all India fig	**25**	**25**	**17**	**29**	**28**	**29**	**8**	**26**	**28**	**27**	**25**	**26**

Annexure- 2

Characteristics of Metal Industries in other Important Industrial States of India

Repair of capital goods (Values in Rs. million*, others in numbers)

Characreristics → States ↓	No. of factories	Factories' % in state to All India	Productive Capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
				Men	Women							
1. Bihar	34	2	4	881	11	892	4	896	224	1120	47	51
2. Haryana	26	1	144	6842	31	6873	7	6880	690	7570	590	608
3. Madhya Pradesh	37	2	1539	5348	65	5413	55	5468	1140	6608	457	476
4. Punjab	44	2	116	2518	1	2519	29	2548	414	2962	208	217
5. Tamil Nadu	475	21	4453	34633	422	35055	407	35462	7561	43023	2785	3039
6. West Bengal	39	2	436	13285	289	13574	156	13730	5285	19015	994	1103
7. Delhi	46	2	306	5052	6	5058	0	5058	1048	6106	460	504
Total	**701**	**31**	**6998**	**68559**	**825**	**69384**	**658**	**70042**	**16362**	**86404**	**5540**	**5998**
All India	2242	100	18946	229376	2194	231574	2298	233872	54944	288816	16926	18365
% of total to all India fig	31	31	37	30	38	30	29	30	30	30	33	33

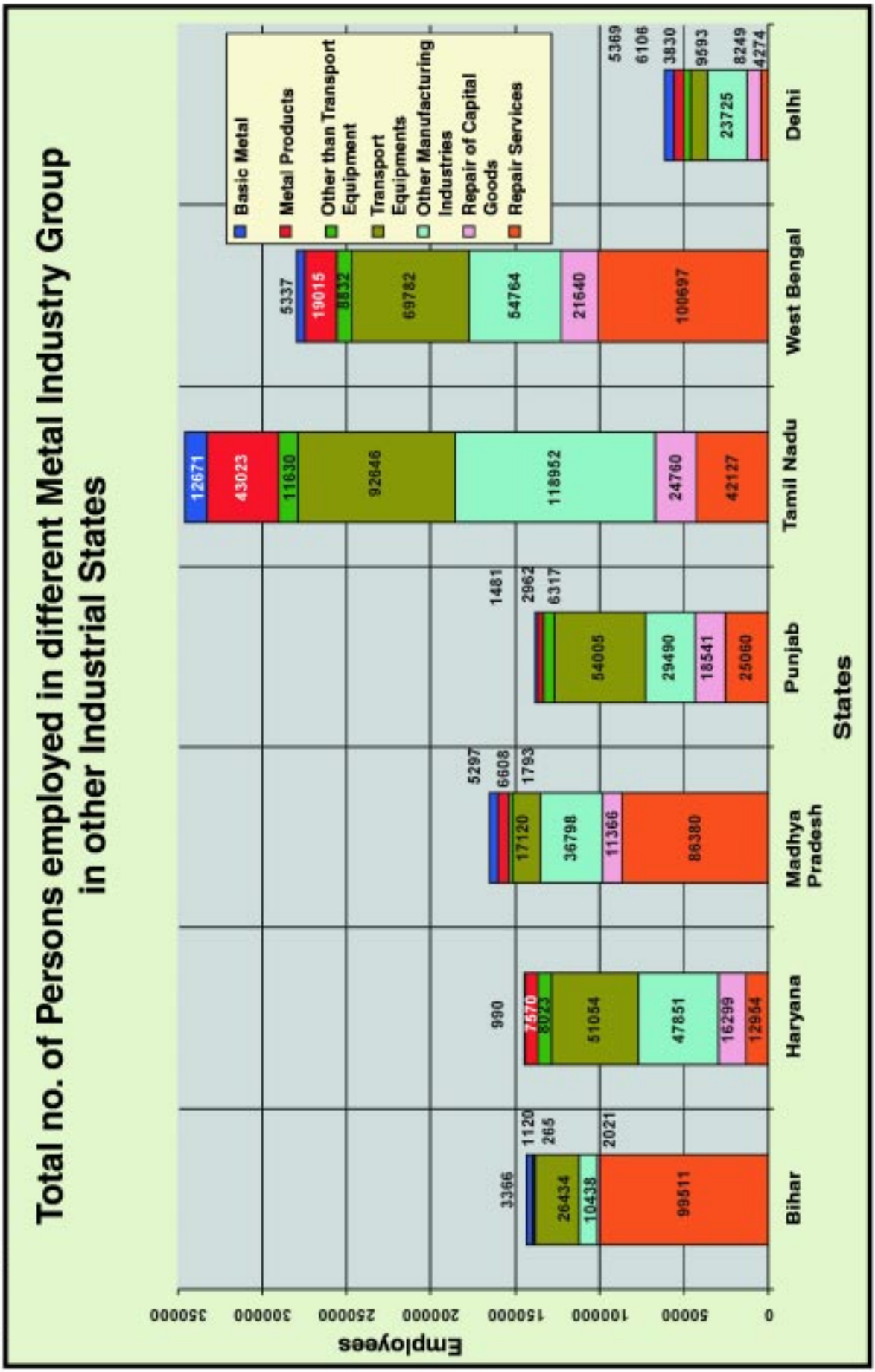
Annexure- 2

Characteristics of Metal Industries in other Important Industrial States of India

Repair services (Values in Rs. million*, others in numbers)

Characreristics → / States ↓	No. of factories	Factories' % in state to All India	Productive capital[1] (Rs.)	Directly employed workers		Total directly employed workers	Workers employed through contractors	Total no of workers[3]	Employees other than workers[4]	Total no. of emplo-yees[2]	Annual wages & salary with bonus[5] (Rs.)	Total emolu-ments[6] (Rs.)
				Men	Women							
1. Bihar	97	5	155	2672	34	2706	0	2706	660	3366	106	113
2. Haryana	18	1	108	739	0	739	8	747	243	990	54	57
3. Madhya Pradesh	114	6	1056	3909	44	3953	50	4003	1294	5297	251	295
4. Punjab	51	3	251	1012	0	1012	0	1012	469	1481	67	72
5. Tamil Nadu	406	21	1286	8075	12	8087	425	8512	4159	12671	429	490
6. West Bengal	113	6	1219	3828	26	3854	0	3854	1483	5337	508	536
7. Delhi	132	7	816	3053	3	3056	98	3154	2215	5369	418	487
Total	**931**	**47**	**4892**	**23288**	**119**	**23407**	**581**	**23988**	**10523**	**34511**	**1831**	**2050**
All India	1977	100	11946	47411	287	47699	1353	49052	22972	72024	3757	4191
%of total to all India fig	47	47	41	49	41	49	43	49	46	48	49	49

Key findings :



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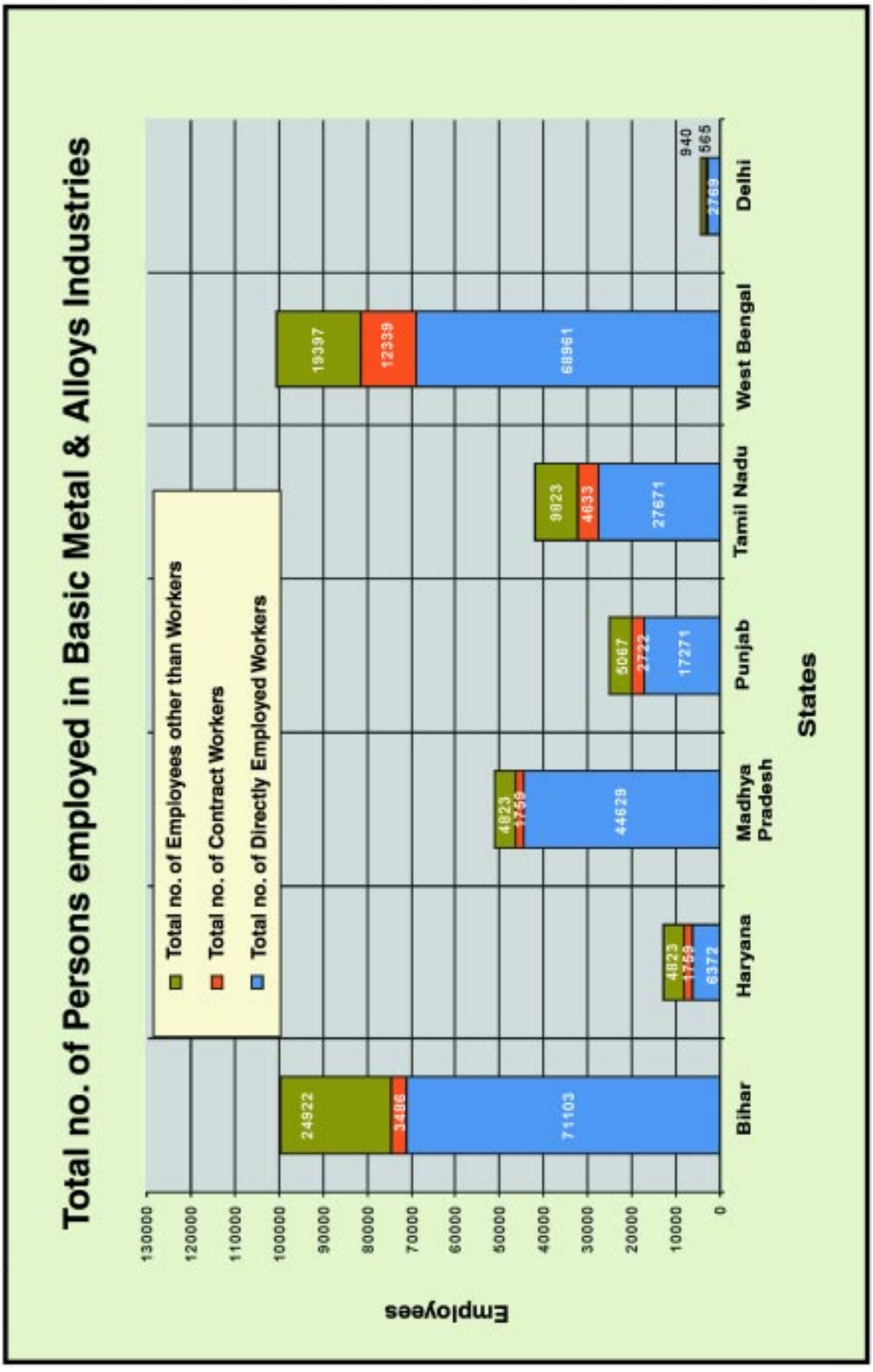

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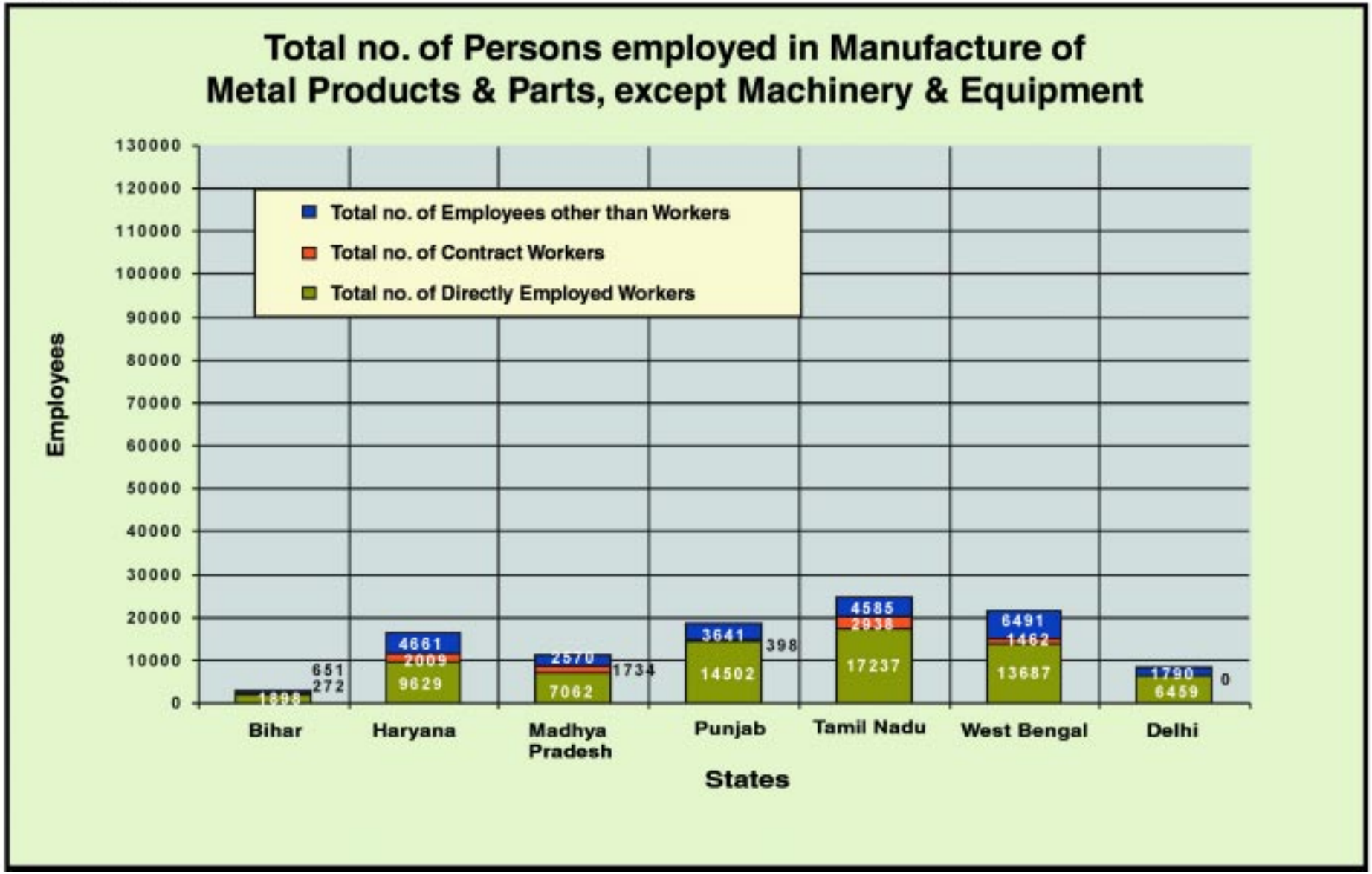

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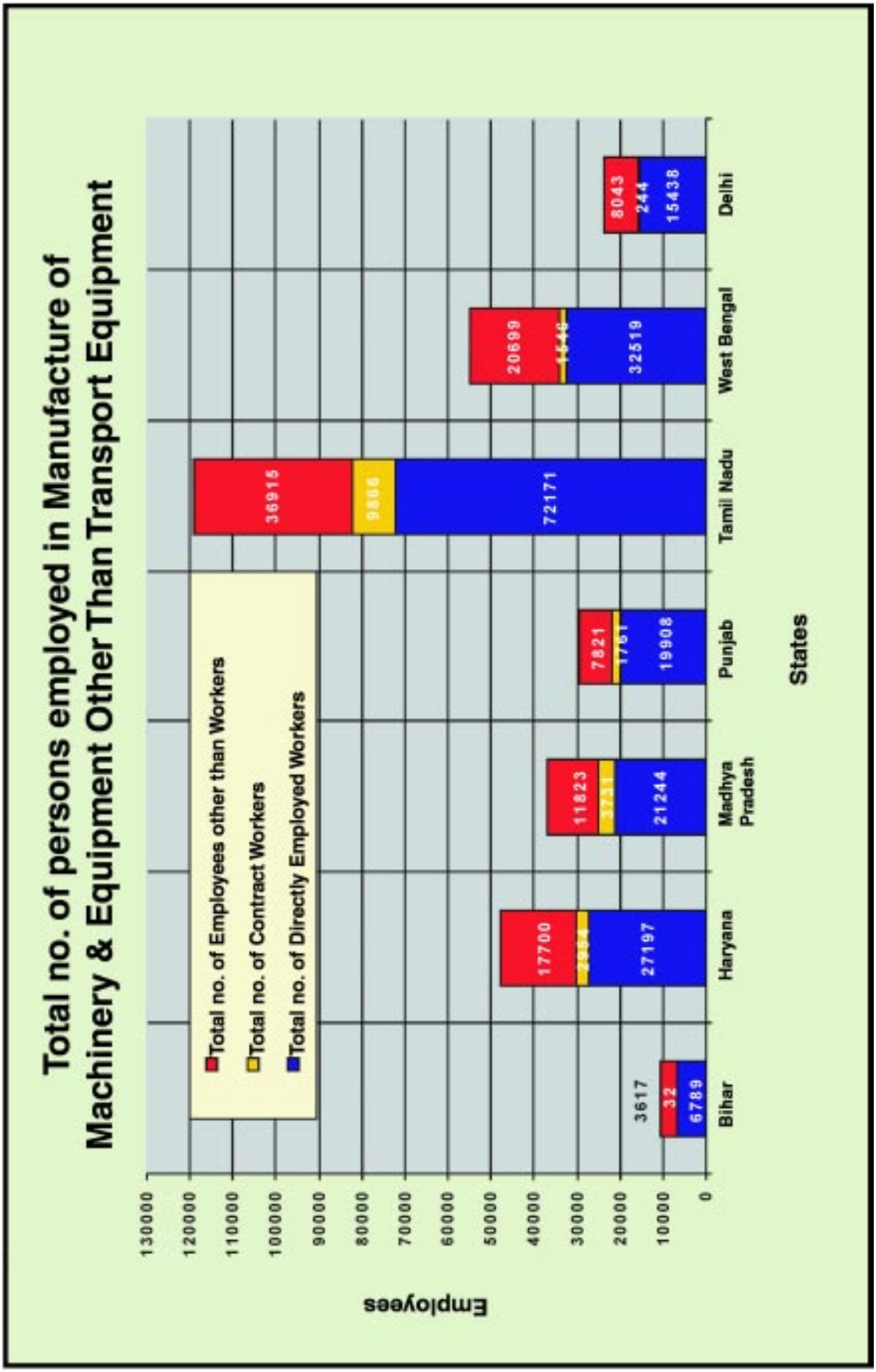

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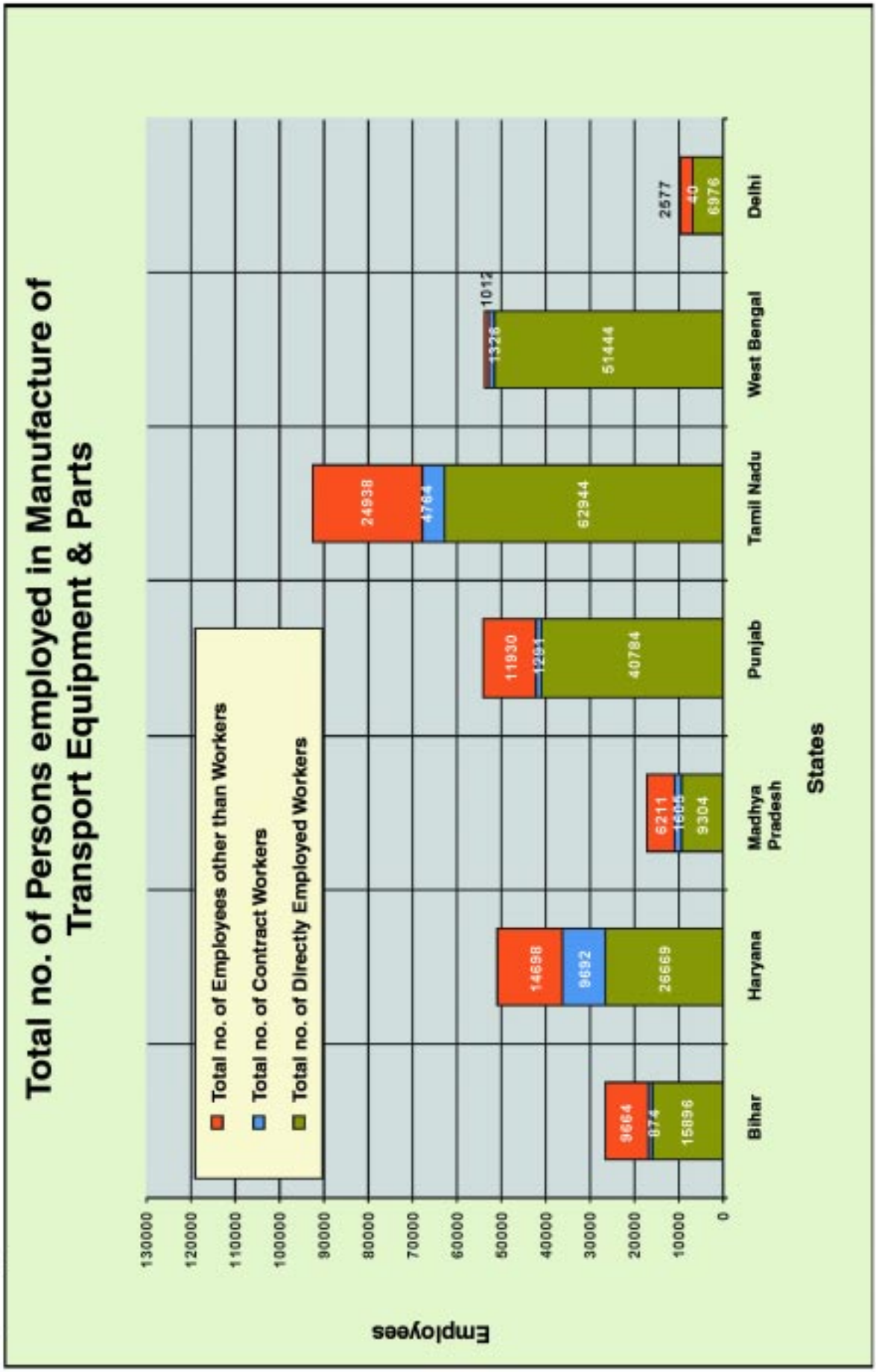

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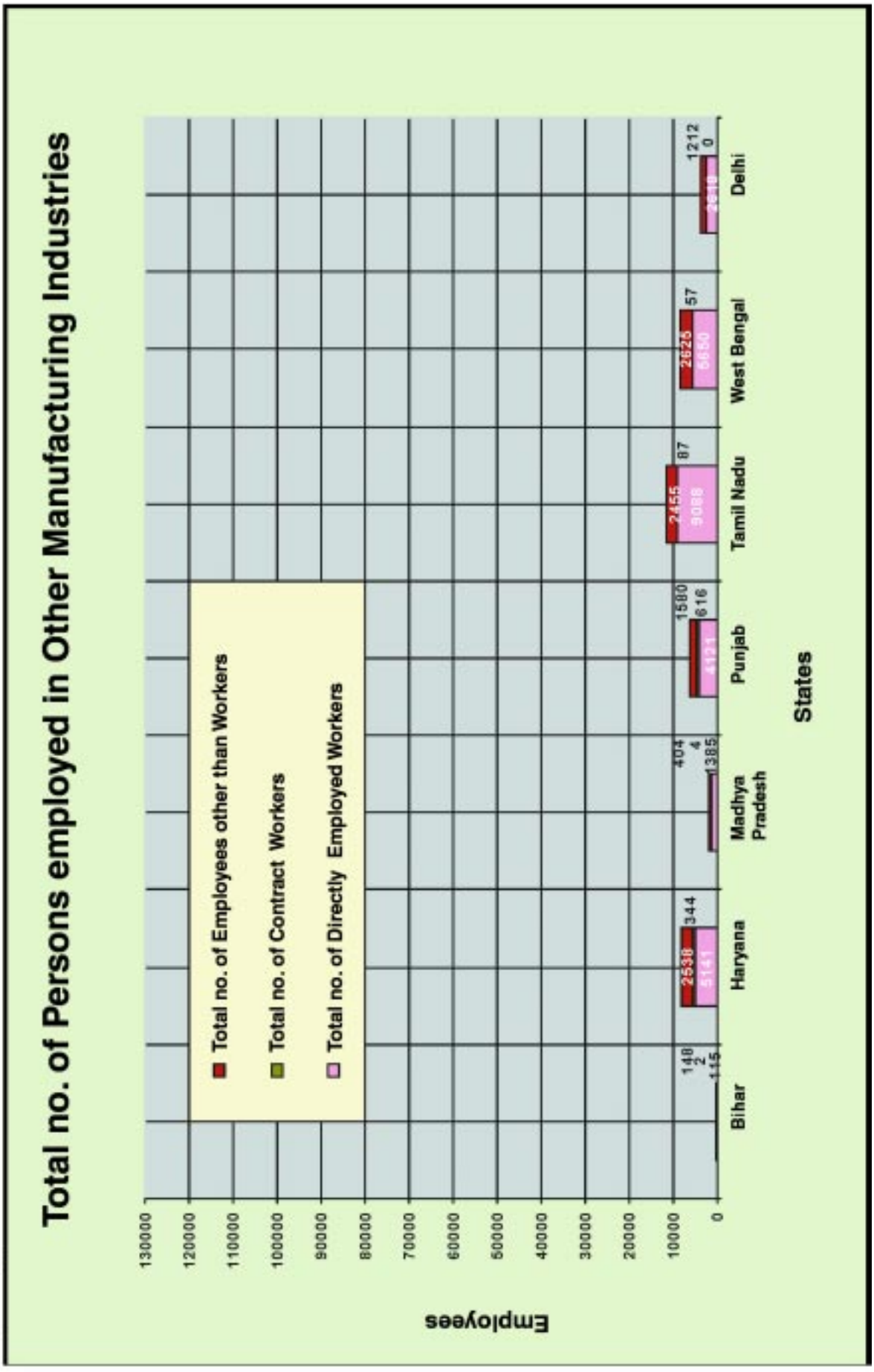

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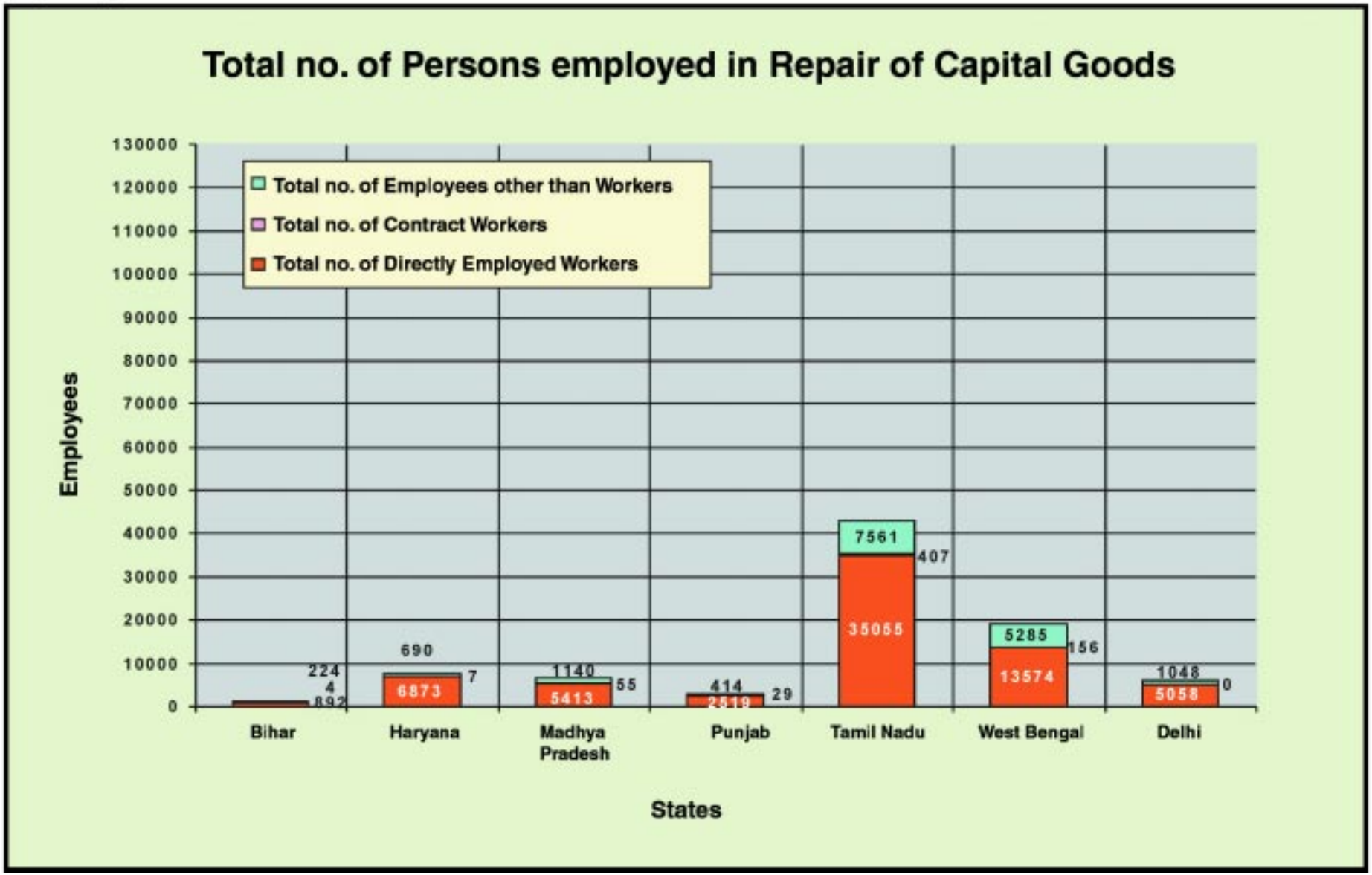

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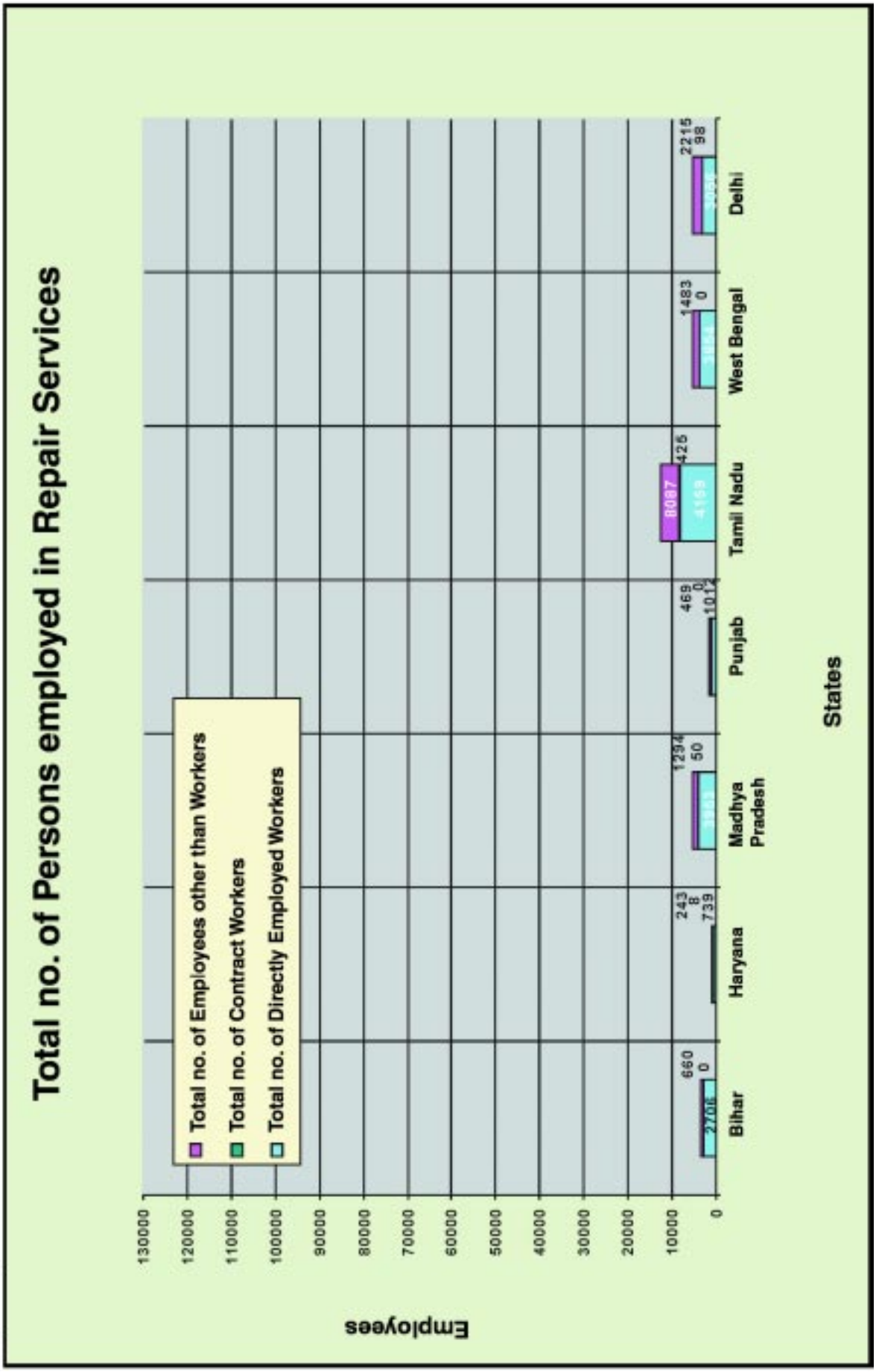

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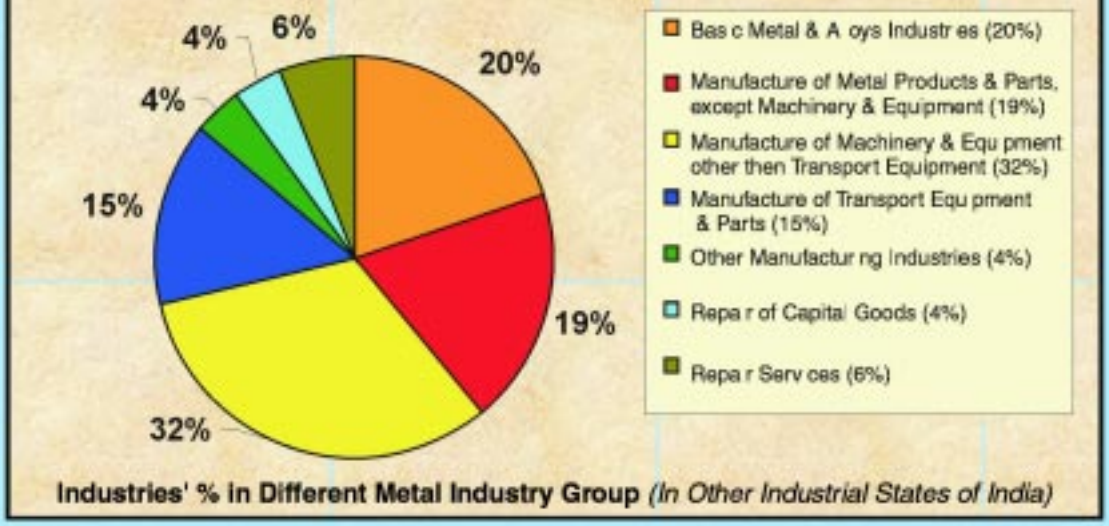
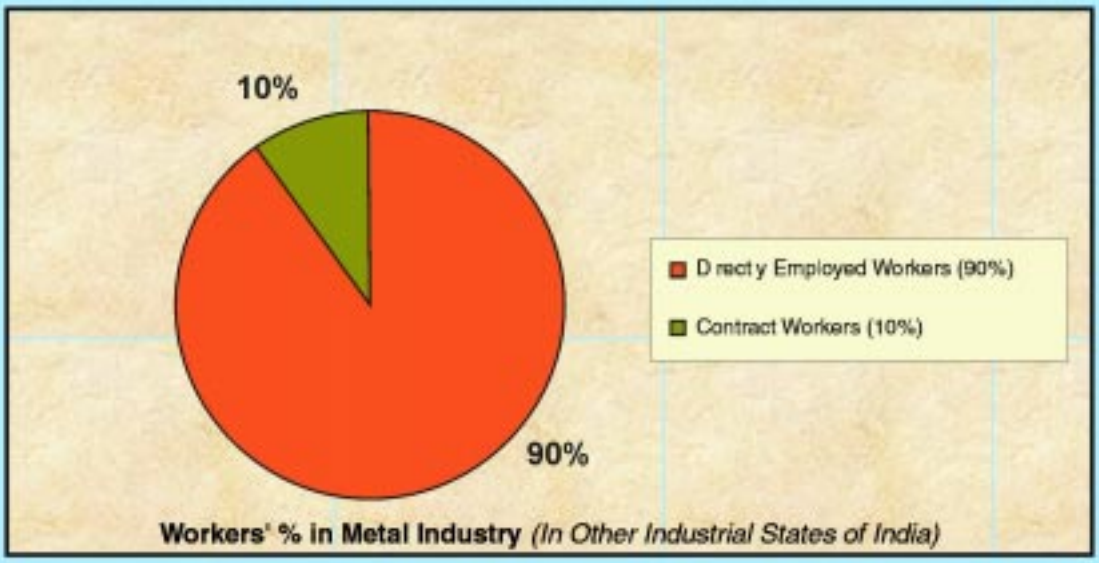
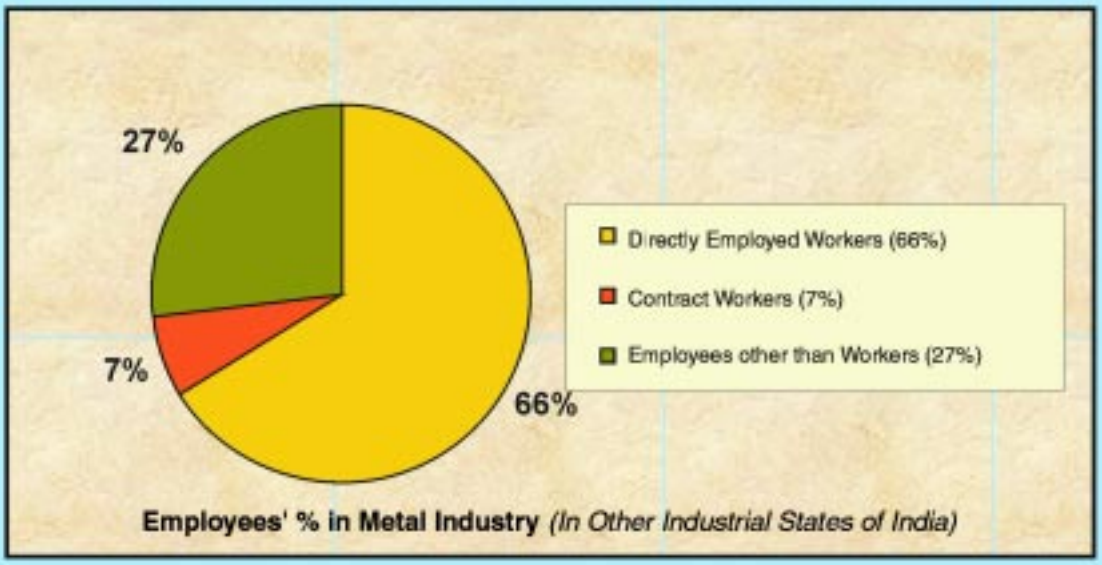


Industries' % in Different Metal Industry Group *(In Other Industrial States of India)*



Workers' % in Metal Industry *(In Other Industrial States of India)*



Employees' % in Metal Industry *(In Other Industrial States of India)*

Glossary

Factory is one which is registered under sections 2m (I) and 2m (II) of the Factory Act, 1948. The sections 2m (I) and 2m (II) refer to any premises including the precincts therof (a) whereon 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 (b) whereon twenty or more workers are working or were working on any day of the preceding twelve months and in anypart of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on.

Fixed Capital represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year. Fixed assets are those which have a normal productive llife of more than one year. Fixed capital includes land including lease hold land, buildings, plants and macinery, furniture and fixtures, transport equipments, water system and roadways and other fixed assets such as hospitals, schools etc. used for the benefits of the factory personnel.

Physical Working Capital is the total inventories comprising of raw materials and components, fuel and lubricants, spares, stores and other, semi-finished goods and finished goods as on the closing day 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 and finished goods processed by the factories from raw materials supplied by others.

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

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

Workers are defined to include all persons employed directly or through any agency and engaged in any manufacturing process or in cleaning any part of the macinery or premises used for manufacturing process or in any other kind of work incidental to or connected with the manufacturing process or the subject of the manufacturing process. Labour engaged , in the rapair and maintenance or production of fixed assets for factory's own use or labour employed for generating electricity or producing caol, gas etc. are included.

Employees other than Workers includes persons employed as clerks, supervisors etc., i.e nonmanual workers.

Total Persons Engaged includes the employees as defined above and 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 cooperative societies who worked in or for the factory in any direct or productive capacity.

Wages and Salaries are defined to include all remuneration in monetary terms and also payable more or less regularly in each pay period to workers as compensation for work done during the accounting year. It includes (a) direct wages and salary (i.e., basic wages/ salaries, payment of overtime, dearness, compensatory, house rent and other allowences); (b) remuneration for the period not worked (i.e., basic wages, salaries and allowances paybale for leave period, paid holilday, lay-off payments and compensation for unemployment, if not paid from sources other than employers); (c) bonuses and ex-gratia payment paid both at regular and less frequent intervals (i.e., incentive bonuses, good attendence bonuses, productive bonuses, profit sharing bonus, festival or year end bonuses etc.). It excludes lay off payments which are made from trust or other special funds set up exclusively for this purpose i.e., payment not made by the employer. It also excludes imputed value of benefits in kind, employer's contribution to the old age benefits and other social security charges, direct expenditure on maternity benefits and creches and other group benefits. Travelling and other expenses incurred for business purposes and reimbursed by the employer are excluded. The wages are expressed in terms of gross value i.e., before deduction for fines, damages, taxes, provident fund, employee's state insurance contribution etc.

Total Emoluments is defined as the sum of wages and salaries, employers contribution as provident fund, workmen and staff welfare expences as defined above and other funds.

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

THE INTERNATIONAL METALWORKERS' FEDERATION (IMF)

IMF was founded in 1893 and represents the collective interests of over 25 million members in 200 unions in 100 countries worldwide.

The IMF is a federation of national unions - a union of unions - in the metal industry at world level. It is representing workers, both blue- and white-collar, in industries such as steel, non-ferrous metals and ore mining, mechanical engineering, shipbuilding, automobile, aerospace, electrical and electronics.

Head Office is in Geneva, Switzerland, where worldwide activities are co-ordinated with a network of regional offices around the world.

The IMF keeps abreast of developments in the metal industry, servicing its member unions by research on economic and social issues, providing educational background and fighting for trade union, human and equal rights. The IMF brings together trade union representatives to discuss international union policy on subjects such as working time and new work organisation, new technology, industrial democracy and workplace health and safety.

The focus of IMF activities is determined by the Action Programme adopted at the IMF's 30th World Congress, in Sydney in 2001, in which a strategy was drawn up for, among other priorities:

- ✓ Global structures to meet global challenges
- ✓ Solidarity and Organising
- ✓ A social dimension to Globalisation

The IMF publishes comprehensive reports on trends in international metal industries. It also produces a magazine, Metal World, as well as providing a newsletter service, NewsBriefs, and an extensive Internet site, www.imfmetal.org.

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