CHAPTER - II

2.1 HISTORICAL DEVELOPMENT OF INDUSTRIAL RELATION IN INDIA.

The historical background can be classified under four periods viz. 1) Ancient period (Pre-medieval period) 2) Medieval period, 3) British period and 4) Modern period.

ANCIENT PERIOD :

Ancient India had witnessed cordial socio-economic relations. The origin of productive engagement in India can be treced to prehistoric ancient period, when a primitive type of socio-economic relation had existed. In the various stages of ancient enterprises like hunting stage, pastoral stage, agricultural stage and village economy, help or hire stage, handicraft system, bartar economy, emergence of money economy, twon economy and putting out system, there was little scope for systemetic practice of industrial relations.

Varhashrams which existed in the ancient India during Vedic and Puranic periods provide the evidence for the existence of a type of division of labour. It reveals the existance of socio-economic enterprises which necessitated for a primitive type of industrial relation

even in ancient India. Brahmins earned their living by teaching, offering sacrifice on behalf of the others, receiving gifts etc. They were then managers of the affairs of the State who representated God on earth and as a result they claimed implict obediance from other sections of the Society. Kshatriyas were warriers, who had also enjoyed the right of learning and sacrifice. In course of time rulers and worriors came to consist of Kshatriyas, Vaishyas were entitled to cultivation, commerce, trading etc., while Shudras were the real working class who did not have any right for education, sacrifice etc. Even though the Varnas were not castes, they had paved the way for caste system in India. Varhashrams were occupations groups and the members of each Varna were at liberty to leave one profession and to take up another subject to many other restrictions. The relations were not strained. Workers, especially Shudras, made themselves available at the disposal of the superiors, and they had implict obedients to their employers.

MEDIEVAL INDIA :

Kautilya has given a vivid picture of the productive occupations during medieval period, in the 3rd book of his Arthashastra. It provides sufficient evidence for the absence of the organisational, existance of industrial relations in the beginning of the medieval period.

Various types of the guild system viz. artisans guild, Merchants guild and Co-operative guild, Caste system and Slave system had not provided any scope for organised industrial relations. However, relations were not bad during the medieval period which is evident in the statement of Ghosh and Santoshnath : "From the 4th Century B.C. till the latter half of the 10th Century A.D., in spite of the foreign invasion, there is sufficient evidence to indicate that the relations between the employers and the workers were based on justice and equity."

The existence of the organisations, viz. Piga and Shreni during Buddhist period can be traced from the earliest Buddhist literature. These organisations had aimed at achieving a good commercial progress. Shreni was a type of Union consisting of about thousand workers. Each occupational group had its own Shreni which was headed by a leader who was called 'Pramukha or Jyestha'. These shrenis enjoyed considerable influence in the public life also. Davids has mentioned about 18 Unions, while Majumdar mentions about 28 uhions. At the same time there is mention of about four unions in the Cambridge History of India. Even though these Shrenis were not identical to the Trade Unions of modern age. One can very well realise that there were organised activities even

in the medieval India. Similarly the numerical strength may change, but the reality of the group consciousness of the ancient Indian workforce cannot be disputed.

During the Mauryan rule (B.C.400 - 200) city local bodies like Pura, Nagara or Desa were empowered to control the factories and to inspect the manufactured goods, according to the account of megasthenes. A number of historical evidences of Gupta period (A.D. 479 - Gupta Era 159) have been revealed by the Paharpur Copper plates. There were factories during the Mauryan period and there are evidences of good relations between workers and the guild-Master and between artisant and workers themselves. Professionals like artisans, guid masters, merchants, Chief and chief scribes were holding influential position in the city administration. Workers were well regarded and the employer-employee relations were cordial. Thus during the period of Aative Hindu rulers employer-employee relations were mostly good. However, the bright industrial environments had ceased to exist during the Muslim Empire in India. All the industrial activities were controlled according to the whims and fancies of the autocracy. Kotwals who were the town governors had virtually controlled all the local ihdustrial activities and the industrial relations was quite controlled. The entire government was a centralised autocracy under the

Mughal rule and the industrial environments were directly controlled by rulers. Consequently, relations in the industry were maintained according to the whims and fancies of the rulers.

The above discussion has thrown light on the fact that the industrial relation during both ancient and medieval periods had been cordial. Basu reveals the existance of a practice of settling disputes with the help of "Madhyamasi" (mediator) though such disputes were very rare in the ancient period. They emphasised the importance of mutual relations and peaceful co-existence. Workers were treated with affection and respect in many cases and hence they did not prefer to leave their employers. They had enjoyed many privileges like sick leave, old age pensions and satisfactory wages during Ashoka's reign. The relations were cordial, and any dispute between the workers and their employers had been settled then and there under the mediation of the rulers or their representatives. Thus Industrial relations during the ancient period as well as during the period of native Hindu rulers were quite cordial, which were based on mutual respect and understanding. But the very foundations of the relations established on mutual understanding had been shaken during the time of Muslim rulers. This sitaation had prevailed until the advent of British rule.

BRITISH PERIOD :

There was not much scope for industrial development in India during the early British period. India was expected to be a colonial market for the British goods till the second half of the 19th century. Except indigo Plantations which started in 1831, industrial activities were practically nil prior to this. However, industries started springing up by the beginning of the latter half of the 19th Century. A cotton Mill was established in Bombay in 1853 and jute Mill in Calcutta in 1855. The period from 1860 to 1875 was a period of development of Jute and Cotton Industries, Coal mines and rail road constructions. The workers were to work in a subvertive and deplorable conditions, while they were exploited by their Contractors. Their relations had been strained and the workers abstained themselves from work. As a result, many disputes had arisen. In the sequel, fight between workers and the European Contractors took place in Bombay in 1859 which had resulted in the death of a European Railway contractor. The Central Government was then forced to pass the first Industrial Relations Act in 1860 - Employers and Workers (Disputes) Act of 1860. According to the Act all the disputes in the constraction of railways and other public works was to be subjected to a summary trial by a Magistrate. Any breach of contract on

the part of the workers was made a criminal offence. The payment wages was also systematised. This Act was in force until it was repeated in 1932.

Indigo and Tea Plantations were the earliest forms of large scale employment in India during British period, of which Indigo plantations ceased to exist after the advant of systematic dyes. A private tea garden was started in Assam in 1852, the number of which rose to 48 in 1857, 260 in 1869 and 295 in 1871 which a total area of 31,301 Acres and turnover of 6,251, 143 lbs. of tea. In course of time tea plantation have spread to Kangra in Punjab and Nilgiris in South India, and thus the area under cultivation of tea has exceeded 5,64,000 acres which produced an out put of 263 million lbs.

The Bombay Spinning and Weaving Company, the first organisation of its kind, established in 1851, built up the first cloth mill in India in 1853 which started production in 1854. A slow and steady growth took place with regard to textile industry to India and the number of Mills had grown to 19 in 1874, 56 in 1879 and 264 in the beginning of the World War I, which were mostly concentrated in Bombay and Ahmedabad. A jute mill was established in Serampore in 1854. Their number had grown to 20 in 1882 and 64 in 1913-14, they were in Bengal, mostly in and around

Calcutta. Tata Iron & Steel Industries Ltd. had been established in Jamshetpur in 1911. Industries like Tanning, Paper, Cotton, gins and presses, rice mills in Bengal and Madras had also been established. Engineering, and Railway workshops, Iron & Brass Industries etc. had also developed in moderate way prior to the First World War. The modern industry in India owes its existence to a great deal to the initiative of Europeans. However, the workers were not satisfied with the conditions in which they worked and the worker-Management relations were not cordial. Workers were actually in a very deplorable condition. Hence the factories Act of 1881 was passed which gave an impetus to workers approach for redresal. The first labour association, Bombay Mill hands Association was established in 1890. A number of Unions have come into existence after 1890. These organisations can be considered as the first organised movements of workers in India. Working and living conditions as well as the wages were not satisfactory and there was a lot of strain in worker-management relations. Growing indiscipline of workers, Gandhiji's influence on the political and labour movements etc. have paved the path for more confident unity among the workers. The formation of ILO (1919) and the emergence of AITUC (1920) were the remarkable incidents immediately after the World War. The Labour Party which gained ground in England had also stimulated the labour

movements in India. Explosive industrial relations had been boosted up in an unprescedented manner. The presidency Governments of Bombay and Bengal, therefore, felt the need to tackle the burning industrial and labour problems. Two committes, Bengal Committee and Bombay Committee had consequently been set up. The former had recommended to set up joint workers councils while the latter recommended to establish an industrial Court of Enquiry and an Industrial Court of Conciliation. The industrial unrest had skyrockated in Bengal, Bombay and Madras presidencies in 1920's and all the presidency Governments had been concerned with the developments.

Ultimately Central Government had passed the long awaited Trade Disputes Act of 1929 on the lines of the British Trade Disputes Bill of 1927, For the prevention and settlement of industrial disputes in India. The trade disputes Act of 1929, which was a counterpart of British Industrial Court Act of 1929 was therefore, of very little application. There was no provision to prevent the disputes by making mutual negotiations even though some provisions were made to cure the illness of industrial relations. This was specifically pointed out by Whitley Commission (Royal Commission on Labour) in 1931. The Commission recommended to rationalise the labour Management relations. They have emphasised the need for an internal

machinery, a works Committee, to prevent the disputes and to ensure worker's effective co-ordination and involvement. This would be an encouragement to workers and a means to avoid the differences. On the basis of the recommendations of the Commissions a Trade Dispute Amendment Act was passed in 1934 which placed the 1929 Act permanently on the Statute book. Government of India provided for the appointment of conciliation officers to be mediators and promoters of settlement of disputes in 1936. Following suit of the Bombay Government provision (1934) yet the recommendation of the Royal Commission to appoint works committee had not been adhered to until (1947. (Industrial Disputes Act,1947).

The Government of India Act,1935, which has provided for provincial autonomy had generated new hops and inspirations in the minds of the working class. But as soon as they found that their expectations were null and void, The unrest had spiralled up, which affected the industrial relations more than ever before. This had provoked the Bombay Government to pass the Bombay Industrial Disputes Act of 1938, Many of the provisions of which are still in force. Moreover, the new Industrial Relations Bill (1938) which is recently initiated by the Government of India has adopted a major portion of this Act.

Industrial scene was very much troubled as a result of growing workers' unrest during the period of II World War. There had been widespread demand for wage rise, because of the price rise in essential commodities. Cordial relations between the workers and the managements was very rare. In order to tackle this unrest Government had made use of Both the Trade Disputes Act and the Bombay Industrial Disputes Act in addition to which Rule 81A of the Defence of India Rules was promulgated in January,1942. Any Trade dispute was to be referred to conciliation and arbitration tribunal. Both management and workers were legally bound by the decision of the tribunal. Neither strike nor lockout could be possible when the conciliation or arbitration was pending. Similarly,no strike could be resorted to without a minimum notice for 15 days according to the order of 6th March,1942. Even though the II World War had come to an end in 1945 the stringency and restrictive measures still remained and the industrial relations scene had remained like a volcano ready to explode at any time until India become independent. Industrial Employment (Standing orders) Act of 1946 was not a panacee for the unprecedented industrial unrest in the country.

MODERN PERIOD (POST INDEPENDENCE) :

Modern industrial relations owe a lot to the

employer-employee relations of the past as Mamoria asserts "Modern industrial relations represent a blending of order systems with innovation introduced as society has changed through ages. Some features of early system even now persist, while other features are the result of Industrial Revolution and, therefore, represent sharp brakes with traditionally challenging problem for the management." Post independance industrial relations have been very much influenced by the pre-independence industrial environments and labour management relations. When India became independent in 1947, industrial scene was subjected to a considerable amount of chaos and confusion. Industrial Unrest and the shattered worker-management relations have been prevalent everywhere. Hence the Government of India did not wish to remain a passive spectator. Government has emerged out as an arbitrator between management and workers. It is in this context that the Industrial Dispute Act of 1947 has come into exhistence which has been amended from time to time.

In spite of the efforts made by the Government of India much change was not noticed with regard to the industrial relations in the country. Government had therefore, to take further precautionery measures. Trade Unions Amendment Act 1947, Labour relations Bill of 1950, Trade Union Bill 1950 and Bill No.11 introduced in the

Rajyasabha on 17th December,1954 are examples of Government concern over the troubling industrial relations scene. However, as a result of strong resistence and opposition from the Trade Unions, Government have been forced to drop out these Bills. Factory Act of 1948 has also been a strong Government step to improve the industrial relations. The Act, which has been an extention of all the factory legislations in the past viz. Factories Act 1881, 1891, 1911, 1922, Act of 1934 and its amendments (1935, 40, 41, 44, 45, 46 and 47), were expected to have laid the foundation for a new trend in industrial relations. Yet the recent trends in industrial relations through light on the fact that the industrial relations in India should go a long way to attain peaceful co-existence of both managements and workers. The legal machinery which was established as early as in 1860 in the matter of worker-management relations in India has acquired greater and greater importance as the time has passed. But the cloudy atmosphere in the industrial relations scene has also acquired wider dimensions proving that the legal institutions have got very limited scope in establishing industrial harmony and peace. The wead for a code of discipline for both workers and the managements has therefore, been widely falt, which was discussed and evolved at the Indian Labour Conference in 1957.[1]

---

1. Industrial Relation in India and Workers involvement in Management. By - Dr.V.P.Michael.

2.2 SCOPE AND ASPECTS OF INDUSTRIAL RELATIONS :

An industry is a social world in miniature. Associations of various persons, workmen, supervisory staff, Management and Employer in industry create industrial relationship. This association affects the economic, social and political life of the whole community. Thus, industrial life creates a series of social relationship which regulate the relations and working together of not only workmen and management but also of community and industry. Industrial relations are therefore, inherent in an industrial life. These include;

i) Labour relations, i.e. relations between Union - Management (also known as labour management relations);

ii) employee-employer relations i.e. relations between the management and employee;

iii) Group relations i.e. relations between various groups of workmen; and

iv) Community or public relations, i.e. relations between the industry and the society;

The last two are generally not considered for study under Industrial relations. They form the part of the larger discipline - sociology. The two terms, "Labour Management

relations" and "employer-employee relations" are synonymously used.

The main aspect of industrial relations are ;

1) Promotion and development of healthy labour management relations.

2) Maintenance of industrial peace and avoidance of industrial strife.

3) Development of Industrial Democracy.

1. Development of healthy labour management relations -

Promotion of healthy labour management relations pre-supposes :

a) The existence of strong, well organised, democratic and responsible trade unions and associations of the employers in the industry. These organisations enhance job security of employees, help in increased worker's participation in decision making (affecting the terms and conditions of their employment) and give labour a dignified role in the society. These association also tend to create vantage grounds for negotiations, consultations and discussions on a mutual basis which ultimately lead to good labour management relations.

b) Spirit of collective bargaining and willingness take recourse to voluntary arbitration. The very feeling of collective bargaining recognises equality of status between the two opposing and conflicting groups and prepare grounds, in an atmosphere of trust and goodwill, for discussion, consultations and negotiations on matters of common interest to both industry and labour. According to L.E. Howard, "Collective bargaining means... to get together (right of association), to determine that whatever conditions of work are allotted shall be same for all workers, and to make a bargain with employers to that effect (right of combination and collective bargaining) and eventually in case the employers should refuse to enter on such a bargain or fail to honour it when entered upon to confront them with a united refusal to go to work or to continue at work (right to strike)". Collective bargaining, plant discipline and union relations are the principal items with which industrial relations is primarily concerned.

c) Welfare work - Whether statutory or non statutory provided by the state, trade unions and the employers do create, maintain and improve good and healthy labour management relations and try to achieve peace for the industry.

2. Maintenance of Industrial Peace :

Industrial peace presupposes the absence of any type

of industrial strife. Permanent industrial peace and harmony in a plant and the unit is a must for increased production and healthy relationship between the workers and the employers. Such peace is established with the availability of the following privilage and power to the Government, and the facilities for bipartite and tripartite consultation for resolving the differences between the two contending parties.

a) Machinery for the prevention and settlement of industrial disputes in the form of i) legislative and administrative enactment - like that of the Trade Union Act, the Disputes Act, Industrial Employment (standing industrial orders) Act; ii) Works Committees and Joint Management Councils; iii) Conciliation officer and Board of conciliation; iv) Labour Courts, Industrial Tribunals, National Tribunals, Court of Enquiry; and v) Provision for voluntary arbitration.

b) Appropriate Government should have the power to refer the disputes to adjudication when situation becomes intense and the industry is faced with an economic collapse on account of continued stoppage of production due to long strikes/Lockouts, or when it is urgent in public interest during period of emergency, or fear of foreign attack, when production need be carried on without interuption.

c) Government enjoys the power to maintain statusquo, such power is exercisable where the government after referring the dispute finds that either party is continuing the strike or lockout and such strike or lockout is likely to jeopardise the life of the community and to create chaos in industry.

d) The provision of the bipartite and tripartite forums for the settlement of dispute. These forums act through code of discipline in industry, code of conduct, code of efficiency and welfare, model standing order, Grievance procedure and granting of voluntary recognition to Trade Unions by the employer. These non statutory measures help to create satisfaction among the employer and employees.

e) The creation and maintenance of Implementation cells and Evaluation Committees which have the power to look into the implementation of agreements, settlements and awards and also violation of the statutory provisions under various labour laws.

3. Development of Industrial Democracy :

The idea of "Industrial Democracy"is that the Labour should receive the right to be associated with the running of the industry. For achieving this objective, following techniques are usually adopted :

a) Establishment of the shop councils and Joint management councils at the floor and the plant level, which endeavour to improve the working and living conditions of the employees, to inprove productivity to encourage suggestions from employees, to assist in the administration of the laws and agreements, to serve as a channel of communication between management and employees, to create in the employees a sense of participation in the decision making issues and a sense of belonging to the industry. These methods and activities provide the necessary climate for the development of industrial democracy in the country.

b) Recognition of Human Rights in Industry :

This e implied that "Labour is no more an article or commodity of commerce" which can be purchased and disposed of according to the sweet whims and caprices of the employers. They are to be treated as human being, given a sense of self-respect and better understanding of therrole in the organisation and their urge for self expression (through closer association with management) is to be satisfied. The recognition of labour as human being and the treatment of labour on human grounds provide the basic pre-requisite for achieving industrial democracy.

c) Increase in Labour Productivity :

Factors that contribute to higher productivity are;

i) improvement in the level of effort and skill of workers;

ii) improvement in production design, process, materials, equipment, layout, work methods which can be brought about by ideas or suggestions received from the workers research and development including special studies and technological development elsewhere;

iii) improvement in the output due to capital intensification within the frame work of the same technology; and

iv) improvement in Management methods and practices. Through equitable distribution of the gains earned between the management and labour increased productivity can bring about industrial peace. Labour productivity is intimately connected with incentives (financial and non financial) in the shape of increased wages and allowances, recognition of good work, promotion, awards, job security, profit sharing plans, incentive payment to workers on individual or group performance. All these devices lead to a change in the attitude of employees towards work and the employers. This leads to a satisfactory performance of job and maintenance of good industrial relations.

d) The material and social environment, to which the worker adjusts and adapts himself while at work, must be available. It is this environment which may stimulate or

depress, help or hinder the relations between labour and management. Environmental grievances have a great bearing on industrial relations.

According to Lester, "Industrial relations involve attempts to arrive at solutions between the conflicting objectives and values between profit motive and social gain, between deiscipline and freedom, between authority and industrial democracy, between bargaining and co-operation, and conflicting interests of the individual, the group and the community. [2]

2.3 BRIEF HISTORY AND DEVELOPMENT OF AUTO INDUSTRIES IN INDIA.

2.3A Brief history of auto industriess in India :

After the second World War the mopeds made an entry in the Indian market. With the entry in the market by the moped the new era in mopeds started.

Italions are the pioneers in introducing mopeds in India. There was an Italian Company which was producing INOCENTEE-48 mopeds. The said company stopped production of mopeds and converted its business in Machine Tools. So Inocentee is no more in Italy.

---

2. Dynamics of Industrial Relations in India
By- C.B.Mamoria, S.Mamoria.

The advantage of the above change has taken by the Indian Company. The Indian Company Automobile production of India took up the technical know how of the Inocentee and made collaboration with the Italian Company, and introduced first Moped in India in 1952 by the name LAMBRETTA 48cc.

In the year 1962 the Germany entered in the field of mopeds and introduced "Vikee Moped". This is the second attempt in mopeds. "Saund Iwe riod nion India (P)Ltd." produced the Vikee moped in collaboration with India.

The third attempt was made by France when they introduced "SUVEGA" moped in collaboration with "Mopeds India Limited" an Indian Company.

The fourth attempt was made by Japanese. They introduced "PEARL YAMAHA" of 0.75 cc in the market.

After that so many entreprenuers came in this field and introduced auto mopeds, scooters, motor cycles etc. in India.

2.3.B Development and Present position of Auto Industries in India :

In the past few years, the Automobile Industry has

undergone a sea-change. Government of India having recognised the tremendous impact modernisation of this industry can make on the income and employment of the country, as well as its own image in the national and international market has sought to provide various incentives, opportunities and assistance to this industry. The decision of the Government to liberalise import of technology and thereby encourage Indian enterprises to enter into technical collaboration with their foreign counterparts are only some instances of the modernisation objective. Further, to promote diversification, the Government will permit Vehicle Manufacturers to modify their industrial licences so as to manufacture any vehicle within the broad band of their own category. In addition, Government has also licenced new units to enter the vehicle, engine and component manufacturing fields. Import of capital goods and components will be allowed to all manufacturers on the grounds of quality and technology.

Many new technical collaborations for a wide range of vehicles, engines, machine tools and components are on the anvil. The Automobile industry has built up new and vital links all over the World. Many Auto manufacturers in the World have come to India to assess new opportunities for trade or collaboration. Leaders of the industry have also

been looking, within as well as abroad, for more opportunities to increase scale of production and lower the cost of production. It is hoped that all these measures will help Indian Automobile industry to come up to the levels of contemporary technology.

The structure of the industry itself is rapidly changing. New plants are being set up and the existing ones are modernising and expanding. It has been estimated that between 1985-90, number of vehicles produced will double to 2.3 millon a year. Their value is estimated to multiply three to four times. In order to reach these levels the industry is planning to make sizeable fresh investments during the next five years.

Acquisition of Modern and sophisticated technology has enabled the Automobile industry to offer a hider choice of vehicles to the customers. While the passenger Car segment is poised for a major spurt, the light commercial vehicle and two wheeler markets are also gearing up for a transformation, in terms of production capacity and product technology. The vehicles are now safer, more fuel efficient and comparatively more pollution free. The quality of performance and the level of comfort offered by them though higher than in the past, are still being improved.

Emphasis on the development of fuel efficient, low priced vehicles, equipped with the latest technology has in turn led to greater attention on research and developments and efforts are being made both at the unit and industry level. It is needless to emphasis the key role such efforts will play in the area of automobile manufacturing in future years.

THE CATALYTIC EFFECT :

These changes in the industry, however go beyond the technology in the factories and competition in the markets. The automobile plants act as a catalyst by promoting growth, diversification and modernisation of other industries that supply raw materials, inputs, components, assemblies and peripheral parts like tyres, batteries, starters etc.

The Automobile manufacturers exposed to new and efficient technologies, are seeking reliable and sophisticated machines as well as better quality components. This concern for quality and performance has spread to other industries too : die casting, forging and foundry units, paints, lubricants, plastics and fuels. These industries have also been motivated to look around for better technology and good performance. Demand for sophistication and reliability in the manufacturing

processes in these areas has, in turn, generated a demand for better electricals, hydraulics, controls and in process ganging. The changing automobile industry has thus heralded successive changes in many other upstream industries. In most cases, the manufacturers have promoted Vendor Development Programmes by offering technological and financial guidance to the new breed of supplier-manufacturers.

ISSUES AND RESPONSIBILITIES :

Along with these developments, there are the continuing problems of inadequacy in the quantity, quality, technology and cost of resources for long term investment as well as working capital resources, machine tools, auto components, ball and roller bearings, power, availability and road development.

Further the vehicle manufacturers are concerned about improvements and investments in auto components, machine tool and bearing industries not keeping pace with the growth and development of the Automobile industry. The ultimate performance of the automobile manufacturers depends on the support they get from these industries. The automobile industry would therefore wish for commensurate growth

diversification, development and investments in these industries.

In view of the changing environment, there is now a greater responsibility on the Automobile industry for responding to the demands on the industry creatively, positively and in time. The new developments also give an opportunity to the industries to contribute to the thinking and decision making process within the Government and to make an effective impact on the formulation of the policies, plans and programmes during the next decade.

MATERIALS, INPUTS, COMPONENTS :

a) Steel :-

Shortage, coupled with rapidly rising prices and poor quality indigenous steel, affects the production programmes of vehicles manufacturers and the final performance of vehicles. Steep increase in steel prices and duties, revised twice in a short period of 10 months between July 84 and February 85, resulted in a 55% rise in the cost of steel. In addition to short falls in production a shortage of wagons affected availability of steel to vehicle manufacturers. The Steel Plants have been unable to develop and establish special sheets and plates. The

inadequacy of indegenous supplies of micro-alloyed plates and sheets to international specifications has forced the automobile industry to import such requirements.

b) Machine Tools :-

The Automobile industry needs superior machine tools both, in sophistication and in reliability. In its various discussions with the machine tool industry and the Government, the Automobile industry has identified the major technology, performance and capability gaps. Both, the Automobiles and Machine Tool industries are jointly evolving ways and means for bridging such gaps.

TABLE NO. 2.1 NUMBER OF MANUFACTURERS IN VARIOUS VEHICLES.

	VEHICLE	NO.OF MANUFACTURERS
1.	Heavy & Commercial Vehicles	5
2.	Light Commercial Vehicles	8
3.	Jeeps	1
4.	Cars	5
5.	Scooters	21
6.	Motor Cycles	6
7.	Mopeds	25
8.	Three Wheelers	6
9.	Electric Vehicles	3
10.	Tractors	13

TABLE NO. 2.2 : LICENSED AND INSTALLED CAPACITIES IN AUTOMOBILE INDUSTRY

Sr. No.	Manufacturers	Licensed Capacity.	Installed Capacity	Letter of Capacity	Intent Date
A)	HEAVY & MEDIUM COMMERCIAL VEHICLES :				
	1) Ashok Leyland	47,000	23,000	-	-
	2) Hindusthan Motors	30,000	15,000	15,000	29-9-83
	3) Premier Automobiles	15,000	4,000	-	-
	4) Simpson	12,000	N.A.	-	-
	5) Telco	44,640	44,640	24,360	6-5-83
B)	LIGHT COMMERCIAL VEHICLES				
	1) Bajaj Tempo	15,000	15,000	15,000	7-5-83
	2) D.C.M. Toyota	-	-	15,000	6-5-81
	3) Eicher Goodearth	-	-	12,000	5-10-81
	4) Hyderabad Allwyn	-	-	10,000	29-9-81
	5) Mahindra & Mahindra	13,000	2	-	-
	6) Maruti Udyog	1,40,000[3]	40,000	-	-
	7) Punjab State IDC	-	-	10,000	5-10-81
	8) Standard Motors	12,500	7,200[1]	-	-
C)	JEEPS				
	1) Mahindra & Mahindra	27,000	25,000	-	-

D) CARS

1) Hindustan Motors	30,000	30,000	20,000	6-3-84
2) Maruti Udyog	5	5	-	-
3) Premier Automobiles	28,600	28,600	-	-
4) Sipani Automobiles	3,000	3,000	-	-
5) Standard Motors	2,640	6	-	-

(Contd....)

Sr. No.	Manufacturers	Licensed Capacity	Installed Capacity	Letter of Capacity	Intent Date
E)	SCOOTERS				
1)	A.P.I.	48,000	48,000[7]	-	-
2)	A.P. Scooters	60,000	20,000	-	-
3)	Bajaj Auto	2,29,700[8 & 9]	2,29,700[8 & 9]	-	-
4)	Bharat Electricals	15,000	n.a.	-	-
5)	Bihar State IDC	30,000	n.a.	-	-
6)	Enfield India				
7)	Escorts				
8)	Girnar Scooters	24,000	9,000	76,000	25-11-83
9)	J & K State IDC	12,000	n.a.	-	-
10)	Karnataka Scooters	24,000	20,000	36,000	29-12-83
11)	Kelvinator of India	1,00,000	n.a.	-	-
12)	Kerala State Engg.	24,000	n.a.	-	-
13)	Kinetic Honda	-	-	1,50,000[13]	23-4-83
14)	Lohia Machines	1,00,000[12]	-	2,00,000	3-12-83
15)	L.S.Agarwal	24,000	n.a.	-	-
16)	Maharashtra Scooters	52,000	65,000[10]	8,000	Application made for re-endorsement.
17)	Majestic Auto	-	-	1,00,000	26-8-82
18)	Punjab Scooters	24,000	n.a.	-	-
19)	Scooters India	1,00,000	60,000	-	-
20)	U.P.Scooters	24,000	n.a.	-	-
21)	West Bengal Scooters	30,000	n.a.	-	

F) MOTOR-CYCLES :

1)	Bajaj	21	21	-	-
2)	Enfield Auto	1,20,000 [18]	36,000	-	-
3)	Escorts	84,000 [17]	60,000	1,50,000	4-4-83
4)	Ideal Jawa	42,000	39,000	-	-
5)	Ind-Suzuki	1,00,000	-	-	-
6)	Majestic Auto				

(Contd....)

Sr. No.	Manufacturers	Licensed Capacity	Installed Capacity	Letter of Capacity	Intent Date
G)	MOPEDS :				
1)	A.P. Scooters	-	-	1,00,000	2-8-82
2)	Atlas Auto Cycles	50,000	n.a.	-	-
3)	Balraj Agarwal	-	-	1,00,000	26-7-82
4)	Chamundi Mopeds	1,00,000	60,000	1,00,000	12-1-82
5)	Elgi Equipments	10,000	n.a.	-	-
6)	Enfield India	-	-	-	-
7)	Harish Jain	-	-	50,000	11-2-81
8)	India Automotives	24,000	4,000	D.G.T.D. Registration	
9)	Ind-Suzuki	2,00,000	n.a.	-	-
10)	Karnataka Scooters	-	-	-	-
11)	Karnavati Auto	15,000	15,000	D.G.T.D. Registration	
12)	Kelwinatar India	1,00,000	n.a.	-	-
13)	K.G.P. Auto Ltd.	24,000	18,000	-	-
14)	Kinetic Engineering	1,00,000	1,00,000	1,00,000	19-1-84
15)	Lohia Machines	-	-	1,00,000	7-1-82
16)	Majestic Auto	1,00,000	1,20,000	1,00,000	26-8-82
17)	Mopeds India	30,000	30,000	-	-
18)	Ramon Engineering	24,000	n.a.	-	-
19)	R.S. Oswal	-	-	1,00,000	6-5-82
20)	Sound Zweiral	15,000	15,000	-	-
21)	Scooters India	50,000	-	-	-
22)	Scooters Kerala	50,000	n.a.	50,000	6-5-82
23)	Sen & Pandit	50,000	n.a.	-	-
24)	Sundaram Clayton	1,04,000	1,04,000	-	-
25)	Tamil Nadu Mopeds	20,000	n.a.	-	

H) THREE WHEELERS :

1)	A.P.L.	15,000	27	-	-
2)	Bajaj Auto	33,000	33,000	-	-
3)	Electromobiles	-	-	-	-
4)	Kinetic Honda	-	-	-	-
5)	Lohia Machines	-	-	50,000	28-10-83
6)	Scooters India	30,000	2,500	-	-

I) ELECTRIC VEHICLES :

1)	Bharat-Heavy Electricals (Battery Powered)	-	-	5,000	24-9-83
2)	Electromobiles (Three Wheeler)	25,000	-	-	-
3)	Intra Chatterjee (Electric)	-	-	12,000	17-9-81

J) TRACTORS :

1)	A.P. IDC	-	-	6,000	8-5-83
2)	Concorde India	-	-	12,000	31-3-83
3)	Eicher Goodearth	15,000	n.a.	-	-
4)	Escorts	20,000	16,000	-	-
5)	Escorts Tractors	10,000	3,600	-	-
6)	Gujarat Tractors	7,000	n.a.	-	-
7)	Harsha Tractors	10,000	n.a.	-	-
8)	Hindustan Machine Tools	12,000	12,000	-	-
9)	Kirloskar Tractors	10,000	8,500	-	

10)	Mahindra & Mahindra	18,800	15,000	-	-
11)	Pittie Tractors	12,000	n.a.	-	-
12)	Punjab Tractors	20,000	12,000	-	-
13)	Tractors & Farm Equipment	12,000	8,750	-	-

Sr. No.	Manufacturers	Licensed Capacity	Installed Capacity	Letter of Capacity	Intend Date

1. Inclusive of Cars (See Item No. D.5)
2. Installed capacity combined with and shown against Jeep (Item No.C.1)
3. Includes Cars (See Item No. D.2)
4. Inclusive of LCVs (See Item No.B.5)
5. Capacity is combined for Cars, Jeeps and LCVs.(Item B.6)
6. Installed capacity is combined with and shown against LCVs (See Item B.8)
7. Includes three wheelers also (See Item H.1)
8. In addition, capacity of 52,000 CKD packs for supply to Maharashtra Scooters.(See Item E.16)
9. Includes Motor Cycle.(See Item F.1)
10. Partly under installation.
11. Includes Mobiks also. (See Item G.10)
12. Includes Three Wheelers (See Item H.5) & Mopeds (Item G.1
13. Includes Three Wheelers (See Item H.4)
14. Includes Motor Cycles.(See Item F.6)
15. Capacity is combined with and shown against Motor -Cycles (See Item F.3)
16. Capacity is for Two Wheelers (See Item F.2)
17. Includes Scooters (See Item No.E.7)
18. The capacity is for Two Wheelers.
19. Includes with and shown against Scooters.(See Item No.E.1)
20. Capacity combined with and shown against Mopeds (Item G.9.
21. Includes with and shown against Scooters (Item No.E.3)
22. Capacity includes Motor Cycles also (See Item F.5)

23. Includes Mini Motor Cycles also.
24. Capacity combined with and shown against Scooters (See Item E.14)
25. Capacity for Mobikes shown against and combined with Scooters (See Item E.10)
26. Capacity is for Two Wheelers (See Item No.F.2)
27. Installed capacity combined with and shown against Scooters (See Item E.1)
28. Capacity combined with and shown against Scooters (See E.14)
29. Capacity combined with Scooters (See Item E.13)
30. Electric Vehicles. (See Item 1.2)
31. (See Item No. H.3)

TABLE No. 2.3 : ESTIMATED SALE VALUE OF PRODUCTION DURING 1984.

	No.of Manufacturers	Value in Lacs
1. Commercial Vehicles	9	1239.73
2. Cars/Jeeps and Vans	4	574.10
3. Two/Three Wheelers	9	478.35
4. Tractors	4	450.50
Total ..	26 *	2693.68

* Since this includes Companies engaged in production of more than one type of vehicles, the total number of manufacturers covered are 19 only.

Source : 25th Annual Report (1984) of Association of Indian Automobile Manufacturers, Bombay.

TABLE NO. 2.4 : FOREIGN COLLABORATIONS IN RESPECT OF VEHICLES - TECHNICAL/FINANCIAL :

Sr. No.	Name of Company	Name of Collaborator	Products	Year
1)	Autra Pradesh Scooters	Piagio S/a. (Italy)	Scooters	1982-1992
2)	Automobile Products of India	Automotive Products (England)	Brake System & Clutch Assembly	1955-1985
		Beraqt Brems Belag KG (W.Germany)	Clutch Facings	1967-1972
		Alfred sell Autoteila Fabric (W.Germany)	Brakes	1967-1974
			Tie Road Ends, Drag Links, Drag link ends, King Pins, side rod assembly, spring bolts.	1961-1981)
		Firestone Tyre & Rubber (USA)	Brake Linings	1954-1971
		Fichtet & Saches AG (W.Germany)	Clutches	1959-1976
		Fiat SPA (Italy)	Brakes	1959-1968
		Innocenti SG (Italy)	Scooters & 3 Wheelers	1955-1970
3)	Ashok Leyland	Leyland Vehicles (U.K.)		1983-
4)	Allwyn Nissan	Nissan Motor Co. (Japan)	Light Commercial Vehicle	N.A.
5)	Bajaj Auto	Piagio & Co. (Italy)	Scooters & 3 Wheers	1960-1971)
		Industria Prototipi & Serie (Italy)	Restyling of Scooters	1982-
		Kawasaki Heavy Industries Ltd., (Japan)	Motor Cycles	
6)	Bajaj Tempo	Diamler Benz AG (W.Germany)	OM 616 Diesel Engine	1979-1989
			Light Commercial Vehicles	1979-1989

7)	DCM Toyota	Toyota Motor Co. (Japan)	Light Commercial Vehicle	1983-
8)	Escorts	Yamaha Motor Co. (Japan)	Motor Cycles/Scooters	1983-
		Maschinan Fabric (W.Germany)	IC Engines/Diesel Engines and Engine blocks.	1981-
9)	Enfield India	Enfield Cyclo Co. (U.K.)	Motor Cycle & Components	1957-1969
		Villiers Engg.Co. (U.K.)	Two Stroke Engine Gear Box Units.	1960-1970
		Zundapp Werke GMBH (W.Germany)	Motor Cycle, Motor Cycle Engine, Mopeds.	1982-

(Contd...)

10)	Hindustan Motors	Vauxhall Motors	(U.K.)	Commercial Vehicles.	1980-1983
		Isuzu Motors	(Japan)	Commercial Vehicles and Car Components.	1983-
		Cam Léon	(England)	Complete Stearing Mechanism	1981-
		Detroit Diesel Allison Div of General Motors	(U.S.A)	Diesel Engines & Power Shift Transmission.	1980-
		General Motors	(U.K.)	Stearing Column Assembly	
				Healen Motor Assembly	
				Front Door total assembly	
				Rear Door total assembly	
				Front Window Regulation	
				Rear Window Regulator.	
				Tank Unit	
				Windscreen Wiper Assembly	
11)	H.M.T.	Motokov Foreign Trade Corpn.	(Czechoslovakia)	Tractors	1971-1983
12)	Hero Honda	Honda Motor	(Japan)	Motor Cycle & Mopeds upto 100 CC	N.A.
13)	Ideal Jawa India	Polytechna	(Czechoslovakia)	350 CC Twin Cylinder Engine	1983-

14)	Ind-Suzuki	SUZUKI Motor Co. (Japan)	Motor Cycle/Mopeds within 100 CC Range.	1983-1993

TABLE No.2.4 (Contd....)

Sr.	Name of Company	Name of Collaborator	Products	Year

TABLE No. 2.4 (Contd....)

Sr. No.	Name of Company	Name of Collaborator	Products	Year
15)	Kinetic Engineering	M.G. Sessa (Italy)	KV Payload upto 3 tons	1982-
			3 Wheeler Vehicles	5 Years from Commencement.
16)	Kinetic Honda	Honda Motor Co. (Japan)	Scooters	1984-1994
17)	Kelvinator of India	Agrati Garelli SPA (Italy)	Mopeds	1982-
18)	Kirloskar Cummins		Diesel Engines.	
19)	Lohia Machines	Piaggio KCSPA (Italy)	Light Scooter 97 CC	
			Moped 49.77 CC	1982-
			3 Wheelers	1983-
20)	Majestic Auto	Honda Motor (Japan)	Two Wheelers	N.A.
21)	Mahindra & Mahindra	American Motor Corpn. (USA)	Jeep Vehicles	1957-1974
		Automobiles Pengcot (France)	XDP-4.90 Diesel Engines and Light Commercial Vehicles.	1979-1989
		KIA Machine Tools (S.Korea)	4 Speed Transmission and Transfer cases.	1982-1985
		International Harvestor (USA)	Agricultural Tractors	1961-1971)
22)	Maruti Udyog	SUZUKI Motor Co. (Japan)	Cars & Comm[illegible]	

23)	Premier Automobiles	Henry Meadows (England)	Meadows Diesel Engines	1967-1971
		North American Roucwell Corporation, (USA)	Timken Axles, Assemblies and related component for commercial vehicles.	1963-1970

		Fiat SPA (Italy)	Fiat 124 Car Body	1981-1986
			Fiat 1100 D4 Door Sedan Car	1966-1971
		Chrysler Corpn. (USA)	Dodge/Fargo Commercial Vehicle	1968-1972
		Nissan Motor Co.Ltd. (Japan)	Nissan A12 Engine Transmission	1984-1989
24)	Scooter India	Steyr Arlagemban GMBH (Austria)	Mopeds	1982-
25)	Shree Chamundi Mopeds	Cycles Peugeot (France)	Mopeds	N.A.
26)	Standard Motor Products of India.	No collaborator Purchased Design from Austria Rover Group Ltd. (U.K.)	Passenger Car	1983-
27)	Simpson	F.Perkins Ltd. (U.K.)	Diesel Engines	N.A.
~~27~~)	~~Simpson~~			
28)	Sundaram Clayton	-	Mopeds	-
29)	Swaraj Mazda	Mazda Motor Corpn. (Japan)	Light Commercial Vehicles	1984-
30)	Telco	Daimler Benz (W.Germany)	Diesel Engines,Truck & Buses	1954-1969
			Direct Injection Engines	1969-1974
		Kunhle Kopp & Kench AG (W.Germany)	Turb.Changer For IC Engines.	1977-1985
		George Fischer AG (Switzarland)	Ductile/SG Iron castings	1978-1988
		Hueller Hille GMSG(W.Germany)	(Sp.Purpose Machines	1980-1985.
31)	TAFE	Massy Fergussion (U.K.)	Agricultural Tractors	N.A.
32)	V.S.T. Tillers & Tractors	Mitsubishi Heavy Industries (Japan)	Mini 4 Wheels Tractor	N.A.

Source : 25th Annual Reports (1984) of Association of Indian Automobile Manufacturers., Bombay.

TABLE No.2.4 (Contd.....)

-: 4 :-

Sr.	Name of Company	Name of Collaborator	Products	Year