

Chapter V

INDUSTRIES

TRADITIONAL INDUSTRIES

There were only a few need-based industries in the district at the beginning of the present century. Unfavourable geographical conditions, lack of communications, scarcity of water and basic raw material inhibited industrial development. When such development began in other parts of the country, most of the moneyed people of this area, particularly from the Bhiwani tahsil, migrated to other States like West Bengal, Assam and Bombay and established industries and other business there. Most of them now own big industrial units there, while Bhiwani remains a city of absentee millionaires whose massive *havelis* remain locked up for the most part of the year.

It has been explained in Chapter I, that areas comprising the Bhiwani district have till Independence in 1947 remained under three different administrative set-ups, viz. (i) Dadri tahsil, a part of the formerly princely State of Jind ; (ii) Loharu tahsil, another princely State ; and (iii) Bhiwani and Bawani Khera tahsils, a part of the Hisar (Hissar) district. The existence of traditional industries may be considered in each area.

Dadri tahsil.—The *Gazetteer of Phulkian States (Patiala, Jind and Nabha)*, 1904¹, mentions saltpetre, *kankar* and stone as the three mineral products found in the then Jind State, of which Dadri was a part. Saltpetre was obtained in the Jind tahsil and Dadri. The ruler of the State (Raja Raghbir Singh) had opened three State refineries (Shora Kothis) one of which was at Dadri². The average daily number of workers employed at this refinery was 7 during 1900—1901, 1905—1906 and 1910—1911³. The refined saltpetre was sent for sale to Calcutta. The refinery was managed by a *mansarim* or manager who was assisted by a *gumashta* (Hindi Accountant), *muharrir* (Urdu Clerk), a *tolla* (weighman), two chaprassis and eight workmen. A number of crude saltpetre factories were attached to the refinery⁴. Crude saltpetre was prepared by the workers who worked as *asamis* (contractors) for the refinery.

1. Ibid, pp. 287—93.

2. The other two were at Jind and Safidon.

3. *Jind State Gazetteer, Statistical Tables* 1933, Table 28.

4. About 74 crude saltpetre factories had been attached to all the three refineries at Jind, Safidon and Charkhi Dadri.

The workers in the refineries for preparing crude saltpetre were given contracts through the manager in *Katak* (October), with an advance of money. The workmen prepared crude saltpetre and brought it to the refinery. They were paid on an average Rs. 1—3 per maund. To prepare the crude saltpetre, *shora mitti* (earth containing saltpetre which was generally found in eccentric quantities in the vicinity of every village) was scraped up and brought to the factories which were generally located near tanks or wells. Nothing was paid for the material if it was scraped from common land, but a small royalty was paid on private land. Each factory was provided with a *kundi*, a brick-lined sloping channel about 10 yards (9.15 metres) long with a reservoir at the lower end. The *kundi* had wooden poles on all sides and was thatched with *panni* grass. The roof was coped to a height of one *balisht* on both sides, and the coped roof was filled with *shora mitti* and water. The water impregnated with saltpetre leaked down through the thatch and collected in the reservoir. It was of a reddish colour. This process was carried on every day until a sufficient quantity of saltpetre had been collected when the water was boiled in the iron cauldron till it became syrup, and was then spread over brick-lined beds plastered with lime. When hard saltpetre was scraped off with a spade, crude saltpetre was brought to the refinery in loads of 15 to 20 maunds (5.6 to 7.5 quintals).

The crude saltpetre thus collected was next buried in underground cells (*khattis*) for a year and then taken out, 25 maunds (9.3 quintals) at a time, boiled in an iron cauldron, and cleaned in an iron sieve called *jharna*. It was then poured into a wooden box with a vessel (*dohra*) shaped like a spoon or an iron pan (*chhaj*). After some time the sediment settled and the colour of the liquid became white. This was then put in small boxes, provided with a *machi* (wooden frame), for crystallization. After 6 or 7 days, the crystals were taken off the *machi*, collected in baskets and sprinkled with alum and indigo water to colour them. Then they were spread on *dolaras* (sheets of coarse country cloth) to dry. This completed the process.

Kankar or argillaceous limestone was worked near a good many towns and villages. It was used for road-metalling and for buildings. The Public Works Department either got the *kankar* from contractors or employed labourers to excavate it. In the former case the contractors were generally paid Rs. 4 per 100 cubic feet (2.8 cubic metres) and they delivered the *kankar* within a distance of a mile (1.6 kilometres). The owner of the land from which the *kankar* was dug was paid 4 annas (1/4 of a rupee) per 100 cubic feet. When direct labour was used they were paid Rs. 2 per 100 cubic feet, and the owner of the land got the same royalty. The labourers were generally menials, Chuhars, Chamars, etc., who earned on an average 4 annas (1/4 of a rupee) a day. *Kankar* was of

two sorts *bichhwa* and *silli*. *Bichhwa kankar* was so called because its nodules were supposed to resemble scorpions (*bichhu*) in shape. It was hard, bluish grey in colour, and was used for metalling roads. *Silli kankar* was brittle and a whitish grey in colour. It was burnt to make lime and mixed with Pinjauri lime for building purposes.

Stone was blasted on several points in the Kaliaana and Kapuri hills in tahsil Dadri, the chief being the Kumhar quarry near Kaliaana. The stone obtained was of two sorts, hard and sandstone. The hard stone was bluish grey in colour and was made into many articles, such as *ukhals* and *kundis* (large and small mortars), *chakkis* and *kharas* (small and large mills), pillars, etc. It was also used for building. At the Kumhar mine, about 26 families of Kumhars, commonly called *Sangtarshas*, worked in stone and earned about 5 annas (1/3 of a rupee) a day. It was said that about Rs. 5,000 worth of stone and stone articles were worked yearly, of which Rs. 2,000 worth were exported. Stone obtained from the Kapuri hill was whitish grey and only used for building. Flexible sandstone (called *sang-i-larzan*, the sand particles being loose) had no commercial importance, but was exported as a curiosity.

The Muslim women of Kaliaana spun very fine thread (*barik sut*) which was sold at 1½ *sers* (1.2 kilograms) per rupee.

Charkhi Dadri town was famous for turnery. The turners (*kharadis*) earned from 5 to 8 annas (1/3 to 1/2 of a rupee) a day. The following were the chief articles manufactured by the turners of Charkhi Dadri with the range of prices for each article :—

Name of article manufactured	Price range					
	Rs.	A.	P.	Rs.	A.	P.
Bed legs (lacquered)	2	0	0	to 5	0	0
Bed legs (plain)	1	0	0	to 3	0	0
<i>Pira</i> legs	0	4	0	to 0	10	0
<i>Terwas</i> of <i>Kalis</i> (pipes)	0	1	6	to 0	4	0
<i>Khuntis</i> (wooden pegs)	0	1	0	to 0	1	6
<i>Surmadanis</i> and <i>Karelas</i> (collyrium boxes)	0	0	6	to 0	1	6
Chessmen	0	4	0	to 0	8	0
Toys	0	0	6	to 0	2	0

Oil-pressing was done by *telis*. One *ghani* (10 to 13 *ser*s or 9.3 to 12.1 kilograms) of rape (*sarson*) was put into the hollow part of the press (*kolhu*) and worked with a wooden pestle (*lath*), which was driven by a single bullock. Half a *ser* (0.49 kilogram) of hot water was mixed with the rape and when it was well pressed, a hole was made at the bottom of the press and the oil began to come out. This oil was heated and again poured on to the rape, while the *kolhu* was kept warm with torches (*mashals*) until all the oil was extracted from the rape. One maund (37.3 kilograms) of rape gave 12 *ser*s (11.2 kilograms) of oil and 28 *ser*s (26.1 kilograms) of *khal* (rape cakes). A man and a woman worked the press; two *ghanis* of rape was a fair day's work for one press and the workers earned from 4 to 6 annas (1/4 to 3/8 of a rupee). Other oil-seeds such as *sesamum*, *alsi*, etc., were pressed to order. There was one factory (Din Mohammad-Abdul Ghani Oil Crushing Machine) at Charkhi Dadri which did the business of oil crushing. It employed 9 workers during 1925-26 to 1929-30 and was reported to have stopped business in 1931-32 $\frac{1}{2}$.

The Chamars of the Dadri tahsil made good *desi* shoes, light and flexible. These were exported but only in small quantities. The shoes prepared in the Dadri tahsil were *Salim-Shahi*, *deswali munda* (with a *chaura panja*) and *zanana juta* (with *gol chhota panja* and without heels). Others were quite plain (*sada*). These were generally made of sheep or goat skin dyed red or black with an inner lining of *dhauri*; some were ornamented at the toe and round the sides; others were completely covered with embroidery. The price of a pair of shoes varied from 8 to 12 annas (1/2 to 3/4 of a rupee) for an ordinary pair for hard rough use or one rupee for slightly better quality, to as much as Rs. 5 to 10 for an embroidered pair. The ornamental work was generally done by Chamar women.

Pottery was practised in every big village. Two potters jointly could prepare 25 vessels daily and thus in 15 days they could prepare 375 vessels, as detailed below, burnt in an *awi* (small kiln) which required three days firing :—

Name of the vessel	Number	Price			Rate
		Rs.	A.	P.	
<i>Gharas</i> (pitchers)	175	8	0	0	9 pies each
<i>Handis</i> (small pots)	100	1	9	0	3 pies each
<i>Kishores</i> (small glasses for drinking)	100	0	4	0	4 annas per 100

In this work, a family of 5 persons could earn 9 annas (9/16 of a rupee) on an average per day. They also supplied clay for building purposes, and carried grain and other articles on donkeys from village to village. They also transported foodgrains from the fields at harvest time. A *kumhar* with 8 donkeys could earn 12 annas (3/4 of a rupee) daily.

A state distillery was in existence at Charkhi Dadri in 1900-09. It prepared country spirits and employed two workers¹. The four flour grinding mills, three at Charkhi Dadri and one at Baund Kalan, employed workers as follows²:—

Name and location	Average daily number of workers employed						
	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
Din Mohammad Lahri Ram Flour Mills, Charkhi Dadri	2	3	3	3	3	3	3
Gopi Nath Jagdish Rai Flour Mills, Charkhi Dadri	1	..	..	2	2	2	2
Nand Kishore Chander Flour Mills, Charkhi Dadri	1	..	..	2	2*	2	2
Raghunandan Lal Flour Mills, Baund Kalan	1	..	..	2	2	2	2

In 1938, Ram Kishan Dalmia, a renowned industrialist, set up the cement factory at Charkhi Dadri, with a 250 tonnes per day plant to break the all India monopoly of the Associated Cement Cos. It was styled the Dalmia Dadri Cement Ltd.

Loharu tahsil.—The manufactures of Loharu were of no importance; coarse country cloth was made in almost every village. Rough blankets of camels' hair and embroidered woollen *chadars* were also made. The *chadar* was usually of good quality and often fetched a high price³.

1. *Jind State Gazetteer, Statistical Tables, 1933, Table 28.*
2. *Ibid.*
3. (i) *Hisar District and Loharu State Gazetteer (Loharu State), 1904, p. 13.*
(ii) *Hisar District and Loharu State Gazetteer (Loharu State), 1915, p. 14.*

The liquor licences granted in the State covered both manufacture and sale, there being no distinction between wholesale and retail licences. The licences were sold by auction and ran for a period of one year. There were 4 licence-holders each of whom sold retail country liquor of his own manufacture. No European liquor was sold in the State¹.

Bhiwani and Bawani Khera tahsils.—In the Bhiwani and Bawani Khera tahsils, which were then a part of the Hisar district, *shora* was reported to be usually found in the deserted village sites². The fee charged was Rs. 2 on the licence issued by the Salt Department, but the proprietors of every village exacted a royalty from all contractors extracting *shora* within the area of the village. In some cases, these royalties amounted to a considerable sum. All profits derived by the proprietary body from these royalties were taken into account in fixing the land revenue of the village. For the extraction of *shora* the earth was dug out and placed in a heap or mound near the village site, an earthen channel connected the mound with the evaporating pans, water was poured on the saline earth and the resulting dark brown liquid drained off into the pans was left to evaporate by solar heat. In some cases, the manufacture was carried on by means of solar evaporation alone, while in others, after a certain amount of evaporation, the material was boiled in an iron cauldron (*karahi*) for six hours. In either case, the resulting product was dirty brown crystals of crude saltpetre, These were purified and re-crystallized by the contractors at Bhiwani, Hansi or Sirsa where there were licensed refineries.

The cleaning and pressing of cotton was the main factory industry established at Bhiwani at the beginning of the present century. Bhiwani was the nearest *mandi* to the southern villages of Hansi tahsil, which is a cotton growing area. Most of the cotton of the tahsil was, therefore, brought for sale to Bhiwani. As buyers were mostly from Rajasthan, the location of the town as a cotton market suited them. Out of the 15 factories in the then Hisar district in 1904, 4 were at Bhiwani³. A spinning and weaving mill (Venkateshwar Cotton Mills) was opened at Bhiwani in 1913 thus raising the number of factories to 5. This mill was managed by a Bombay firm and was on a fairly large scale. It did prosperous business and dealt more with yarn than cloth. The data showing the names of the factories, nature of work carried on and workers employed in

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1. (i) *Hisar District and Loharu State Gazetteer (Loharu State)*, 1904, p. 16.
(ii) *Hisar District and Loharu State Gazetteer (Loharu State)*, 1915, p. 19.
 2. *Hisar District and Loharu State Gazetteer (Hisar District)*, 1904, p. 186.
 3. *Ibid.*

1916 onwards are given in Table XVI of Appendix.

The establishment of cotton cleaning industry led to a great increase in the area under cotton in the canal irrigated areas of the Hisar district. None of these factories is extant. Bhiwani was really not a suitable location for textile mills. On merits it was neither a cotton area nor suitable as a purchasing or selling centre. Water was scarce; the area was frequently visited by drought and famine. These factories, therefore, could not work successfully and remained closed over long spells. The vicinity of a cotton growing area alone somewhat sustained the industry. However, as a result of the persistent efforts of the prominent persons of Bhiwani, the Venkateshwar Cotton Mills was purchased by G.D. Birla, a well-known industrialist, who started it again in 1938 under the name of Bhiwani Cotton Mills Ltd. It was then a small mill of 12,100 spindles and 240 looms manufacturing coarse counts of yarn, cloth and *niwar*. Its spindles and looms which had become old and obsolete were repaired after the World War II.

The Bhiwani Cotton Spinning and Weaving Mills was purchased by the Punjab Cloth Mills Ltd. in 1938. Its installed capacity at that time was 3,444 spindles and 145 looms which were not in working condition.

Bhiwani was also the centre of fairly important brass and bell metal (*kansi*) trade. About 200 artisans were employed in this trade and their earnings varied from Rs. 7.50 to Rs. 8 per mensem. The goods were exported to all parts of the Punjab and to Rajputana (Rajasthan). The articles manufactured were mostly the ordinary cups and platters. These were fairly well finished but quite without ornament. The brass was imported from Calcutta, mainly for re-export to Bikaner (Rajasthan) and old broken brass (*phut*) was chiefly used for local purposes. Some brass was manufactured from imported copper and zinc in the proportion of 24 seers of copper to 16 seers of zinc to make a maund of 40 seers. The cost of the metal thus manufactured was calculated as Rs. 26 per maund (37.3 kilograms). *Kansi* was made with copper and pewter. The cost was Rs. 39.50 per maund.

Besides its brass trade, Bhiwani had a name for carved *chawkats* or doors. Elaborately carved models mounted with brass had been sent to the exhibitions at Lahore and Calcutta and one had also been placed in the Lahore Museum¹.

The embroidered woollen *orhnas* or *chadars* were also quite famous.

1. *Hisar District Gazetteer*, 1892, pp. 209-10.

Though nothing could be more homely than the material, or more simple than the design, they were thoroughly good and characteristic in effect. Two breadths of narrow woollen cloth were joined and covered with archaic ornaments in wool and cotton thread of different colours, needle wrought in sampler stitch. The cloth was a fine red, though somewhat harsh and coarse in texture and all the designs were in straight lines. The price of these *chadars* had been originally about Rs. 4 each, but since a demand had arisen, the rate doubled¹.

In the thirties and forties of the 20th century, as a consequence of the nationalist struggle in the country, the textiles became a major fast developing industry; but there was a great shortage of technologists. G.D. Birla not only realized the need of high grade training in textile technology to meet the need of the industry but also felt that an industrial atmosphere was necessary to give the right type of training. With the twin objectives, he established the Technological Institute of Textiles in Bhiwani in 1943 and the Bhiwani Cotton Mills was attached to this Institute for providing practical training under mill working conditions.

INDUSTRIAL PROGRESS SINCE INDEPENDENCE (1947)

When India achieved Independence in 1947, Dadri was famous for stone carving, Loharu for the manufacture of locks, bangles and iron pans, and there were three large-scale industrial units, i.e. two textile mills at Bhiwani and one cement factory at Charkhi Dadri. This was the sum total of the industrial effort in so far as the present day Bhiwani district was concerned. The Muslim artisans left the country consequent upon the Partition and the industrial art of stone carving and bangle making received a serious set-back.

There was very little improvement in the large and medium-scale industries sector up to the formation of Haryana on November 1, 1966. In the Bhiwani Cotton Mills Ltd., 1,000 new spindles were installed in a separate building in 1963 and the spinning of the man-made fibres like rayon, nylon, terene, acrylic, etc., was started. The management of the Punjab Cloth Mills Ltd. could not work the Bhiwani Cotton Spinning and Weaving Mills although from 1938 to 1961, there was an addition of 20,096 spindles and 284 looms. Losses were suffered continuously. In January 1964, this Mill was purchased by the Gwalior Rayon Silk Manufacturing (Weaving) Co. Ltd., a Birla concern, and started working under the name and style of Bhiwani Textile Mills (Proprietor: The Gwalior Rayon Silk Manufacturing (Weaving) Coy. Ltd.). At Charkhi Dadri, a second plant of 500 tonnes per day capacity was installed at the cement factory in 1958.

1. *Hisar District and Loharu State Gazetteer (Hisar District)*, 1915, p. 176.

Another Birla concern, Express Dairy Company Ltd., Calcutta, established the Bhiwani Gum and Guar Factory in 1956 with a licensed capacity of 16,200 tonnes of guar splits per annum. In 1962, a new company under the name and style of Hindustan Gum & Chemicals Ltd. was formed in collaboration with M/s Stein Hall & Coy. (Inc. U.S.A.), with an installed capacity of 12,000 tonnes and licensed capacity of 9,600 tonnes of Refined Guar Gum.

However, this period saw the setting up of a number of small-scale industries. Table XVII of Appendix shows the industries established till November 1966, their location, the number of workers employed, their capital investment and other details. It will be observed that the hand made brass utensils industry is exclusively concentrated at Bhiwani. They bring brass sheets and circles from Rewari and Jagadhri. Till 1963-64, they were being allotted the raw material, i.e. copper, zinc and tin for the manufacturing of utensils; but due to change in the import policy of the Government of India, this assistance of raw material was stopped.

In the first two years after the formation of Haryana, there was a nominal increase in the number of small-scale units. Four units of *dal* processing industry were established at Loharu due to nearness to Rajasthan as gram is the main crop of this area. Some *dal* processing units are also coming up at Siwani. New and additional chemical, fabrication and mineral-based units were also established at Bhiwani, Charkhi Dadri, Bahl, Dighawa, Tosham, Kalyana and Jhojhu Kalan.

In the last few years the Bhiwani district has had a spurt of industrial activity, a process which has been considerably assisted and hastened by extension of electricity, construction of a network of roads and the increased availability of drinking water. With the creation of the Bhiwani district, various facilities and incentives provided by the State Government have been brought within the easy reach of the entrepreneurs. By March 31, 1977, the number of large and medium-scale industries has increased from 4 to 8 and as it would appear from the general remarks at the end of this Chapter, more large-scale units are being planned. The number of small-scale units has also increased from 135 to 518.

GOVERNMENT ASSISTANCE TO INDUSTRIES

The industrial development is looked after by the District Industries Officer, Bhiwani who is assisted by one Mining Officer, 4 Block Level Extension Officers and 2 Inspectors. The Mining Officer looks after the mineral concession work in the district. His staff consists of a clerk and two guards. The Block Level Extension Officers are posted at tahsil headquarters and their main work

is to help rural industrialisation. The Inspectors assist the District Industries Officer at the district headquarters in guiding and assisting the existing and new industries. The District Industries Officer functions under the overall control of the Director of Industries, Haryana, Chandigarh.

The Government assists the entrepreneurs in a number of ways: by giving cheap land on easy instalments and financial assistance, by supplying machinery on hire-purchase basis and raw material at controlled rates, by providing marketing assistance and technical industrial training and common facility centres. These facilities are discussed briefly:

Land.—Land in industrial areas/colonies is allotted on easy instalments to be paid in 10 years, after making an initial payment of 20 per cent of the cost of a plot. Preference is given to the educated unemployed and technically qualified persons.

Financial assistance.—After Independence, the provisions of the State Aid to Industries Act, 1935, have been liberalized. Loans are advanced to the small-scale industries for the construction of factory buildings, purchase of machinery and equipment and working capital to the extent of Rs. 1 lakh against tangible security in the form of land, building and machinery (fixed to the ground) owned either by the applicant or his surety. Such loans are given up to 50 per cent of the value of the security offered. Loans up to Rs. 5,000 are granted against one personal surety having solvent property for double the value of the loan applied for. Loans up to Rs. 5,000 are granted at district level on the recommendation of the District Loan Advisory Committee and above Rs. 5,000 up to rupees one lakh by the Board of Industries at State level. The Deputy Commissioner is the Chairman of the District Loan Advisory Committee, which has seven official and 2 non-official members with the District Industries Officer/Project Officer, Rural Industries Project, Hisar as the convener member. The following loans were disbursed in the district during 1972-73 to 1976-77 :—

Year	Loans disbursed		
	Amount (Rs. in lakhs)	Beneficiaries (Number)	
		Urban	Rural
1972-73	2.30	20	49
1973-74	3.65	41	66
1974-75	1.32	2	21
1975-76	2.80		35
1976-77	1.93	19	22

Haryana Financial Corporation grants loans up to Rs. 30 lakhs in the case of limited companies and registered cooperative societies and up to Rs. 15 lakhs in other cases. These loans are granted for the creation of fixed assets to new concerns or for expansion or for rationalizing existing industrial units. Loans for working capital are also granted to small-scale industries in deserving cases where such capital is not available from other sources and when the loan is required to provide margin for accommodation from banks. The loans are payable in a period of ten years with a grace period of two years.

For the units in the Bhiwani district which is a backward area, special concessions are granted by the Corporation. The margin is reduced from 40 to 30 per cent for medium and large-scale units and from 25 to 20 per cent for small-scale units. The repayment period is extended up to 15 years with a grace period of 4 years. A smaller rate of interest is charged.

Loans are also provided on attractive terms for the purchase of generating sets and transport vehicles.

In order to promote self-employment among technician entrepreneurs holding a degree or diploma in engineering, loans are granted on liberalised terms at a reduced margin of 15 per cent on the value of fixed assets offered as security. Under the scheme of educated unemployed, seed money equal to 10 per cent of the capital cost of the project is also given in addition at a nominal rate of interest which is to be repaid after the normal instalments of loan are cleared.

The Corporation also grants foreign currency loans to industrial concerns for import of plant and equipment under the World Bank Loan Scheme where the cost of project does not exceed Rs. 1 crore.

The loans sanctioned and disbursed by the Corporation in the district are given in Table XVIII of Appendix.

The Haryana Khadi and Village Industries Board, Chandigarh also advances loans and grants for the promotion of village industries. The grants and loans disbursed by the Board in the district are given in Table XIX of Appendix.

Supply of machinery on hire-purchase basis.—On the recommendations of the State Government, the National Small Industries Corporation, an agency founded and controlled by the Government of India, processes and meets machinery requirements of the small-scale units on hire-purchase by easy instalments.

The Haryana State Small Industries and Export Corporation, a State

undertaking, also supplies machinery on hire-purchase basis. It provides financial assistance up to Rs. 50,000 in each individual case at a nominal rate of interest. The intending entrepreneur gives only a margin of 10 per cent of the cost of machinery with one solvent surety. The loan is repayable in 13 half-yearly instalments, the first instalment being due after one year from the date of delivery of R.R./G.R.

Supply of raw material.—Indigenous iron and steel are supplied to the small-scale sector through the agency of the Small-Scale Industries and Export Corporation which also distributes other scarce raw materials allotted to the State from time to time.

The supply of raw material like iron, steel, steam coke, hard coke, copper, zinc, wax, fatty acid, spirit, etc., is regularly made to quota-holders and deserving industrialists by the Industries Department. The quota is fixed after proper assessment. The requirements of imported raw material and equipment are assessed by the State Government and necessary recommendations made to the Government of India for import licences/release orders on the basis of year-to-year policy framed by the Government of India. Allotment of indigenous raw material is made 50 per cent more to industrial units of the district in comparison to units in other districts.

Special incentives.—The district was declared an industrially backward area by the Government of India in 1974. Consequently, 15 per cent subsidy on fixed capital investment (land, building and machinery) is given by the Central Government to the industrial units coming up in this district after March 1973. The units established during the period October 1970 to March 1973, have been allowed 10 per cent subsidy by the Central Government.

Relief from taxation.—The new units established in the district are exempt from the payment of electricity duty for a period of 7 years. Further concession in tariff is available to such chemical and other industries using power as the principal raw material.

They are also exempt from property tax for a period of 5 years.

Inter-State sales tax payable by the new units is treated as an interest-free loan for a period of 7 years from the date of their going into production.

The amount of inter-State sales tax involved in any particular year is recoverable after a period of 5 years and is payable in a further period of 5 years in 10 equal six-monthly instalments. This is, however, subject to the limitation that total amount to be treated as interest free loan in this manner, in any particular year, does not exceed 8 per cent of the capital investment. Similarly, in

the case of purchase of raw material made by the new industries within the State of Haryana, for manufacture of goods to be sold outside the State, the purchase tax is treated as a loan on the same terms and conditions as inter-State sales tax. No new taxes are to be levied in respect of purchase of industrial raw material for the manufacturing processes in factories for the next 5 years.

The units which fall outside the municipal limits at the time of their establishment, are exempt from levy of octroi for a period of 5 years from the date of their going into production. New industrial units located within the municipal limits are exempt from octroi on capital equipment and building material. These units are also exempt from octroi on raw material for a period of three years. Both these exemptions are admissible to units with a capital investment up to Rs. 1 crore in the Bhiwani district.

These incentives and facilities being provided by the Central and State Governments are an attraction for new entrepreneurs to set up industrial units in this district.

COMMON FACILITY CENTRES

The Haryana Government has established a number of Common Facility Centres for the benefit of industries. The centres are spread over the whole of State. Though no such centre is located in the Bhiwani district, the industrial units of the district can avail of the facilities available at these centres. A brief description of these centres is given below :

(i) **Quality Marking Centres.**—With a view to make the small-scale units quality minded and to ensure that the products marketed by them are up to standard, Quality Marking Centres have been established. These also serve as testing centres for goods according to I.S.I. Standards. The items for export from Haryana are checked at these centres for obtaining certification from the Export Inspection Council.

There are at present eight Quality Marking Centres in the State :

Place 1	Centre 2
Ambala Cantonment	(i) Instrument and precision machinery
	(ii) Electronics
Faridabad	(i) Engineering goods
	(ii) Electrical goods

1	2
Jagadhri	Engineering goods
Karnal	Leather goods
Panipat	Textile goods
Sonipat	Engineering goods, paints, rubber

A quality marking centre for engineering goods is also being set up at Hisar.

The scheme of quality marking is voluntary and is done on a no-charge basis. The units registered with the Quality Marking Centres are also provided with the following facilities :—

- (a) Testing of raw material, semi-finished and finished products.
- (b) Technical guidance regarding material, methods of fabrication and standardisation.
- (c) Supply of standard specification and assistance to adopt these.

(ii) **Industrial Development Centres.**—The following Industrial Development Centres have been set up to assist the small-scale industries which are not in a position to arrange for this facility due to high capital costs :—

Place	Centre
Ambala Cantonment	Graduation and engraving of scientific instruments
Jagadhri	(i) Anodizing (ii) Tools and dies

(iii) **Heat-Treatment Centres.**—These centres have been established for the benefit of industries which do not have a Heat-Treatment shop of their own. The two centres located at Faridabad and Bahadurgarh provide heat-treatment facilities at a nominal cost. It is proposed to extend the existing facilities at these centres and also to provide laboratory facilities for testing of raw materials. The facility of heat-treatment is also available at the Industrial Development Centre for Tools and Dies Making, Jagadhari.

MARKETING ASSISTANCE

The Haryana State Small Industries and Export Corporation (a State undertaking) assists the small-scale industries in marketing their products. The Corporation also assists the small-scale industries in marketing their goods abroad.

The National Small Industries Corporation, New Delhi, also helps the small-scale industries in marketing their products. Such assistance is provided

by this Corporation through the participation of small industries in the Government Stores Purchase Programme. About 196 items have already been reserved by the D.G.S.&D. (Director General of Supplies and Disposal) for exclusive purchase from the small-scale sector. Small-scale units are given purchase preference over the large and medium units for Haryana Government Programmes.

INDUSTRIAL AREAS

An Industrial Development Colony was set up at Bhiwani in 1971 by the State Government and 155 acres (62 hectares) of land was developed for it. Almost all the plots of different sizes, i.e. 5 acres (2 hectares), 2 acres (0.8 hectare), 1 acre (0.4 hectare), $\frac{1}{2}$ acre (0.2 hectare) and $\frac{1}{4}$ acre (0.1 hectare), have been sold.

Another 92 acres (39 hectares) of land was acquired in May 1976 for extension of the Industrial Development Colony. The roads and other services are being developed in this colony. Most of the plots in the newly developed area are yet to be sold. The allottees of the plots are being persuaded by the State Industries Department to start their projects early. The allottees who complete the construction work of their factories within a period of two years from the date of allotment of the plots, are allowed a refund of 20 per cent on the cost of land.

Fifty acres (20.2 hectares) of land is being acquired by the Industries Department at Charkhi Dadri for setting up an industrial area.

COMMERCIAL BANKS

Financial assistance is provided by the commercial banks for the development of industries. It is generally given as working capital. The banks provide two types of credit limits, i.e. one lock and key and the other open credit. Eight nationalised banks, viz. State Bank of India, Central Bank of India, Punjab National Bank, State Bank of Patiala, Indian Overseas Bank, United Commercial Bank, Bank of India and Indian Bank and 3 other banks, viz. New Bank of India, Oriental Bank of Commerce and Lakshmi Commercial Bank, are functioning in the district. All of these have their main offices at Bhiwani; the Central Bank of India has branches at Mundhal, Tosham and Jhojhu Kalan; the Punjab National Bank at Chang, Bahl, Badhara, Charkhi Dadri, Baund Kalan and Loharu and the State Bank of Patiala at Satnali, Charkhi Dadri and Jui. The New Bank of India has a branch at Bawani Khera and the Oriental Bank of Commerce at Charkhi Dadri.

From 1975-76, commercial banks have also started providing financial assistance to small artisans under DRI/RIP schemes. The rate of interest

under DRI scheme is only 4 per cent. The following figures show the amount of loan advanced under these schemes in the district during 1975-76 and 1976-77 ;—

Year	Number of parties	Loan advanced (Rs. in lakhs)
1975-76	127	1.60
1976-77	185	2.03

A large number of sophisticated industries calling for a high degree of precision in quality control with standard specifications have been reserved for development in the small-scale sector. With a view to encouraging small-scale units to step up the quality of their products by introducing or improving quality control measures, Industrial Development Bank of India has decided to offer the following financial incentives with effect from July 1, 1976:—

- (a) A small-scale unit which obtains ISI mark from the Indian Standards Institution (ISI) in respect of its products would be provided with a rebate of 0.5 per cent per annum in interest rate on the outstanding amount of refinance. The interest rebate would apply from the quarter during which the ISI mark certification is obtained and would hold good till the licence to ISI mark is operative or till the refinance is repaid, whichever is earlier.
- (b) The Bank will also provide 100 per cent refinance in respect of loans granted by eligible institutions to small-scale units for purchase of quality control equipment without any margin, provided the industrial unit furnishes a certificate from ISI to the effect that the equipment is needed essentially for introducing/improving the inplant quality control system.

RURAL INDUSTRIES PROJECT

The Government of India had sanctioned a Rural Industries Project for Hisar district in 1971-72 as a centrally sponsored scheme. The object was to evolve appropriate methods and techniques for intensive development of village and small industries, for accelerating the pace of industrialisation in backward areas and to bring about dispersal of industries to the rural areas. When Bhiwani was created a separate district, an attempt was made to have a separate project sanctioned for it. The Government of India, however, did not agree and desired that the Rural Industries Project, Hisar, should

continue to cover the newly formed district. Consequently, the headquarters of the Project Officer continue to be at Hisar but an Industrial Promotion Officer has been posted at Bhiwani to assist the District Industries Officer in Rural Industries Project work. The project area in Bhiwani comprises villages and small towns with a population of less than 25,000. For the grant of loans and other help to the existing new units in the project area, screening is done by the Project Officer. The following figures show the amounts of loans and subsidies advanced under this project :—

Year	Loans disbursed under State Aid to Industries Act, 1935		Subsidy		Power Subsidy		Number of trainees trained under MFAL schemes
	Number of parties	Amount (Rs. in lakhs)	Number of parties	Amount (Rs.)	Number of parties	Amount (Rs.)	
1972-73	49	2.30	—	—	—	—	—
1973-74	57	3.65	—	—	—	—	29
1974-75	21	1.06	47	50,605	35	9,085	28
1975-76	35	2.55	69	63,800	—	—	30
1976-77	20	1.93	46	28,350	3	709	37

The Project Officer in so far as the cases of his area are concerned, acts as a convenor of the Loans Advisory Committee of the Bhiwani district.

INDUSTRIAL TRAINING

The four institutes for industrial training and technical education¹ at Bhiwani provide training facilities in various crafts:

Institute 1	Trade in which training/technical education is imparted 2
1. Industrial Training Institute, Bhiwani	Fitter, Welder, Electrician, Turner, Carpenter, Radio Mechanic, Moulder, Machinist, Stenography, Cutting and Tailoring, Embroidery and Composing.

1. For more details, see Chapter on 'Education and Culture'.

1

2

- | | |
|--|---|
| 2. Rural Industrial Development Centre, Bhiwani | Weaving |
| 3. Government <i>Ban</i> and Rope Making-cum-Textile Development Centre, Bhiwani | <i>Ban</i> and Rope-Making, and Weaving |
| 4. Technological Institute of Textiles, Bhiwani | B. Text and M. Text. Degrees |

The trainees are encouraged to start their own work when they pass out.

Besides, there are 4 industrial schools for girls, 2 at Bhiwani and 1 each at Charkhi Dadri and Tosham, which impart training to girl students in the trades of cutting, tailoring and embroidery.

SOURCE OF POWER

The district had no electricity till 1932. Thereafter only two towns, Bhiwani and Loharu, had diesel power to run oil and flour mills and for domestic lighting. This continued till 1956 when hydel power from the Bhakra Nangal Project became available.

M/s Lahore Electric Supply Co., a private licensee, provided electricity to Bhiwani town in 1932. The generation was by small diesel sets. In 1944, this company was sold to M/s Rohtak and Hisar District Electric Supply Company which continued generation as well as distribution of power to Bhiwani town up to 1954. In 1954-55, the work of distribution of supply was taken over by M/s South Punjab Electricity Cooperation Limited, Bhiwani.

Loharu town had also been provided with electricity by a private licensee.

During 1956-57, M/s Rohtak and Hisar District Electric Supply Co. started getting hydel power from the Bhakra Nangal Project of the Punjab State. On April 9, 1962, the supply company was taken over by the Punjab State Electricity Board. After the creation of Haryana on November 1, 1966, the Haryana State Electricity Board took over the control of supply of power in May 1967.

INDUSTRIES AND MANUFACTURES

Mineral wealth of the district is not considerable. Except *kankar* and building and masonry stone, resources in minerals and metals are of academic interest only. Iron ore has been reported from Tosham but the studies so far made, reveal that the reserves are very small and uneconomic for exploitation. Pyrite occurrences have also been reported from Khodana. Malchite stains which indicate presence of copper have been noticed in Tosham area¹.

The district is well supplied with *kankar* deposits. It is used for cement manufacturing and road construction. Soft variety is crudely burnt for lime for house construction.

There are a number of building stone and masonry stone quarries in the district. Rocks are quarried for use as building stone and also in the construction of roads, canals bridges, etc. Stone crushing industries are flourishing in the district. Road metal is exported not only to the adjoining districts but also to the Punjab.

Friable quartzites occur in the west of Atela Kalan in the Dadri tahsil. This is crushed to powder and used as glass sand or for the manufacture of sodium silicate.

Clay for the manufacture of bricks, earthen pots and other allied purposes is abundant in the district.

Saltpetre is found in a large number of villages of Bawani Khera, Tosham and Bhiwani blocks. It occurs as thin white encrustations on the surface. Mostly, it is exported out of the State, where it is used in fire work industries.

The National Council of Applied Economic Research, New Delhi had carried out a Techno-Economic Survey of Haryana and published a report in November 1970. It made some recommendations for development of industry in backward areas basing them on the suggestions of the Wanchoo Committee. One of the suggestions was that growth points should be selected for intensive development to have maximum impact on a backward region. Areas either already having a well-developed infrastructure, or having an inherent development potential were to be preferred for selection of growth points. It was also suggested that the Government should carry out detailed surveys

1. For more details, see Chapter I 'General'.

and feasibility studies of the prospective industries and make them available to entrepreneurs.

Soon after, the Industries Department requested the Small Industries Service Institute, New Delhi to initiate studies for selecting growth centres in the State. The term "growth centre" essentially refers to any area which has the potential for further expansion, and which would ultimately become a centre of attraction for concentrated development. After a detailed survey, the Institute has since identified Bhiwani as a growth centre for reasons of its locational advantage and availability of infrastructural facilities like land, power, skilled workers, banks and educational institutions. The survey team has identified 65 new industries (Table XX of Appendix) for development at Bhiwani. Of these, 59 industries are demand based and the remaining 6 are resource/skill based. These will require a total investment of Rs. 1.50 crores and 1250 H.P. of electricity. The space requirements will range from 101 to 900 square metres. The units will produce goods worth Rs. 4.60 crores and provide employment to 1,300 persons.

LARGE AND MEDIUM-SCALE INDUSTRIES

Of the 8 large and medium-scale industries¹ functioning in the Bhiwani district, 7 are located at Bhiwani and 1 at Charkhi Dadri. These are :

1. Technological Institute of Textiles/Bhiwani Cotton Mills, Bhiwani.— This institute was established at Bhiwani in 1943 under the auspices of the Birla Education Trust. The object was to provide high grade training in textile technology to meet the need of the textile industries and also to help create an industrial atmosphere which is necessary to encourage the right type of training. The Bhiwani Cotton Mills was attached to this institute for providing practical training in mill working conditions².

A small factory with 12,100 spindles and 240 looms and manufacturing coarse counts of yarn, cloth and *niwar* in 1938, the Bhiwani Cotton Mills has now grown into a big factory. It has 33,124 spindles and 644 looms, and manufactures medium and fine counts of cotton yarn and cloth and synthetic blended yarn besides terene suiting and shirting. The factory has kept abreast with technological developments and has installed the latest type of machinery

1. Keeran Vegetable Products Ltd., a large-scale unit, was established at Bhiwani in 1972 for the manufacture of vegetable (*vanaspati*) ghi. It was closed in January 1976.

2. For more details about courses offered and training facilities provided at the Technological Institute of Textiles, see Chapter on 'Education and Culture'.

such as Metallic Cards, High Speed Draw Frames, Sixplex, Combers, Ring Frames with modern High Draft System, Schlafhorst Pirn Winder, Barber Colman Spooler and Warpper, Automatic Looms, Calenders, Jiggers Cheese and Beam Dyeing Plant, Mercerising Plant, Singeing, Raising and Roller Printing Machines, Screen Printing Section, Hot Air Stenter with Heat Setting arrangements, etc.

The re-generated and synthetic fibres such as rayon, nylon, terene, acrylic, etc., have rapidly taken over leadership from natural fibres both in versatility and quantitative output on account of their excellent performance: wash and wear characteristics, and better handling and draping qualities. In 1963, 1,000 new spindles were installed in a separate building and the spinning of man-made fibres was started. For the last few years, the mill has also been manufacturing terene suiting and shirting that sell under the brand of T.I.T. Terene.

Employment and production figures of the mill are shown in Table A and the working result in Table B below :

TABLE A

Year	Employment (Number)	Production (Rs. in lakhs)
1966	2,483	331
1970-71	2,564	680
1971-72	2,701	770
1972-73	2,901	735
1973-74	3,023	858
1974-75	4,000	937
1975-76	2,919	921
1976-77	3,132	1,181

TABLE B

Year	(Rs. in lakhs)			
	Total assets (Rs.)	Net sales (Rs.)	Wages and salaries (Rs.)	Gross profit/ loss (—) (Rs.)
1966	91.07	326.63	60.65	29.92
1970-71	83.55	595.61	86.54	9.84
1971-72	94.99	708.94	96.85	28.46
1972-73	103.70	873.76	117.63	62.00
1973-74	112.11	1,161.74	127.81	137.42
1974-75	129.95	900.75	123.50	30.00
1975-76	87.53	974.39	172.78	1.74
1976-77	80.00	1,171.55	181.05	25.00

(2) **Bhiwani Textile Mills, Bhiwani.**—Established in 1921, this is another composite textile mill. To begin with, it could not be worked by its promoters. It was purchased by the Punjab Cloth Mills Ltd. in 1938. Its installed capacity at that time was 3,444 spindles and 145 looms which were not in working condition. A lot of repairs, adjustments, additions and alterations were necessary. During 1938 to 1961, an addition of 16,652 spindles and 139 looms was made, raising the total installed capacity to 20,090 spindles and 284 looms. Despite all these efforts, the factory did not work successfully and suffered losses. It was purchased by the Gwalior Rayon Silk Manufacturing (Weaving) Co. Ltd., Birla Gram, Nagda (Madhya Pradesh) in January 1964. In order to make the mill an economically viable unit, an investment of Rs. 50 lakhs was made on the modernisation of machinery. The replacement of old and addition of new machinery cost another 50 lakhs. By 1975, the installed capacity of the mill increased to 20,976 spindles and 334 looms.

The mill manufactures synthetic blended yarn and fabrics. A most modern and up-to-date process house has been put up at a cost of about Rs. 60 lakhs for processing all types of fabrics including man-made fibres and acrylic to meet the present taste and demand. The capacity of this process house is 10,000 metres of synthetic fabrics daily along with fibre and yarn dyeing. It can also process 40,000 metres of cotton cloth daily. Thus it will cater to the processing needs of the textile complex being encouraged at Bhiwani, and serve

as a nucleus for the development of cotton, silk and woollen powerloom units. It is claimed that there is no other such process house in the whole of Haryana.

Employment and production figures of the mill are shown in Table A and the working results in Table B below :

TABLE A

Year	Employment (Number)	Production (Rs. in lakhs)
1966	1,294	123.43
1970	1,342	168.45
1971	1,338	110.52
1972	1,424	143.03
1973	1,408	175.06
1974	1,369	301.60
1975-76	2,246	270.52
1976-77	2,889	722.59

TABLE B

Year	Total assets (Rs.)	Net sales (Rs.)	Wages and salaries (Rs.)	Gross profit/ loss(—)
				(Rs.)
1965-66	116.91	119.56	27.29	(—)0.57
1970-71	153.60	183.25	46.77	(—)29.85
1971-72	217.02	243.97	50.46	(—)16.26
1972-73	263.78	311.78	63.18	(—)16.02
1973-74	254.16	357.51	72.47	2.47
1974-75	231.92	277.50	76.95	(—)28.73
1975-76	73.56	264.84	85.45	(—)75.19
1976-77	113.46	701.56	99.52	18.14

(3) **Hindustan Gum and Chemicals Ltd., Bhiwani.**—Originally started as Bhiwani Gum and Guar Factory in 1956, this concern had a licensed capacity for 16,200 tonnes of *guar* splits per annum. In 1962, it was formed into a new company under the name Hindustan Gum and Chemicals Ltd. in collaboration with M/s Stein Hall and Company (Inc. United States of America). It has an installed capacity of 12,000 tonnes against the licensed capacity of 9,600 tonnes of refined *guar* gum.

Guar has been grown in India for centuries and before the establishment of this factory it was used mostly as cattle-feed. *Guar* contains mannoglactan (gum) to the extent of 35 per cent. After extraction of gum from *guar*, the remaining 65 per cent is used as cattle-feed which is known as *guar* meal or *guar churi*. *Guar* gum is used in many industrial applications such as paper, textile, printing, sizing and furnishing, jute, petroleum drilling, pharmaceuticals food and pesticides. For manufacturing end products for most of these applications the company obtained the requisite know-how and the plant from its American collaborators in 1965. Since then the end products are being manufactured by the company and are sold in the home market.

Ever since its establishment, the company has been making steady progress in exports of refined *guar* gum and pulverized *guar*-gum, as well as *guar* meal to the Continent and U.S.A. Its exports during 1970-71 amounted to more than Rs. 2 crores, for which the company is said to have been awarded a certificate of merit for outstanding performance by the Government of India, Ministry of Commerce. Its exports during 1976-77 increased to nearly rupees five crores.

If properly processed, the *guar* meal, can be used for poultry consumption as a protein aid. The company is planning to put up a processing unit to make this product. Bhiwani's *guar* gum and its by-product *guar* meal carry the ISI mark and are known in the world market.

Employment, production and export figures of the company are shown in Table A and the working results in Table B below :

TABLE A

Year 1	Employment 2 (Number)	Production 3 (Rs. in lakhs)	Export 4 (Rs. in lakhs)
1966	60	87.59	52.18
1970	62	240.94	201.12

1	2	3	4
	(Number)	(Rs. in lakhs)	(Rs. in lakhs)
1971	58	206.72	136.92
1972	55	160.66	49.53
1973	62	162.00	171.48
1974	84	565.00	502.60
1975-76	92	505.41	354.59
1976-77	100	612.58	498.59

TABLE B

Year	Total assets	Net sales	Wages and salaries	Gross profit/loss(—)
	(Rs.)	(Rs.)	(Rs.)	(Rs.)
1966	34.53	87.59	1.67	8.46
1970	22.31	240.94	2.50	6.52
1971	20.03	206.72	3.48	5.46
1972	18.13	160.66	3.41	5.64
1973	17.39	161.54	3.10	2.46
1974	58.09	563.71	5.05	10.18
1975-76	24.66	505.41	5.63	12.16
1976-77	27.51	612.66	7.46	48.45

(4) **Dalmia Dadri Cement Ltd., Charkhi Dadri.**—The Associated Cement Companies had a practical monopoly as manufacturers of cement in India and they had been selling cement at rates fixed at their option. Ram Krishna Dalmia, a renowned industrialist, took the daring step of breaking this monopoly and simultaneously installed cement factories at five different places in India including Charkhi Dadri. A plant with 250 tonnes per day production capacity was built in 1938 and another with 500 tonnes per day was added in 1958. The factory is situated near the railway station of Charkhi Dadri and has its own siding. The factory area includes the company's residential colony, free dispensary, primary school, playground, etc.

The company manufactures portland cement. *Kankar* is the basic raw material which is found in agricultural fields. The cement manufactured at this factory is consumed within the State and also supplied to the neighbouring States of Uttar Pradesh, Punjab and the Union Territory of Delhi.

Employment and production figures of the company are shown in Table A and the working results in Table B below :

TABLE A

Year	Employment (Number)	Production (Rs. in lakhs)
1966	949	214.56
1970	889	214.14
1971	915	197.01
1972	905	176.80
1973	898	200.84
1974	836	268.48
		(Metric tonnes)
1975	777	132,706.76
1976	756	2,334.22

TABLE B

Year	Total assets (Rs.)	Net sales (Rs.)	(Rs. in lakhs)	
			Wages and salaries (Rs.)	Gross profit/loss(—) (Rs.)
1966	202.38	325.52	29.70	36.39
1970	204.67	345.14	32.35	20.09
1971	206.44	327.96	34.25	6.24
1972	207.62	315.27	35.00	(—) 6.77
1973	208.56	337.16	41.55	(—)44.27
1974	200.00	274.00	65.94	(—)77.85
1975	210.66	424.67	46.02	(—)38.28
1976	210.22	72.55	42.08	8.64

From the above data it is apparent that except for 1976 the company incurred losses from 1972 to 1975. A number of factors are responsible. *Kankar*, which is the basic raw material and was earlier found in the nearby agricultural fields, has now to be transported from a distance of about 20 to 25 kilometres because the nearby deposits have been exhausted. The compensation to be paid to the owners of the fields has gone up. *Kankar* is excavated by manual digging and the labour charges have also increased considerably. Previously, octroi on *kankar* was charged at concessional rate by the municipality but now that concession has been withdrawn. Since the rates for the sale of cement are fixed on all-India basis by the Government of India, no particular weightage is given to the disadvantageous position of this factory.

(5) **Shri Saraswati Spinning Mills, Bhiwani.**—This mill was established in 1969 with 5,000 spindles to produce cotton-waste yarn which was much in demand at Delhi, Panipat and other surrounding areas. Subsequently, the Central Government gave permission to spin cotton yarn on these spindles. Since then the mill has progressed and expanded considerably. As against the sanctioned capacity of 25,000 spindles, it has installed 22,000 spindles.

The mill spins cotton-waste, cotton and woollen yarns but it also proposes to spin all types of synthetic blended yarn.

Employment and production figures of the mill are shown in Table A and the working results in Table B below :

TABLE A

Year	Employment (Number)	Production (Rs. in lakhs)
1970-71	210	28.00
1971-72	248	46.00
1972-73	259	67.00
1973-74	346	80.00
1974-75	481	120.00
1975-76	250	96.56
1976-77	200	58.69

TABLE B

Year	(Rs. in lakhs)			
	Total assets (Rs.)	Net sales (Rs.)	Wages and salaries (Rs.)	Gross profit/loss(—) (Rs.)
1970-71	28.32	26.72	4.64	3.43
1971-72	39.89	46.30	5.47	5.96
1972-73	46.03	61.38	7.24	5.70
1973-74	69.81	81.18	9.05	7.21
1974-75	50.00	120.00	13.00	6.00
1975-76	63.00	87.00	11.00	(—)1.00
1976-77	63.00	56.00	9.50	(—)1.00

(6) **Milk Plant, Bhiwani.**—This milk plant is one of the several units of commercial undertakings of the Haryana Dairy Development Corporation Ltd., Chandigarh and was established in 1972 at Bhiwani, with an investment of Rs. 69.26 lakhs. The plant has an installed capacity of 15,000 litres of milk per shift or 35,000 litres of milk per day. The factory manufactures sweetened condensed milk, both full cream and skimmed. It is sold in bulk as well as in consumer packs of 397 grams each. The condensing equipment installed at the factory was designed and fabricated at Faridabad by indigenous enterprise. The five chilling centres which procure milk are located at Mundhal, Kalanaur, Jui, Loharu and Tosham. Milk is procured through Milk Supply Cooperative Societies.

Employment and production figures of the plant are shown in Table A and working results in Table B below :

TABLE A

Year	Employment	Production
	(Number)	(Rs. in lakhs)
1972-73	..	..
1973-74	86	42.91
1975-76	90	96.62
1976-77	77	97.00

TABLE B

Year	(Rs. in lakhs)			
	Total assets	Net sales	Wages and salaries	Gross profit/loss(—)
	(Rs.)	(Rs.)	(Rs.)	(Rs.)
1972-73	69.26	1.00	2.16	..
1973-74	61.96	45.12	4.20	..
1974-75	..	..	..	..
1975-76	55.00	80.00	6.00	1.00
1976-77	52.00	158.00	6.00	1.00

(7) **Haryana Textiles, Bhiwani.**—The unit was established in 1972 with an investment of Rs. 20.25 lakhs. It manufactures shoddy yarn.

Employment and production figures of the mill are shown in Table A and working results in Table B below :

TABLE A

Year	Employment	Production
	(Number)	(Rs. in lakhs)
1972-73	120	23.00
1973-74	140	30.94
1974-75	150	25.95
1975-76	103	29.61
1976-77	104	21.66

TABLE B

Year	(Rs. in lakhs)		
	Total assets	Wages and salaries	Gross profit/loss(—)
	(Rs.)	(Rs.)	(Rs.)
1972-73	28.80	2.84	4.38
1973-74	45.37	4.16	9.98
1974-75	..	..	..
1975-76	15.45	2.85	..
1976-77	14.00	3.27	..

(8) **Mohta Electro Steel Ltd., Bhiwani.**—The unit was established in August 1975. It manufactures C.R. steel strips .

Employment and production figures of the mill are shown in Table A and working results in Table B below :

TABLE A

Year	Employment (Number)	Production (Rs. in lakhs)
1975-76	183	65.10

TABLE B

Year	Total assets (Rs.)	Net sales (Rs.)	Wages and salaries (Rs.)	Gross profit/ loss (—) (Rs.)
1975-76	144.06	54.42	4.71	3.38

SMALL-SCALE INDUSTRIES

On March 31, 1977, there were 518 small-scale units in the district. Of these, 118 manufactured metal and engineering goods, 75 chemicals, 68 textiles including synthetic and woollen, 46 food articles, 35 furniture and wood products, 28 brass utensils, 24 mineral based products, 18 cement products, 8 optical material, one lime and the rest of the 97 miscellaneous items. For more details see Table XXI of Appendix.

COTTAGE INDUSTRIES

Traditional cottage industries still flourish to some extent in the district and include shoe making, blacksmithy, carpentry leather tanning, pitloom weaving, *ban* making, candle making, stone carving, rosary beads and utensil making by the Thathiar community. There is no speciality about the products. Even otherwise, these are diminishing in importance as persons in these industries are switching over to more lucrative occupations. The position at various stages regarding cottage industries till March 31, 1977 is given in Table XXII of Appendix.

REGISTERED FACTORIES

On December 31, 1961 only two factories from the Dadri tahsil stood registered with the Labour Commissioner. These were (i) Dalmia Dadri Cement Works Ltd. and (ii) Ishware Industries, both located at Charkhi Dadri. The former gave employment to 686 workers, while the latter, which manufactured *balties*, trunks and agricultural implements had an establishment of only 4 persons¹.

In Bhiwani, there were five registered factories detailed below² :

Serial number	Place	Name of factory	Nature of work	Number of workers
1.	Bhiwani	Technological Institute of Textiles/Bhiwani Cotton Mills	Cloth manufacturing	1,122
2.	Bhiwani	The Punjab Cloth Mills	—do—	2,236
3.	Bhiwani	Krishana Bobbin Factory	Wooden bobbin	877
4.	Bhiwani	B.K. Engineering Works	Diesel oil engines	8
5.	Bhiwani	Bhiwani Gum Guar Factory	Gum and <i>guar</i> manufacturing	42

The industry-wise data regarding the registered working factories as on March 31, 1977, and the names of these factories are given respectively in Tables XXIII and XXIV of Appendix.

INDUSTRIAL LABOUR

Industrial labour in the district is generally drawn from U.P. and Rajasthan; it migrates on account of shortage of employment avenues over there. Moreover, the wage rates prevalent here are higher as compared to the wage rates being paid in U.P and Rajasthan. The general

1. *Census of India 1961, District Census Hand book, Mahendragarh District, 1966, p. 48.*

2. *Census of India 1961, District Census Hand book, Hissar District, 1966, p. 74.*

condition and standard of living is quite unsatisfactory due to high prices of essential commodities, non-availability of housing facilities, etc. To overcome this problem, the employers are persuaded to construct houses for labour under the subsidised Industrial Housing Scheme, to open fair price shops, etc.

Although the industrial institutions and schools opened by the Department of Industries increasingly meet the demand of skilled labourers and help in the development of industries, yet these do not meet the full requirements. More skilled hands are needed.

Industrial labour in the district has to go without work many times due to shortage of electricity and it is compensated by way of payment of lay-off compensation in accordance with the provision of the Industrial Disputes Act.

The wage rates paid to industrial labour are either fixed under the Minimum Wages Act, 1948, or under awards and settlements. Mostly there are textile industries in the district in which the wage structure of an unskilled worker ranges from Rs. 171 to Rs. 275 per mensem and that of a skilled worker from Rs. 190 to Rs. 350.

COOPERATIVE MOVEMENT

The development of industrial cooperatives is essential for democratic development of industries specially in the cottage and small-scale sectors. Stress is, therefore, laid on the development of industries through cooperatives. The industrial cooperatives ensure that decentralisation of industry is accompanied by proper improvement of techniques of production, procurement of raw material and marketing of finished goods.

The cooperative movement in the district has been finding its place in the industrial sphere also. The development of industrial cooperatives is looked after by the Assistant Registrar, Cooperative Societies, Bhiwani, who is assisted by 2 Industrial Inspectors and 7 Sub-Inspectors. The activities of the Cooperative Department are confined to cottage and small-scale industries.

The following table indicates the number of industrial cooperative societies that have existed since 1973-74:

Serial Number	Name of industry	Number of societies (year ending June 30)			
		1973 —74	1974 —75	1975 —76	1976 —77
1.	Handloom weaving	34	42	43	41
2.	Small Scale Industries				
(a)	Engineering goods	28	34	34	32
(b)	Wood works	21	21	21	19
(c)	Miscellaneous	89	89	86	79
3.	Khadi and village Industries				
(a)	Non-edible oils and soap	19	21	21	21
(b)	Pottery	2	2	2	2
(c)	<i>Gur</i> and <i>khandsari</i>	16	16	16	15
(d)	<i>Ghani</i> oil	4	4	3	3
(e)	Cobblers	48	48	48	41
(f)	Leather tanning and flaying of skins	8	8	8	7
(g)	Others	9	10	10	10

The value of the goods produced and the loans and subsidies advanced to the industrial cooperative societies are given below :

Year (ending June 30)	Value of goods produced	Loans advanced	Subsidies advanced
	(Rs.)	(Rs.)	(Rs.)
1973-74	40,41,694	8,25,663	20,435
1974-75	31,84,000	10,30,000	21,765
1975-76	35,65,000	16,24,000	57,850
1976-77	45,23,000	20,49,000	4,800

GENERAL

In addition to the number of incentives and facilities offered to attract entrepreneurs to establish industries in the district, Bhiwani is being linked with Rohtak through a broad gauge railway line.

A branch of the Small Industries Service Institute, New Delhi, was opened at Bhiwani in July 1975. It has a workshop with facilities in general engineering, tool room and heat treatment. Machinery worth about Rs.10 lakhs has already been received. This branch is providing technical know-how to the industrialists.

A new unit in the large-scale sector for the manufacture of precision steel tubes with a capital investment of Rs. 1.5 crores is coming up at Bhiwani besides a *dal* mill in the cooperative sector with an investment of about Rs. 50 lakhs.