CHAPTER V

INDUSTRIES

Mandya District is considered as one among the industrially developing districts of Karnataka, where in Small Scale Industries and Tiny industries that have been set up since 1996 have received subsidy and financial assistance and such other concessional facilities from the State Government. Industries that have already been set up can receive subsidy for industrial expansion, electrification and modernization. Facilities for products manufactured by are created Khadhi and Village Industries to receive sales tax rebate and concessions.

In the district Large Scale Industries that have Capital investment of Rs.100 crore and above as well as those industries that have cent percent export oriented production with special promotional facilities. As the district is predominantly agriculture oriented naturally has the industries that are agro based such as rice mills, Jaggery manufacturing, furnaces, sugar factories, oil mills and such others. The crushed sugar cane pulps generated from the Mysore Sugar Company and other Sugar factories have been used till recently in the manufacturing of paper by the Mandya National Paper Mills at Belgola. This Mandya Paper Mills has been closed recently.

Industries that manufactures Distilleries have been founded which are byproducts obtained from manufacturing of Sugar. Minerals and other natural resources that are necessary for the development of industries are not available in the district. Majority of the Small Scale Industries in the district are just in a

position to manufacture the goods in accordance with the consumer's demands, but not yet utilised the greater marketing facilities. Internal infrastructure facilities such as Transport, Communication, Finance, Electricity, Industrial Area, Industrial Training, which are essential for the industrial development are not inadequate in the district. There is no shortage of land, labour and capital investments and the necessary infrastructure facilities for the development of industries in the district.

Traditional Industries

Before the advent of modern industries there were several variety of traditional industries such as Textile, Bedspreads, Brass vessels, Pottery, Jaggery and so on, that were popular till recently. Ganjam in Srirangapattna was once upon a time an active industrial centre. It was famous for manufacturing quality textiles. It is a popular belief that the industry was set up by Tippu Sultan had brought 12,000 skilled industrial workers from abroad and had made them settled down here. Paper was also being manufactured here. According to C. Hayavadana Rao, the industry could be set up because of the availability of lime (klin) and Soda (Sodium chloride) abundantly here. Dr.R.Balakrishna in his book "Industrial Development of Mysore" has mentioned that the strings used for stringed instruments in the district was produced on a large scale by utilising the abundant availability of steal. C.Hayavadana Rao has opined that of late the locally manufactured quality standard strings and the expertise skills have disappeared due to the shortage of quality steal as well as the decreasing demand for strings.

During 1847 in Palahalli near Srirangapattana the then chief commissioner Sir Mark Cubbon had encouraged to set up Ashta Grama Sugar Works. This was one of the earliest industries in the district and had enabled common people to have facilities and also had contributed to the development of the crops. Farmers who were manufacturing Jaggery using Sugarcane Juice started supplying the sugarcane to Sugar works directly. This resulted in the raise of the farmers in the neighbouring villages also. The Khandsary sugar manufactured in this factory was of high quality and it even secured a prize and a certificate at Industrial Exhibitions in London during 1851 and 1861. Again in 1867 this product received another certificate at an International Exhibition held at Paris with all its credentials this factory was closed in 1894 due to unknown reasons. Kodiyala besides manufacturing cotton sarees was also famous for manufacturing of Sugar cakes.

Nagamangala was a noted centre from time immemorial for manufacturing of Brass and Steel Lampstands, Gods and Goddesses and Brass Vessels. The

regional demand naturally increased the development of this Industry. Such a flourishing Industry had suffered a closure around 1914, says V.S.Sambashiva Iyer. Dr. R.Balakrishna had also expressed that the industry might have been closed owing to the competition created with the use of aluminum vessels and also washed (kalayi) culinary brass vessels that were available for lesser costs. People started etching on the vessels and also decorated vessels with artistic designs in the district. So also inlay work was carried out by them on wooden articles.

Ganjam in Srirangapattana taluk and Sindhaghatta in Krishnarajpet taluk were well known for silk manufacturing industries from ancient times. Sericulture as an Industry received rich impetus from the people who abundantly carried out silk rearing at Mandya and those cocoons were transported to Channapattana for reeling purposes. This process was going on from time immemorial. At Sindhagatta sericulture silk reeling was carried out besides colouring and weaving textile as the raw materials were procured from all other taluks in the district. The district was also famous for manufacturing woolen blankets and quality Dhothis particularly known for Melkote Dhotis. The Government had undertaken two electrical units which had started manufacturing R.C.C. Electric poles. All the taluks within the district had rice mills. From ancient days varied industrial activities were undertaken such as industries, that were predominantly domestic in nature and manufactured goods such as Cotton, weaving woolen blanket, silk weaving, oil extracting mills, pottery; Basket weaving, Gold and Silver works, Black Smithy, Carpentry, mat weaving, Leather work and others. More number of Jaggery making units were available in Mandya district. Sir Francis Buchanan has mentioned in his travelogue that he had seen many Jaggery making units in the district.

Modern Industries

Buchanan in his travelogue had expressed that Tippu Sultan had given much attention for the development of modern industries such as Sugar, Sericulture, Glass and so on. He had also invited technical know how on manufacturing sugar from China and Sericulture from West Bengal. After Rendition Railway construction as well as establishment of Shiva Samudra Hydro Electricity Generating station established in 1902 contributed for the industrial development of the district. Setting up of the Mysore Sugar company at Mandya, heralded the beginning of the Large and Modern Industrial units in the district. This company was not solely meant for manufacturing of Sugar but also utilized Molasses in the manufacturing breweries through distilleries like Brandy, whisky, rum, gin and

such other by products of sugar. Mysore Acetate and Chemicals Engineering Company gets its raw material Acetic Acid from this sugar company at lower rates. In order to fully utilize the by products of Sugar manufacturing industries encouraged the founding of the Mandya National Paper Mill at Belgola and Mysore Acetate and Chemicals Companies became essential and thus they are under the control of the Government. Currently these Companies have been closed. Under the control of Private Sector the modern industries such as B.P.L. PTI (Ltd.,); Chamundeshwari Sugars (Ltd.,) ICL Sugars (Ltd.,) Habeeb Solvents, Keelar Power Project, Gyaman Furcems India (Ltd.), Karnataka Malladi Biotech (Ltd.) and others are under Private Sector. Pandavapura Sugar Co-operative Industry and Mandya District Co-operative Milk Producer's federation (Ltd.) located in Gejjalagere are functioning under Animal husbandry sector in the district. These Industries are functioning under the Co-operative Sector.

In this district paddy is being grown widely covering greater areas, but there were no modernised Rice mills here. Small rice mills in the district were fulfilling the requirements. Team of Experts designated by Ford Foundation had conducted major survey and had carried out research of Rice mills at the national level in conducting survey of rice mills and had identified the deficiencies in the management of paddy collection, Transportation, Milling, marketing and so on and had submitted a detailed report to Government of India.

As a result of this the government decided to set up six modernised rice mills at places where there was higher concentration of paddy cultivation. One of them was set up at Mandya with a capacity of milling two tons of Rice per hour. Agricultural Producers Marketing Co-operative Society (APMC) Ltd., was established at Mandya. Later on the State Government in addition to the existing Rice Mill, founded a new Mill with a capacity of one ton paddy per hour at a cost of Rs.15.25 lakhs sanctioned during the current year. This society managed the Modern Rice Mill. On 20th May 1965, the well advanced Satake Rice Mill of Japan was installed in the same premises with a capacity of 1.2 tons per hour. This mill besides having rice providing elevator also had such other equipments that cleaned the paddy, removing and separating the husks, separating paddy from Rice, polishing rice, controlling the quality of rice, collecting the husk and throwing out the such other wastes were simultaneously set up.

During 1937 a Tobacco curing unit was set up in Mandya. It has been since closed. Mysore Acetate and chemicals manufacturing company (Ltd.) was established at Mandya in 1938 and its administrative unit was located in Tharabanahally in Chikkabanavara near Bangalore. This Unit was subsequently

expanded and Copper Sulphate, Aluminum Sulphate and Alum manufacturing factories were established. In 1940 and 1941 One factory was set up in Tharabanahally and another in Belagola in Srirangapattana taluk respectively. This was the first of its kind in India for manufacturing Copper Sulphate. It is used as a disinfectant in the cultivation of coffee, Arecanut, Rubber, Grapes, paddy, Cotton and other food crops. Alum and Aluminum Sulphate is also used in purifying water and clothes/textile dyeing. In 1975 Allied Rasin and chemicals units was set up under Private Sector in Belagola in Srirangapattana taluk. With a aim to manufacture Urea, Farm Aldide and Rasin. During 1966 in Mandya, Agricultural Implements Manufacturing Industry was started as the demand for agricultural instruments and implements owing to high concentration of Agricultural activities in the district. In Maddur taluk there is a greater concentration of coconut grooves and the yield is more hence the Co-operative Jute factory has been established in Nidagatta.

Present Industries

By the end of March 2002, the district comprised of 14 Large and Medium Scale Industries. Of these three belonged to the Government, two belonged to the Co-operative Sector and the rest nine were under the control of Private Sector. The total capital investments made in these amounted to Rs.28,272.20 Lakhs. It had created jobs or 5,653 workers. These industries manufactured Sugar, Milk, Dairy products, edible oils, Electrical Generators, Fertilizers, Paper, Drycell etc.

Among them five have not been functioning. At the same time there were 674 registered Small Industries units have been functioning in the district. And a total Capital Investment of Rs.10,784 lakh. 69 were invested in these industries. These provided jobs for 31,864 workers. Under the district Khadhi and Gramodyog Board there were 325 functional units and had created jobs for 1,738 workers. During the year 1999-2000, around Rs.5,000 Lakh worth goods had been manufactured. 1995-97 a census Handlooms and Power Looms were undertaken. As per this census 310 families engaged in Handloom and 17 Households were depended in power looms. In the district there were 238 Handlooms and had created jobs for 472 workers. There were 32 Power Loom in the (16) were defunct. Sericulture industry was supportive to Agricultural activities in the district. Out of the Kotis (Grainages) Seven were Government and 100 private of them supplied disease free laying to these farmers. Three Government owned mulberry growing centres are engaged in cultivation and maintenance of quality and standard mulberry and their stems are being distributed among farmers and also provides technical Training for rearing Silk Worms.

Incentives and Concessions

With a view to develop Industries and secure them a first ranking and recognition the Industrial map of India the State Government has sanctioned several Incentives and concessions from time to time. To achieve this target the state government has created three Industrial zones covering all the taluks and have categorized them. Since 1995, newly established industries have been provided Incentives and concessions up to 2001. As per this Bangalore South Taluk, Bangalore North Taluk and Bangalore Urban Agglomeration. Regions (as per 1991 census) have been included and classified as Industrially developed Region under Zone No.1 classified and the remaining 173 taluks have been classified as developing and has been included in Industrially grown up Areas under Zone No.2. Dharwad, Hassan and Raichur have been classified as Industrially growing centres and are included in Zone - No.3 and have been provided with special amenities. Besides, this Karnataka Industrial Development Board has identified. Bijapur, Kolar, Chitradurga, Chickmagalur, Gadag, Nippani, Bellary and other areas where in Small Scale in industrial centres and at Torangal in Bellary district for the growth of Large Scale Industrial complexes with modern configuration has been planned.

All the seven taluks in Mandya District comes under Industrially developing area under Zone-2. The Tiny and Small Scale units which possess landed property (Land, Building, plant and Machinery and Investments made on property shall be eligible for an Investment subsidy of 25% of value of fixed Assets subject to a ceiling of Rs.25.00 lakhs. Those needy Small Scale Industries in a zone which do not exceed an Investment of five lakhs and possess immovable property will be given financial assistance up to five percent of its value. For those Industries established already are provided with financial assistance for expansion, electrification, modernization (if financial support is required by them). For those belonging to Scheduled castes and Scheduled tribes, Minorities, Women entrepreneurs, physically Handicapped, Ex-servicemen and others were provided. Financial assistance upto five percent to a maximum of amount Rs. one lakh additional capital investment facilities. Similarly private or Co-operative Zonal industrial units are provided with financial assistance for those who have invested in development and expansion (20% of the total investment made already or upto Rs.20 lakhs) for Capital Investment supporting financial assistance. The Private and Co-operative Industrial Units who have invested upto Rs. 500 lakhs are being provided financial Assistance for Infrastructure development and other facilities. Those established Industrial units which have

modernised its Industrial equipments are also provided with financial assistance upto 20% out of the total investments made or a maximum amount of Rs.20 lakhs, additional financial assistance. This is applicable for projects worth upto Rs.500 lakhs each and this does not include cost of Industrial sheds and Industrial Housing.

Captive Power Generation Units shall be considered as a part of new/expansion unit and considered a part of project cost of those eligible for incentives and this is limited to Investments on Generator Sets and this will be included in the Capital Investment in consideration for the Sales Tax. This rebate or concessions facilities will be provided to each unit that has 10% or Rs. five lakhs. New Industries that use diesel to generate electricity are charged with the sales tax which is refundable to the respective company. This facility is however available for only five years. For those units that not have Captive Electric Generator facilities, for their own use and who utilize or consume electricity, are given rebate for the first five years. For Technically based and pollution free Industries financial assistance is provided with capital investment, Tax rebate and other facilities are given several incentives and encouragement. Units under Khadhi and Village Industries are given central sales tax rebate as well as Karnataka State Sales tax rebate on products that are marketed. Encouragement is given to Large Scale industries that have capital investment of Rs.100 crores based on their investment plan programmes and absorption rates of manpower. For these 100% export oriented industries financial assistance such as capital investment, sales tax rebate, entry tax on purchase of spare parts and other facilities are extended. New Small Industries that have been set up in the district have been given financial assistance for their expansion, modernization and from exemption on stamp duty. The fees fixed incurred at the time of conversion of agricultural land for industrial use is given exemption. For the Small Scale Industries engaged in commercial production are exempted from power cut for the first five years of its inception.

Terms and Conditions

Definitions for Incentives and Concessions for Industrial Units and also Tiny Industry is one in which the Investment in plant and machinery is less than Rs.5.00 lakhs irrespective of location of the Unit. An Industrial undertaking in which the investment is fixed assets in plant and machinery. Whether held on ownership terms or on lease or by Hire purchase does not exceed Rs.60.00 lakhs is called Small Scale Industries.

Ancillary Industry

An Industrial undertaking which is engaged or is proposed to be engaged in the manufacture of production of spare parts, components, sub-assemblies, Tooling or intermediates or rendering of services and the undertaking supplies or rendering proposed supply of finished products and undertake not less than 50 percent of its production or services as the case may be to one or more other industrial undertakings and whose investments in fixed assets in plant and machinery whether held on ownership terms or on lease or on hire purchase should not exceed Rs.75.00 lakhs. An Industrial unit which is not classified as Tiny/ Small Scale/Ancillary Industry shall be classified as Medium and Large Scale Industry. A cent percent export oriented units is one which undertakes to export its entire production of goods subject to relaxation as permitted by Government of India from time to time. Such Units may be set up either under the EOU or EPIP (Export Promotion Industrial Park) scheme or under the electronic hardware Technology Park (EHTP) scheme or Software Technology Park scheme. Items used for direct production such as expenditure on Industrial sites, Buildings, Production, Plant and Machineries, Captive Power Plant and Electrical Sub Station, computers and such other directly used equipments are included.

Small Scale Industries Modernization Fund

Modernization of Small Industries: Understanding the problems being faced by Small Scale Industries, the State Government formulated a new programme was initiated and issued a Government Order on 27-10-2000. Opportunity is provided under this programme to revive and modernise suitable small industrial, units and also sick industries.

- 1) The State Finance Commission that has borrowed Rs. 500 lakhs as loan at the rate of 11.5% from (SIDBI) Small Industries Development Bank India is utilized to extend loans at the rate of 8.5% to eligible Small Scale industries.
- 2) Rules and Regulations formulated by SIDBI is strictly adhered to and has provision to sanction a maximum of Rs.5.00 lakhs as loan for Small Scale Industries.
- Financial Assistance is granted to sick and needy as well as technically upgraded industries.
- 4) Karnataka State Finance Commission along with Commercial Banks and other institutions including K.S.I.I.D.C. is eligible to borrow this financial assistance.

- 5) The Industrial units which utilized financial assistance for the first time under this scheme and those who could not avail working capital from Commercial Banks, KSFC can provide financial assistance borrowed from SIDBI and the Principal amount will be charged with simple interest.
- 6) The Industrial Units recommended in KSFC's single Agency Meeting at single window Agency meeting for sanctioning financial assistance are to be considered.
- 7) Karnataka State Government released finances at one stretch to Karnataka State Finance Corporation. Interest earned under this plan is accounted by the Karnataka State Finance Corporation while sanctioning further finance is to be released with this interest is received and appropriated.

Facilities from Central Government

At the Inauguration of the All India Small Scale Industries Conference held at New Delhi during 30th and 31st of August 2000 the Prime Minister announced several facilities such as increased rebate on central excise duty limit from 50 lakhs to 100 lakhs and enhanced the composite loan limit from 10.00 to 25.00 lakhs. In order to promote industries to improve their quality and secure ISO 9000 Certificate and continue the grant of the loan facilities for each unit upto Rs.75,000 has been enhanced for six more years.

Government invested Rs.125 crores for Small Scale Industries under the loan guarantee plan and encouraged enthusiastic industrialists from 1st September 2000 has extended financial support from the State Financial institutions for those industries who do not have any security but need financial loans with a stipulated frame work and also for selected technical industries Assistance has been extended to get 12% of the Capital Investment. To strengthen khadi and village industries and to technically support the khadhi weavers, a new plan has been prepared and initiated. The Central Government amended the Textile Policy that was in vogue in 1985 and replaced it by a new Textile Policy from 2nd November 2000. The earnings of the Textile Industries export is expected to reach 50 billion from the present 11 billion \$ by 2010. This enabled these units to not only compete with the neighbouring countries but also helped to the readymade Garments Industrial expansion. It is estimated that the Ready made garments will be fetching 25 Billion Dollars. Till now the ready-made garments was in the small industrial sector, which had permission for capital investment of Rs.300 lakhs. In order to resolving the Industrial disputes and provide assistance and get the necessary technical know how for the textile units from the International commerce organization is being provided.

This policy also provides technical support to textile industry as small as at the international level it has come up with mutual understanding and the agreement. It also resolves the conflicts and disputes that may arise from time to time.

POWER

Fundamentally Electricity is not only used in domestic front but also in priority sectors. Mandya district has Power Generation unit at Shivanasamudra and Shimsha and hence the history, the distribution system and other details need to he comprehended. The history of Hydel Power Generation in the district can be traced to over hundred years.

Karnataka as is well known, has been a pioneer in the development of Hydro-Electric Power. The first generating, station at Shivasamudram was established as long back as 1902, in order to meet the power supply demands of the Kolar Gold Mining Company. This was the first attempt to tap hydro-electric potential in India. The Cauvery Power Scheme was initiated in 1900 under the guidance of the then Dewan of Mysore Sir K.Sheshadri Iyer.

In 1894, Mr.Edmund Carrington, an Electrical Engineer, applied for concessions to tap the Water-power at the falls. He was connected with Mr.Holmes of Madras, one of the pioneers of Hydro Electricity Generation in India. These gentlemen and colonel Henderson, the then British Resident in Mysore, who took a keen interest in the scheme, recognised that long distance transmission of power might be possible.

The Mysore Government considered it advisable to investigate the practicability of generating power at the Shivasamudram Falls site and obtained, from the Madras Government, the services of the Chief Engineer at Madras, for the purpose. In his report he took a very favourable view of the potentialities of the head at the Falls. In June 1899, the Deputy Chief Engineer of Mysore, after studying the details of the power installations at the Niagara Falls, conceived the idea of working the machinery at the Kolar Gold Mines with electricity generated by the Cauvery Falls, and this scheme received the hearty support of Sir K.Sheshadri Iyer, the then Dewan of Mysore, and Colonel Campbell, the Chief Engineer. Messrs. John Taylor and Sons of London, who had the general control of the mines in the Kolar Gold Fields, also supported the scheme. The Government decided in 1899 to utilise the head near the Falls for the service of industrial undertakings in different parts of the State, including the Kolar Gold Mines.

In embarking upon this great undertaking, the Government were influenced by the consideration that the supply of a cheap motive power of the kind and on

the scale proposed, was likely to foster industrial enterprises through out the State and thus indirectly increase the wealth and general prosperity of the country. The Deputy Chief Engineer was deputed to Europe and America to examine the project in consultation with the experts there. The Mysore Government acquired from the Government of Madras the right to utilise the whole of the water-power at the head of the Falls under certain conditions. The sanction of the Government of India for the various details, such as the concession from the Government of Madras, the agreement with Messrs. John Taylor and Sons and the individual miners, a contract with the General Electric Company of Schenectady, United States and Messrs. Escher Wyss & Co., Zurich, for hydraulic plant, the former taking the entire responsibility for installing the plant and working at the spot for a period of one year. The works were completed by 1902, and on the 30th June of that year, the generated power (30,000 volts) was successfully transmitted for the first time to the Kolar Gold Fields.

The power line to Mysore was drawn from the Shivasamudram generating station to a point very near Malavalli and from there, it passed, in close proximity to Bannur and Alahalli, on to the Sri Narasimharaja Power Station at Mysore. The distance is roughly 33 miles. The other two lines to Kolar Gold Fields and Bangalore ran parallel to each other from the generating station up to Kanakapura where they deviated, one to Bangalore running via Harohalli, Vasanthapura and Nayandahalli, and the other to Kolar Gold Fields passing through Kanakapura, Jigani and Chandapura. The Shimsha line was linked to these lines at a place close to the generating station.

The power developed by the first installation was 6,000 H.P., but owing to the increased demand for power at the Gold Fields and in Bangalore and Mysore cities for both power and lighting, the generating station was extended by the second installation in 1903, the third installation in 1907, the fourth installation in 1914-15, the fifth in 1918 and the sixth in 1919. The seventh installation was sanctioned in 1925. The total power generated was raised by the sixth installation to 34,000 H.P. The seventh installation provided for an extra 14,000 H.P., the total power thus generated under the seven installations being 48,000 H.P. The name of Sir K. Sheshadri Iyer will be remembered long as the person who laid the foundations for hydel power development in the State. The advent of Electric Power at the Cauvery Falls site in Mandya district revolutionised industrial activity in Mysore and made it possible to establish a large number of big and small industries in the State. The Shiva Samudram Station which was established in 1902 with an installed capacity of 4,500 kws increased gradually to 42,000 kws by 1938.

As the demand for power increased, the Government of Mysore took up the development of additional sources of power generation. The Shimsha Power Station with an installed capacity of 17,200 kws. Was commissioned in 1940. For the purpose of power distribution the district has been classified into two division the Mandya Division and Pandavapura Division are the distribution units. The combined capacity of these distribution capacity is 167.7 Mega Watts, and possess a distribution through 25 varieties of capacity Network in the district. In the table below the number of units of transformers, location of the Transformers, voltage capacity (Proportion), No. of Transformers and their capacity have been presented for the year 2001-02 in the table 5.1.

Table 5.1

Name of the Sub-	Voltage Ratio	No. of	Capacity of each	Total
Station	in KV	Transformers	Transformer (in	capacity in
			MVA)	MVA
Mandya	66/11	2	12.5	25.0
Malavalli	66/11	1	6.3	6.3
		1	12.5	12.5
Maddur	66/11	2	8.0	16.0
Корра	66/11	1	8.0	8.0
Dundenahalli	66/11	1	6.3	6.3
Mandya-I and IInd	66/11	1	12.5	12.5
stage				
Kirugavalu	66/11	1	6.3	6.3
K.M.Doddi (Bharathi	66/11	1	6.3	6.3
nagar)				
Tubinakere	220/66	2	100	200
	66/11	1	12.5	12.5
Pandavapura	66/11	2	6.3	12.6
K.R.Pet	66/11	2	6.3	12.6
Nagamangala	66/11	2	6.3	12.6
Garudana Ukkada	66/11	2	1.0	2.0
Srirangapattana	66/11	1	8.0	8.0
B.G.Nagar	66/11	1	6.3	6.3
Belgola	110/11	2	10.0	20.0
	110/4.6	4	3.3	13.2
Mandagere (Kikkeri)	66/11	1	6.3	6.3
	66/11	1	8.0	8.0
Total		32		413.3

Source: Karnataka Power Transmission Corporation Ltd.,

Table 5.2 gives the Category wise distribution of consumers in the district as on 2000-01 and 2001-02

Table 5.2

2001-2002	2000-2001		Sl.No.
2,23,139	2,05,806	Domestic lighting	1
18,946	18,470	АЕН	2
26,663	25,041	Commercial lighting	3
2,183	2,015	Drinking water	4
10,168	9,916	L.T. Power	5
41,709	39,840	IP.Sets	9
29,768	29,677	Street lights	7
64	63	H.T. Power	8
90,759	84,511	Bhagya Jyothi/Kuteera Jyothi	6
4,13,613	3,85,662	Total (Excluding Street Lights)	

Source: Annual administration Report KPTCL

Details of Talukwise villages, Hamlets and Irrigation Pumpsets electrified in the district during the year 2001-02 are given in the Table 5.3.

Table 5.3

			3.3 5.		_
I	No. of	No. of	No. of	No.of	Taluk
	electrified	Hamlets	electrified	Inhabitated	
	I.P. Sets	electrified	villages	villages	
	8535	57	289	296	1 K.R.pet
ı	6021	73	153	153	2 Maddur
ı	9119	57	169	172	3 Malavalli
ı	5912	74	173	174	4 Mandya
ı	5813	140	343	343	5 Nagamangala
ı	4352	42	139	140	6 Pandavapura
ı	1957	25	85	87	7 Srirangapattana
ı	41 709	468	1351	1365	Total

Source: Annual Administration Report 2000-01, KPTCL

As per the 2001 census, there were 1,365 inhabitated villages in the district, till the end of March 2002, 1351 inhabitated villages were electrified. In the same period there were 468 Hamlets were electrified and 41,709 I.P.Sets were also electrified.

LARGE AND MEDIUM SCALE INDUSTRIES

Large scale modern industrial activity in the district may be said to have begun when the Mysore Sugar Company started its factory in Mandya in 1933. Other places where Large Scale Industrial units are located are Pandavapura

and Belagola. It may be said that while the district is the agriculturally prosperous, it is also being well-developed industrially. In this chapter an attempt has been made to deal with existing industries as also the district's industrial potentialities which may be exploited in years to come.

Sugar Industry

The Sugar Industry which has a direct link with agriculture - a link for which there is no exact parallel in the case of other industries - is today one of the foremost major industries in the country and the progress it has made in recent years is significant. The Indian Sugar industry owes its development to a certain extent, to the grant of protection by Government in 1932 and it was about this time that two factories within the confines of the present Mysore State came into existence, one at Mandya and the other at Hospet in Bellary district. Another factory on a Co-operative basis started working at Pandavapura in 1956 and thus, there are now four sugar factories in Mandya district, which have a pride of place in the industrial map of the district.

The problems of size and location of sugar industrial units, of late, assumed great importance in the sphere of industrial organisation. The efficiency of the industry as a whole depends to a very large extent upon the suitable location of plants and upon their "most profitable" size, which is technically called as "optimum size". The main economic factors, among others, influencing the choice of location are a) availability of raw materials, b) presence of skilled labour at an economic price, c) transport facilities and d) proximity to market.

The main raw material needed in the manufacture of sugar is sugarcane. The district of Mandya is one the important sugarcane zones in the State. Before the construction of the Krishnarajasagar dam across the river Cauvery, the area comprising the present Mandya district was mostly an arid region with an average rainfall of about 27inches annually. Side by side with the construction of the dam, an extensive soil survey was conducted round about the area in the year 1930-31 as a preliminary to the irrigation project under the Cauvery valley scheme. With the completion of the Krishnarajasagar reservoir and the formulation of the irrigation plan under the Irwin canal (now renamed as Visvesvaraiah canal) in the year 1931, designed to irrigate approximately 1,20,000 acres of land, ample opportunities were created for large-scale cultivation of crops like sugarcane. The Krishnarajasagar dam is the direct outcome of the efforts of the "Maker of modern Mysore", Dr.M.Visvesvaraiah, who had the foresight and initiative at a time when economic planning and industrialisation were still in their infancy in India. The sugar factory at Mandya is one of the biggest industrial

units in the State. From the point of view of transport facilities, both Mandya and Pandavapura are on the Mysore-Bangalore Railway line and are also served by good roads. There is no dearth of labour in this area and as the transport facilities are good, the manufactured sugar can reach distant markets easily.

The Mysore Sugar Company Ltd.,

When Mandya district was brought under assured irrigation consequent on the construction of the Visvesvaraiah canal, the Government of Mysore recognised that the prosperity of region would depend in a large measure on the profitable cultivation of a commercial crop like sugarcane and that this would be possible only if manufacture of sugar on modern lines was initiated on a fairly large-scale. The sugar industry being in the nature of a new industrial venture and capital being shy in those days, the then Government of Mysore took the initiative to float a joint stock company, as an earnest of its interest in the welfare of the agriculturists on the one hand and to infuse confidence in the minds of the investing public on the other. Thus, the Mysore Sugar Company came into existence in January 1933 with an authorised capital of Rs.20 lakhs, of which 60 percent was taken by Government. This pattern of company formation with the Government holding a majority of shares was a novel one and may well be said to the fore-runner of the present day public sector companies. If Dr.M.Visvesvaraiah paved the way for the eventual establishment of the sugar industry, the credit for actually bringing the factory into existence should go to Sir Mirza M.Ismail, the then Dewan of Mysore, who was largely instrumental in sponsoring the company by taking advantage of the favourable opportunity presented by the grant of protection to the sugar industry in 1932.

The Mandya Sugar Factory started production early in 1934 with a small plant, having a crushing capacity of 400 tons of sugarcane per day. The quantity of sugar production during the first year was only 5,250 tons. Encouraged by the initial success of the venture, the capacity of the factory was raised to crushing 600 tons of Sugar cane per day in the very next year. The factory was further expanded so as to have a crushing capacity of 1,400 tons of cane per day, in response to the pressure from the agriculturists, who were capable of growing and supplying more and more sugarcane. As a result of further additions to the plant, the factory till recently was capable of crushing as much as 2,000 tons of cane per day. The production of sugar had correspondingly risen to 40,000 tonnes per annum. There are only a hardful of factories in India having comparable output of sugar.

The factory's requirements of sugarcane amounting to about 4,00,000 tonnes per annum are grown over an area of nearly 10,000 acres within a radius of 10 to 15 miles of the factory. The pressure on the factory for purchase of sugarcane is so great that it is forced to restrict the quantity to be purchased from each grower, so as to give opportunities for as large a number of cultivators as possible. The result is that the factory purchases sugarcane in small quantities from as many as about 12,000 agriculturists. The planting of sugarcane is spread all over the district in such a way as to secure for the factory about four lakh tonnes of ripe sugarcane every season, which generally begins in July and lasts upto the following February or March. The Mandya factory has the longest crushing season of nearly 250 to 300 days in a year, which is almost more than double the all-India average of about 130 days.

The system of growing sugarcane for supply to the factory at Mandya is rather unique and is based on modern democratic principles. The system, which is known as oppige in Kannada, consists of an undertaking on the part of each cultivator to plant and supply sugarcane to the factory as per terms and conditions stipulated in an agreement to be executed by each one of them individually, while the company on its part, agrees to pay them for cane at the statutory minimum price fixed by the Government of India, and, in the meanwhile, to advance their requirements of seed materials and manure, such as, ammonium Sulphate, oil-cake and such other materials needed for the purpose, besides paying them a cash advance of Rs. Eight per tonne of sugarcane, to meet the harvesting and supply expenses. The total value of advances so made to the cultivators comes, on an average, to about Rs. 350 to 400 per acre under normal conditions, which will be fully recovered in their respective sugarcane supply bills with a nominal interest of four per cent. As a measure of controlling the heavy on rush of applications for planting of sugarcane under oppige (contract) system, the company fixes the maximum and the minimum area to be allotted for planting cane by each individual under the sluices of the different distributaries, after eliciting the consensus of opinion of the majority of the cultivators at their annual conference. Besides, the agriculturists are given free expert advice during the course of growing cane under oppige system and even the different stages of agricultural operations from start to finish are supervised by the company field staff, headed by a Cane Superintendent, so as to ensure a good crop. Besides, a laboratory has been maintained at Mandya under the charge of the Government Entomologist for purposes of controlling the pests and diseases of cane and the establishment charges there on are being met by the company. In addition to purchasing sugarcane from the cultivators, the company also maintains its own sugarcane farms,

numbering 11, comprising an extent of nearly 2,600 acres. These farms also serve as demonstration plots where experiments are conducted in regard to the various aspects of sugarcane cultivation.

Table 5.4

Year (Crushing	Quantity of	Quantity of	Average	No. of
Season)	Sugarcane	Sugar Produced	recovery of	working days
	crushed (in tons)	(in tons)	Sucrose	
1933-34	51,784	5,250	9.89	121
1934-35	83,897	8,072	9.54	203
1935-36	2,23,925	23,348	10.30	271
1936-37	2,21,571	21,799	9.80	255
1937-38	2,61,120	26,335	9.82	251
1938-39	2,31,230	23,252	10.05	204
1939-40	3,05,371	30,601	10.02	268
1940-41	3,12,923	27,804	8.89	263
1941-42	3,32,710	27,455	8.28	284
1942-43	1,63,212	15,666	9.59	232
1943-44	2,04,587	20,211	9.88	255
1944-45	1,80,696	17,322	9.59	232
1945-46	1,61,312	17,505	10.66	182
1946-47	1,57,786	16,058	10.17	191
1947-48	1,92,434	17,358	9.58	238
1948-49	3,18,305	27,321	8.57	341
1949-50	1,75,822	16,783	9.54	186
1950-51	24,719	2,015	9.18	68
1951-52	3,19,268	37,155	11.62	243
1952-53	2,45,500	27,962	11.37	196
1953-54	12,582	1,210	9.62	37
1954-55	3 <i>,</i> 75 <i>,</i> 548	35,312	9.49	292
1955-56	3,47,523	34,798	10.14	266
1956-57	2,24,228	21,631	9.71	175
1957-58	3,83,814	39,520	10.40	239
1958-59	3,48,814	35,906	10.24	217
1959-60	3,41,804	34,806	10.37	249
1960-61	3,95,963	39,049	10.52	267
1961-62	3,86,350	38,764	10.62	257
1962-63	2,57,363 (metric)	27,390 (metric)	10.52	202
1963-64	1,99,860 (metric)	22,091 (metric)	11.03	155
1964-65	3,70,375 (metric)	35,441 (metric)	9.60	278

For a period of two decades from 1933, the history of the sugar industry in the State was that of the Mysore Sugar Company, Ltd., for there was no other sugar factory in the old Mysore State. During that period, the Mandya factory was meeting the entire requirements of sugar in the State and was also sending out large quantities to the neighbouring States. The table 5.4 gives particulars of the working of the factory from the crushing season of 1933-34 to 1964-65.

Lift Irrigation Plan

The Mysore Sugar Company decided to acquire 800 acres of barren land in the year 1937 vicinity of Irwin canal in Mandya taluk. Accordingly a land survey was conducted to find out the feasibility to undertake the lift irrigation programme of the company. The said land was located between the villages of Malligere and Shambunahalli. The electricity department agreed upon the supply of electricity at the rate of $\frac{3}{4}$ Annas (about 5 paise) per kilowatts and also the company had to annually remitt Rs.700 over a period of five years. The company agreed for the above conditions of the electricity department.

As per the government order dated 17-7-1937 the company had to follow the conditions in implementing lift irrigation programme.

- 1) Accordingly the 800 acres of barren land situated between Malligere and Shambunahalli was made available to the company at the rate of Rs. five per acre for the first hundred acres and subsequently utilize remaining 700 acres after a considerable period.
- 2) The company had dug the new sub canal connecting the main canal at Maddur and later utilise the same for the purpose of lift irrigation. For this each acre had to be invested with Rs.2-8-0 (Two Rupees fifty paise). This was in accordance with the revenue fixed by the then land survey department.
- 3) The electricity required for the lift irrigation has already observed, was at the rate of about five paise per killowatt for a total 15 H.P. load and also Rs.700 had to be deposited to the electricity department, annually as guarantee deposit over a period of five years.

The sugarcane grown in an approximate area of 12,000 acres was supplied to this company. Even for this there was an agreement between the 12,000 farmers to supply the same before 12 to 16 months to the company. Along with this arrangement the company was growing sugarcane at its 2,600 acres own land. Sugarcane exhibits on were also organised to demonstrate the high growing capacity in the company's forms. All these activities were managed throw a super-

visor designated as fields man. Subsequently there was a sudden increase in the sugarcane yield per acre from 14 ton in 1933-34 to 28 ton in 1938-39. In certain areas, the yield of sugarcane interestingly amounted to 50 to 60 tons. The sugarcane prices given to the farmers fluctuated depending on the price of sugar. The The estimated sugar price therefore much depended on the market tendency. Whenever the sugar prices were raised the farmers were rewarded with a bonus price for a sugarcane. This company had more labour strength who were hard working over 250 days per years. In the year 1948-49 the company recorded more than 241 working days. On several occasion both the farmers and company suffered loss either due to delay in cutting of sugarcane due to seasonal changes and also due to the decrease of amount of sweetness in the sugarcane grown. Understanding these productive forms of sugarcane the government of Mysore introduced several programmes.

Expansion Scheme

The company in order to facilitate the supply of increase quantity of sugarcane under took rapid expansion programme in 1964 and 1968. Under this programme the capacity of crushing the sugarcane was increased to 2000 ton per day in 1964 and subsequently 2500 tons in 1968. As a result of this expansion the company decided to replace the dilapidated Machinery and subsequently. A Mill machine with an improved version which had the capacity of crushing 2500 to 3000 tons of sugarcane per day was installed during the year 1971-72. It increased its capital investment to Rs.two hundred lakhs in 1964 from earlier capital investment of Rs.20 lakhs in 1933. Later on during the year 1993-94 the amount of capital investment of the company was at Rs.273 lakhs. The administrative board of the company had earlier under taken an expansion scheme in three stages and it was planned to spend Rs.399 lakhs in the year 1970. In addition to this as per the recommendation of the Technical Advisory committee the investment amount was announced to Rs.535 lakhs in the year 1974. The administrative board approved the excess expenditure already incurred by the company. In 1973 under the Government of India permit, the company increased the sugarcane crushing capacity to 5000 tons in the year 1973. As such the expansion programme of the company was completed by 1975. As a result of the Fore thought and vision of Dr. Lesly C. Coloman, the first president and administrator, this first sugar manufacturing factory was kept running as a consequence of incessant supply of sugarcane grown in the 24 Agricultural Forms of the company. During its long period of existence this company has seen several ups and downs. Even during the shortage of water in Krishnarajasagar, the company

maintained its existence by selling the Agricultural Forms. Presently the company depends more on the sugarcane grown and supplied by the farmers.

Distillery Units

As a means of economic disposal of molasses, a distillery was installed in 1935 as an adjunct to the factory, with an initial capacity of 1,500 gallons of 96 percent rectified spirit per day. This was the first modern distillery to be established in India. After conducting initial experiments in the use of alcohol for power purposes, a dehydration unit which was capable of converting the industrial alcohol into absolute alcohol, was established. In this case also, Mysore was the pioneer State to install such a plant. With a view to utilise fully all the alcohol so produced, a Power Alcohol Act, making the selling of a mixture of petrol and alcohol in certain proportions was compulsory and the same was passed by the Mysore Legislature. Later, when the demand for alcohol increased during the Second World War and the import of plant and machinery from abroad was no longer possible, steps were taken to fabricate a plant in one of the workshops at Bangalore.

The Mandya distillery was producing industrial, potable and power alcohol. A major part of the requirements of industrial and potable alcohol of Mysore State are met by this distillery. The use of alcohol for power purposes had been confined only to transport needs, including its use as fuel for agricultural tractors of the Mysore Sugar Company since 1946. It is interesting to note that production of alcohol is the barometer of the progress of chemical industry of any country. The power alcohol scheme was, however, discontinued from the year 1950. Thus Mandya has come to occupy a prominent place in the distillery industry also. The Mandya distillery is modern in design and has an installed capacity of 1,00,000 gallons of alcohol in terms of absolute alcohol per month or 12,00,000 gallons per annum.

The products manufactured in the distillery were

- Absolute alcohol, i.e., alcohol of 99.6 per cent purity used for scientific and industrial purposes and as motor fuel with an admixture of petrol for power purposes.
- 2. Rectified spirit, i.e., alcohol of 96 per cent purity used for pharmaceutical, scientific and industrial purposes.
- 3. Denatured spirit, i.e., rectified spirit mixed with certain prescribed denaturants so as to render it unfit for human consumption. This spirit is used largely for manufacture of polishes and for burning purposes.

- 4. Molasses arrack and
- 5. Special liquors such as brandy, whisky, gin and rum.

There is a great demand for the various kinds of spirits manufactured in the distillery at Mandya both from within and outside the State. Under the Five-Year Plans many developmental schemes and programmes are bound to increase the demands for alcohol for industrial purposes.

Another product manufactured out of sugar, which is becoming very popular, is a honey-like preparation called "golden and putting the product on the markets on an all-India scale. This superior quality of golden syrup is packed in attractive tins and there is good demand for this product from all over India.

Other ancillary industries that could be set up by utilising the by-products of the alcohol industry may also be mentioned here. The sugar in molasses is convertible into alcohol and carbon-dioxide in the ratio of roughly 50:50. The sugar industry being an agricultural industry, uses large quantities of nitrogenous fertilisers in the form of ammonium sulphate for raising cane. Annually, over 3,000 tonnes of ammonium sulphate are purchased by the Mysore Sugar Company alone for issue to the cultivators, who supplied cane to the factory.

The same nitrogen requirements can be met by 1,500 tonnes of urea. By the interaction of carbon-dioxide with liquid ammonia which can be synthesised by utilising nitrogen from the atmosphere and hydrogen from water, urea can be manufactured economically.

The year 1965 was an eventful one for the company, heralding an era of further expansion. There is a proposal to increase the crushing capacity of the factory to 2,500 tonnes sugarcane per day, for which the company has been given an industrial licence. The distillery plant is also being expanded so as to raise its installed capacity from 12 lakh gallons to 24 lakh gallons of alcohol per year. A new line of development that has been undertaken is the manufacture of acetic acid for which also the company has been given an industrial licence. The manufacture of this new product is part of a bigger scheme for the manufacture of cellulose acetate, for which a separate company has been sponsored by the Mysore Sugar Company. Yet another major scheme of expansion, for which also the necessary industrial licence has been issued, relates to the manufacture of caustic soda and chlorine. These schemes of expansion involve a capital outlay of nearly five crores of rupees.

Power alcohol scheme was, however, discontinued from the year 1950. In the year 1966, with a view to supply Acetic acid to the company, Mysore Acetate and chemical company was established with a daily turn over capacity of 12 tons of acetic acid. This company supplied acetic acid to Mysore Sugar Company at a lower cost than the prevailing market rate. This acid also used in the manufacturing of photo films.

Under the guidance of Mr. Henrich caps an export industrialist, Pepperment and Jelly chocolate manufacturing unit was established in 1950 and the My sweets. In this unit, sugar came to be used extensively as Glucose and Cold Syrup.

Bio-Gas Unit

With an investment capital of Rs. 200 lakhs the bio-gas manufacturing unit was established with the help of using the waste product generated in the distillation of Alcohol. The machinery used in this unit is set to have been free from water pollution. The same product is being used for the boilers, there by saving large amount of fuel and coal also maintenance of pure drinking water in the unit.

Social Welfare programmes

In order to provide well equip Medical specialties the company possess a large hospitals with a separate maternity hospitals with a separate maternity home for the benefit of labourers Medicine are being supplied free of cost primary and higher secondary schools with free educational facilities have also been established for the benefit of children of labourers. The Mysore Sugar Company has also the credit of building officer's houses and also more than 300 labourers quarters with in the vicinity of sugar town in Mandya. At Swarnasandra adjacent to the sugar industry. The company has provided LIG and HIG Houses in collaboration with Housing and urban developed corporation. Besides these programmes, the company as an intension of building apartments consisting of 300 houses in the sugar town for the benefit of the labourers. There is a well organised canteen facilities for all kinds of labourers. In providing all these specialties the company as meticulously taken care in protecting the security meticulously taken care in protecting security and safety measures of labourers under the factories act. For the purpose of the providing cultural entertainment to the labourers the company has created several sports and athletic equipment and also a wide Play-Ground. The company labourers entitled annual Bonus along with the production oriented bonus.

By the end of March 2004, the company had a total capital investment of 6,008 lakh Rupees and this also included 1300 lakh Rupees an official investment and Rs.5500 lakhs as executive investment. The total capital investment was how-

ever Rs.1300 lakhs out of which the Karnataka Government as its share capital of 86.24% of the total capital investment. This company has produced 9,01,018 quintal of rice during the year 1999-00 and also provided employment 1,193 labourers. During the same year the company manufacture about 1,40,10, 501 liters of Alcohol. The High quality sugar produce by this company is being marketed freely as per the provisions of Government of India levy act. The state excise department has laid down certain norms for the sale of the Alcohol manufactured by this company. By the end of 2000-01, the company had crushed large quantity of 8,89,750 metric tons of sugar cane and produced 8,37,742 quintal tons of sugar, their by indicating an impressive production increase of 9.24%. During the same year, the company marketed 5,86,08,359 litres of Alcohol out of 5,87,32,489 litres of Alcohol produced. The company had also incurred a loss of Rs.1169.42 lakhs during 1999-00 and in 2000-01. The total loss increased to 1514.35 lakhs. An amount of Rs. 120 lakhs has been spent to export sugar and also incurred an Rs.282 lakhs, towards management of machinery and repairs. As a consequence of the company incurring additional labour investment of Rs.5450 lakhs (Raised as loan). The company had to bare an additional interest amount of Rs.3.02 lakhs. For further information about total sugarcane crust, sugar produced, total crops and sugarcane rate during the years 1990-91 to 2000-01. See the table 5.5 see page 314.

Pandavapura Co-operative Sugar Company

In response to the co-operative movement and development of the agroindustries coupled with the abundant availability of the sugarcane concentrated around Pandavapura, the Co-operative sugar factory was registered on 10th January 1955. Subsequently on 2nd April 1956, a sugar factory with a production capacity of 800 tonnes of sugarcane per day started functioning. This co-operative industry consisted of an administrative Board headed by a president and 15 Director's. Out of which 12 Directors were elected by members, where as remaining three Director's are nominated by state Government and KSFC. This factory was established with an investment capital of Rs.35,50,360. This capital had been generated from several patrons and also from the savings of this cooperative institution, where as the state government share was Rs.15 lakhs and a lion share of Rs.17,70,644 lakhs from sugarcane growers were invested officially the sugar factory was inaugurated on 24th October 1956 and the imported machinery West Germany had been commissioned. The taluks of K.R.Pet (142 villages) Srirangapatna (61 villages), Pandavapura (113villages) had been identified as sugarcane growing reserve areas according to the Government Order No:CI

ble 5.5

Sl.No.		1991-92	1992-93	1993-94	1994-95	1995-96	16-96-1	1997-98	1998-99	1999-00	2000-01
1.	Sugarcane	6,64,329	5,91,229	4,72,561	8,76,147	7,79,044	6,43,151	3,56,818	8,40,639	9,58,135	8,89,750
	arushed (In										
	Metric tons)										
2.	Sugar	60,289	52,248	42,565	82,635	72,422	50,330	29,403	74,316	89,417	83,774
	produced (In										
	Metric tons)										
3.	Yield	9.21	8.84	6.00	9.40	9.30	7.83	8.25	8.84	9.29	9.41
	in Percentage										
4.	Rate of	420	495	009	200	710	730	810	865	880	880
	Sugarcane										
	(pertons)										
	including										
	subsidy rate										
	(in rupees)										
5.	Production of	83,510	77,424	75,151	73,171	72,171	53,649	49,982	76,541	982'86	1,03,688
	Alcohol										
.9	Production of	1,154.44	1,017	283	•	1	1	1	1	ı	1
	Acetic amla										
	(In tons)										

Source : Annual report, Mysore Sugar Company Ltd, Mandya

255:SGF:97 dated 04/06/1998. This factory during 1998-99 had produced 1,98,486 quintal of sugar by crushing 2,96,737 Metric tonnes of sugarcane between June 1998 to 5th April 1999. The percentage of sugar production was 6.69 in the entire state. During the same year out of the 17,311 quintal of sugar in the stock of the factory 55,799 quintal of sugar was released to the open Market and 24,503 quintal of sugar were marketed at the levy rate by the factory. Towards the end of the year the factory had the total stock of 1,30,509 quintal of sugar. The total income of the during same year the Rs.1,009-11 lakhs per quintal and Rs.1,23,232.58 lakhs per quintal of open marketed sugar. During 1999-00, the sugarcane crushing had began from 2nd Aug 1999 and till 12th October 1999. 75,590 tonnes of sugarcane were crushed in the production of 58,420 quintal of sugar.

Towards the end of March 2000, the factory had provided employment for 796 labourers and had made a capital investment of Rs.6,941.50 lakhs. Out of this 171 were daily wage labourers, 280 were seasonal labourers and 345 were permanent labourers. The factory had produced 2,86,520 quintal of sugar with a production capacity of 3500 Pre-university colleges for the benefit of the children of the labourers. Under the same scheme the HUDCO had built 238 residential houses for labourers and 30 houses for officers. Towards the end of March 2001, the company had a capital investment of Rs.5576 lakhs and provided employment for 451 labourers towards the end of March 2002. Out of which 36 were

Table 5.6

Year	Sugarcane	Production of	Yield in	Sugarcane	Sugarcane
	Crushed (In	sugar (In	percentage	crushed	Rate given to
	Metri	Quintal)		during the	farmers (per
	tonnes)			year(in days)	Metric ton)
1990-91	2,83,297	2,74,870	9.70	268	404.00
1991-92	2,46,474	2,25,815	9.12	241	425.00
1992-93	2,23,459	2,12,515	9.13	218	460.00
1993-94	1,69,302	1,69,345	9.45	168	550.00
1994-95	2,74,896	2,51,345	9.11	252	675.00
1995-96	2,90,540	2,74,388	9.44	290	600.00
1996-97	1,58,607	1,31,297	8.28	169	715.00
1997-98		Fa	ctory Expanded	l period	
1998-99	2,96,737	1,98,340	6.69	296	800.00
1999-00	3,31,337	2,86,520	8.55	214	800.00
2000-01	3,39,850	3,02,690	8.90	214	820.00
2001-02	1,55,721	1,37,025	8.80	142	825.00

daily wage employees, 275 seasonal and 200 permanent labourers were provided employment. The factory has a production capacity of 1,37,025 quintal sugar by crushing 1,55,721 metric tonnes sugarcane and per day crushing capacity of 3500 tonnes of sugarcane. The factory is giving Rs.825 per tonnes sugar came to the growers. **The table 5.6** gives the details of sugarcane crushed, sugar produced and yield for the years 1990-91 to 2001-02.

Chamundeswari Sugar's Limited

Chamundeswari Sugar Factory was established in Bharathi nagar in Maddur Taluk after formal registration in the year 1970. It started functioning in 1974, after its formal installation during the year 1972. The administration of this factory is looked after by the Board of Directors and is functioning as a private zone industry. This factory produces white sugar and till the end of March 2000, it had invested a capital share of Rs.5834 lakhs. This factory had provided employment for 700 labourers during the year 2000-01. This factory had a daily production capacity of 4000 quintal of sugar and sugarcane crushing capacity of 4000 metric tonnes per day. During one year the factory carries crushing of sugar cane for nearly nine to ten months. This sugarcane required is being supplied by the local agriculturists. So the sugar produced is being marketed both under levy as well as is open markets in accordance with the government order. The Distilleries were also established in order to utilise the molasis realised during production of sugar.

As a welfare measure the company as built 167 dwelling houses, which one being distributed to the labourers depending on service seniority. Nearly 130 houses are being taken up on contract basis to further provide housing facilities to its labourers. The company as made several facilities such as education for the children of the sugar cane growers and labourers providing kerosene oil, foodgrains and clothing through the companies co-operative societies at reasonable prices. The Chamundeshwari Education Society has provided education from nursery to 10th std to the children of the labourers. Likewise the company gives loan facilities upto Rs.50,000 for the purposes of house building, medical, education and marriages of the labourers children at the lower interest rates. The Company possesses its own hospitals emergency treatment with ambulance services.

I.C.L. Sugar Factory

Under the private zone, the I.C.L. sugar factory was registered in 1996 to be established at Makavalli in K.R.Pet Taluk. This has been considered as the fourth sugar factory in the district. The sugarcane crushing was started in 1999. The factory had invested a capital of Rs. 11332 lakhs towards the end of March

2000 and provided employment 168 labourers. The factory had production capacity of 14,592 Metric tonnes of sugar valued at 1.24 crores of Rupees and 9747.45 Metric tonnes of molasis production and sugar cane crushing capacity of 2500 metric tonnes per day. Several welfare measures such as Employees Provided Fund (E.P.F.), Gratuity, Bonus. Transport facilities, canteen, quarters and labourers Relief insurance were provided to the employees working in this factory.

Mandya District Co-operative Milk Producers Union Ltd.,

Being separated from Mysore Milk Union, The Mandya Co-operative Milk Producers Union Ltd., came into existence in 1987 at Gejjalagere in Maddur Taluk. This Milk Union in the beginning functioned under Karnataka Milk Federation and later in 1998 it was transferred to Mandya district Milk Union. This Union had 464 milk Producers Co-operative societies and slowly started both producing as well as Marketing of the collected quantity of milk. Several milk Products were introduced gradually in this unit. This union had milk process capacity of one lakh litre milk per day. Later on by 1993-94 the production capacity was increased to two lakh litres milk per day. The chilling centre at Nagamangala and K.R.Pet were renovated and extended between 1992-93. Along with these additional chilling centres was the establishment at Malavalli in 1998 incurring expenditure of Rs.6.50 lakhs. The coconut Burfy produced by this Milk Union is considered as of very high quality on par with other 13 milk union's producing Nandini products. These units also possess a capacity of one lakh litre milk powder plant per day. The other two similar milk powder plants are located at Dharwad and Bijapur Districts. During the year 2001-02 Mandya Milk Union achieved a record production and Marketing of 416 Metric tonnes of Ghees, 614-87 tonnes of Butter and 712.95 Metric tonnes of milk powder. It is a matter of pride that these milk products are being marketed at Kerala, New Delhi and Kolkota Milk Dairies. This union has four chilling centres and substantial increased in the milk production capacity. It also has a capacity of storing 40,000 litres of milk sachets in its cold storage units. The unit also possesses five metric tonnes of steam boilers used in the process in the milk. Since, the milk production will automatically reduce during summer season, the milk processing steam boilers two metric tonnes capacity have been installed in the unit.

Though there are 410 sanctioned posts of office staff at present only 317 posts have been filled up. Under the Co-operative Societies Act, the unit supposed to be invested as additional shares out of the 20% of its profit. The Mandya Milk Union has already a share investment capital of Rs.1.18 crores. This union

towards the end of 2000 March as received 1,58,000 litres of milk from 659 Milk Producers Societies and processed them. Such process milk contains an average of 4.5% of fat and 8.5% of non-fat contents and out of which 3.5% fat content and also 8.5% of non fat content milk (95,000 litres) are called toned milk and being marketed in both Mandya as well as Bangalore District. The remaining milk products such as, Milk powder, Butter and such other milk products are being produced and marketed by this union. The union as invested 1200 lakh as capital and is producing milk and milk products like Milk, Milk powder, Butter, Peda and Burfy. The Milk and Milk products, so produced by union are being marketed in the district of Mandya and Bangalore city and also being sent to Kerala, Tamil Nadu, Maharastra and Goa. Please refer table 5.7 for further marketing details of this union.

Table 5.7

Details of Mandya District Co-operative Milk producer's Union (Ltd)

	1999-00	2000-01	2001-02
No. of Milk	659	706	719
producer's co-			
operative societies.			
Number of Total	-	202,995	206,114
members			
Milk obtained (In	-	-	607.48
lakh Kgs)			
Ghee (In tonnes)	446	381	454
Butter (In tonnes)	1053	805	1340
Pe da (In ton nes)	-	-	14
Curd (In tonnes)	-	-	1479
Untoned milk	734	1195	1632
powders (In tonnes)			

Mandya National Paper Mills, Belagola

The Mandya National Paper Mill is considered to be pioneers is manufacturing both printing as well as good quality writing paper by using crushed sugar cane waste instead of Bamboo pulp. This unique kind of manufacturing paper was undertaken by M/S.Bedi and company by installing advanced machinery imported from M/S.Parsones and Vhitte more Co. of New York for the first time in the Mysore state. In June 1960, this paper mill came to be established at Belgola in Srirangapattana taluk. Since this paper mill was very close to K.R.S.Dam, it

enabled it to receive rich quantity of water. More over the crushed sugarcane which was major raw-material was abundantly supplied by the Mysore Sugar Company at Mandya. By June 1961, the Belgola Paper Mills came to be started at a newly designed building. By March 1961 all the necessary machinery for the paper mill were purchased and finally installed by the end of February 1962. The Paper Mill started its production by August 1962. For manufacturing both printing as well as writing paper 60% of sugar cane pulp and 40% of coir pulp were used, but the former was extensively used.

In the beginning this paper mill was manufacturing 35 tonnes of paper per day. Gradually the demand increased and near by sugar factory was able to supply excessive sugarcane pulp, the production was increased from 35 tonnes to 75 tonnes per day. During later period as per the suggestion of a Technical committee appointed by All India Industrial financial corporation, the extensive expansion of this paper mill was undertaken. Accordingly the company increased its production to 100 tonnes per day. Since Belgola had a network of Road connection the produced paper was able to reach major cities like Bangalore, Madikeri, Mysore and Arsikere and also through the Railway link.

In 1974 this paper mill came under the administrative control of the Government of India and the administration was handed over to Kolkatta Hindustan Paper Company. Such a progressive paper mill started declining from the year 1992. As such this sick paper mill was advised to be rejuvenated by the expert technical committee. But even after this since no entrepreneurs came forward to take over the company, the paper mill was closed and government of India sanctioned two crores of Rupees for the Relief of the employees.

The Mysore Chemicals and Fertilisers

With the main idea of manufacturing chemicals by utilising naturally available nitrogen based the Mysore chemicals and Fertilisers Ltd., came into existence in 1937 at Belgola at Srirangapattana taluk of Mandya District. This company had distinguished as a first synthetic plant in the entire country. The company adopted a new technique of manufacturing. Hydrogen by electrolysis method and there by easily produced Ammonia required for the production of chemicals and fertilisers. This method had to be followed as Mysore state was remaining short of coal. Naturally greater quantity of electricity had to be supplied without interruption. However the then Mysore Government in September 1937 came forward to supply electricity at a concessional rate and also the November 1937 the government sanction an additional capital of Rs.25 lakhs for this company. The machinery required for this factory was however imported from M/S. Chemi-

cal construction corporation, New York. Machinery such as electrolytic hydrogen plant and D.C. generator, Ammonia Plant, Ammonia Sulphate Plant and acid plant were reported from New York. The Company received necessary electric supply from the Mysore Government at the rate of. The company had the power to increase its production by Five percent and their by enhance, the power charges over and above required in accordance profit earned by the company. The total power sanctioned to this company was 500 H.P and out of which 4700 HP of the electricity was utilised in the production of ammonium. On several occasions rate of the power (1/11 Anna per unit) utilised has been frequently enhanced in accordance with agreement made in 1957. As per the decision of the Mysore State Electricity Board in December 1957 revised the rate at 2.7 paise per unit and approved that they should be continued till the end of the 1958. However the same route was also applicable to all the major industry in the state. The required water supply for the factory was made from the Krishna Raja Sagara Dam. At the same time arrangements had been made to let out the waste water from the factory. It has been said the nearly 3.75 TMC of water was pumped into this factory and the company after the utilise the maximum water the company was repumping the used water through the channel.

The utility of the chemicals and fertilisers with rich nitrogenous contents for the agricultural fields had been very well realised in the state Mysore. This company had the capacity of the company Five tonnes of ammonium and 20 tonnes of ammonium sulphate during its peak production capacity increased as a result of several technical changes. Accordingly this company installed a new sulphuric acid plant with the capacity of producing 50 tonnes of manure per day and later on as a consequence of the complete technical upgradation, this sulphuric acid was producing 150 tonnes per day.

Mysore Acetate and Chemicals Company

The Mysore Acetate and Chemicals Company established as a public company on 24th December 1963, with the objective of the producing all kinds of chemicals and alkalis. Besides, producing chemicals and alkalis, the company undertook other kinds of sub-products gradually - cellulose tri-acetate was produced and supplied to the Hindustan photo films manufacturing company at Ooty, Which was a Government of India undertaking. This company was the receiving nearly three tonnes of cellulose triacetate. Their technical collaborators had approved the technical method of producing cellulose triacetate by following Gevarets' Technology. During the year 1966-67 the total anticipated demand for this chemical would be a quantity of nearly 6,650 tonnes of celluloid triac-

etate. The other chemicals manufactured by this company where cellulose triacetate, secondary acetate moulding compounds, plasticisers, Acetic acid, Acetic unhydraid and film, plasticisers and other chemical used in the Ryon industries and also import and export activities. The MYSORE acetate and chemicals had been established 64 acres of land purchased at a cost of Rs. 1,08,475 from the Mysore Sugar Company. The Company has also built residential quarters, store houses and other requirements at a cost of Rs.1,21,200. This company made an agreement with M/S. Von Kohorn - universal corporation, California, U.S.A. and M/S. Acktieabolaget chamatur, stockholm, Sweden, for the supply of plant and machinery for the manufacture of cellulose triaccetate, acetate molding compounds, together with all the auxiliary facilities. The technical know-how of the well-known firm Melsors Gevaert photo production of Belgium has been secured for the manufacture of cellulose triacetate of the quality suitable for use in photographic films such a well flourishing chemicals industries was recently closed the to unknown reasons.

Habib Solvents Extracts Ltd.

The Habib solvent extracts Ltd., came into existence at Srirangapattana is 1979 as a private zone industry. The main purpose of the industry was to produce oil extracted from dry-seeds and used in the manufacturing of soaps. It also manufactures the required poultry feeds. This company had invested an initial capital of Rs.600 lakhs and employed 24 labourers till the end of March 2000. Besides processing purified oil manufacturing the company had the capacity of crushing 50 metric tonnes of oil seeds per day. During the year 1999-00, this mill had produced 25,369 metric tonnes of oil and marketed the produced oil at a cost of Rs.2,734 lakh. Employees working in this company were provided several welfare measures such as provident fund, Gratuity and such other facilities.

M.K.Agro-Teck Ltd.

M.K.Agro-Teck Ltd., came into existence at Srirangapattana with the purpose of producing extraction of oil seeds and later refining same. This Mill started with the initial capital of Rs.699 lakhs and employed more than 42 labourers till the end of March 2000. During the same period the Mill processed the powerful oil extraction unit with the capacity of extracting 250 tonnes of oil seeds per day and produced 100 tonnes of refined oil. Towards the end of the year 1999-00 the mill had extracted 40,802 tonnes of oilseeds (oil cake) and produced 11,998 tonnes of refined oil with a marketing value Rs.6,290 lakhs.

Kilara Power Private Limited

Under the then Government of Mysore scheme of utilising the Hydel power generated from Shimsha, the Kilara power Pvt. Ltd., was established at KILARA at Mandya District with the purpose of producing hydro-electricity. This company was started with an initial capital of Rs. 300 lakhs. This private company had the capacity of producing two Megawatt for the first in the District. So produced electric power is supplied to the Karnataka Power Corporation grid located with in the industrial sub-stations at Kilara.

B.P.L. Private Limited

This Company came into existence as a private factory in 1998 at Somanahally in Maddur Taluk. This company has located in a site with in the purview of Karnataka Industrial Area Development Board (KIADB) at Somanahally. A total amount of Rs.7,586 lakhs had been invested as a initial capital toward the end of March 2000 and the company process 284 labourers. Basically this company had the capacity of manufacturing 240 million cell Batteries. The raw materials such as electrolytic Tin plate from M/S.Metsui Co. Ltd., Japan, led from M/S.Pasmico Metals Pvt. Ltd., Victoria, Manganese dioxide from

Table 5.8

51.	Name of the Industry and	Administrati	Produced	Present	No. of	Capitals
Jо	address	on system	Goods	Condition	Labourers	(In lakh
					working	Rs)
l.	Mysore Sugar Company	Government	Sugar	Functioning	1389	1644.00
	Ltd., Mandya					
2.	BPL (Pvt.) Ltd.,	Private	Dry cell	"	335	8000.00
3.	Pandavapura Co-opera	Co-operative	Sugar	"	<i>7</i> 96	6941.50
	tive Sugar Company,					
	Pan dava pura					
1.	Chamundi Sugar's (Ltd),	Private	Sugar	"	700	5834.00
	Bharathi nagar Maddur					
	Tq.					
5.	Habe eb Solvent	Private	Oil	"	26	245.00
	Extraction (Ltd.,)					
	Srirangapattana					
5.	M.K.Agro-Teck	Private	Oil	"	42	699.00
	Sriranga patta na Tq.					
7.	Mandya District Co-	Co-operative	Milk	"	607	359.00
	operative Milk Producers		processing			
	Union Ltd., Gejjalagere		and Milk			
			By product			

3.	I.C.L.Sugar's Makavalli,	Private	Sugar	"	198	1133.20
	K.R.Pet Tq.					
) .	Kilara Power Project	Private	Hydro	"	12	300.00
	Kilara, Mandya Tq.		electricity			
0.	Karnataka Malladi Bio-	Private	Medicine	156	156	1600.00
	Teck LTd., Tubinakere					
	Industrial area, Mandya					
,	Tq.		D1 1 1	N .T. (607	05 (0 0
1.	Mysore Acetate and	Government	Bleched	Not	627	956.00
	Chemicals Co. Ltd.,		Lintel	functioning		
_	Mandya	_	Cotton			
2.	Mandya National Paper	Government	Paper	Functioning	-	-
	Mills, Belagola					
	Sriranga pattana Tq.	D	61 . 1	.		
1.3	Gaman Ferchems India	Private	Chemicals	Functioning	-	-
	Ltd., Belagola					
١,	Sriranga pattana Tq.	D ' '		F		
.4	Mysore Dyer's Pvt. Ltd.,	Private	-	Functioning	-	-
	Mogarahalli					
	Sriranga pattana Tq.	D		.	24	22 0 00
1.5	D.S.Granite	Private	Granite	Functioning	31	220.00
	Somana halli Industrial		Cutting			
	area, MaddurTq.		and			
			polishing			

East Born Chemicals Industries Pvt. Ltd., Singapore, Ammonium chloride separates paper Electrolyte. Manganese dioxide from M/S. Qusin Shoji Co. Ltd., Japan and Corban Rods from M/S.IMCC Chennai, India were being imported by the Company.

The Details of the Large and Medium scale industry established in Mandya District till the end of March 2001 have been given in the table 5.8.

Small Scale Industries

The progress of Small Scale Industries as in 1967 in Mandya District have been analysed here under as: The district had only 54 registered Small Scale Industries. Later on due to the encouragement given further expansion looks place. By the end of March 2000 in the district there were 5866 registered Small Scale Industries. They had provided employment for 28,211 labourers. The initial investment capital in them was Rs.8,128.48 lakhs. Progress of Small Scale Industries from 1987-88 to 2001-2002 has been recorded in the Table 5.9.

Table 5.9

	Total		No. of	Fixed	SmallScale	Year
No. of	Fixed Capital	Small	Labourers	Capital (Rs.	Industrial	
Labourers	(Rs. In Lakhs)	Industrial Units		In Lakhs)	Units (Nos)	
11861	1264.90	1999	913	158.20	200	1987-88
12885	1425.29	2208	1024	160.39	209	1988-89
14008	1770.87	2422	1123	345.58	214	1989-90
15173	1952.39	2670	1165	181.52	248	1990-91
16154	2275,39	2851	981	323.00	181	1991-92
17156	2549.61	3052	1002	274.22	201	1992-93
18346	2823.70	3340	1190	274.09	288	1993-94
19448	3363.40	3590	1102	539.70	250	1994-95
20257	2636.95	3767	809	273.55	177	1995-96
21363	4001.77	4085	1106	264.82	318	1996-97
24472	5071.52	4982	3109	1069.75	897	1997-98
26220	6433.77	5442	1748	1362.25	460	1998-99
28211	81 28 .48	5866	1991	1694.71	424	1999-2000
30162	9727.55	6304	1951	1599.07	438	2000-01
31864	10784.69	6774	1702	1057.14	470	2001-02

Total number of small scale units and their investments and number of workers have 3 been detailed in the following Table 5.10

Table 5.10

orkers	No. of W	In Lakhs)	Capital (Rs.	Units	No. of	Small Scale	Sl
2001-02	1999-2000	2001-02	1999-2000	2001-02	1999-2000	Industrial Units	No.
281	6625	294.25	2077.03	48	1244	Food and	1
						Beverages	
239	2174	70.97	582.53	84	523	Textile and	2
						Readymade	
						Garments	
06	2442	54.18	533.24	21	499	Wood	3
						Furnitures	
						domestic and	
						Furnitures)	١. ا
43	1334	38.09	321.80	15	273	Printing and	4
			a			Stationery	_
20	411	13.80	73.48	04	81	Leather and	5
						Leather	
	\ - -		c- c	70	30.5	Industry	
30	576	53.07	172.17	05	106	Rubber and	9
	3705		05.61.6			Plastic	_
98	1356	9.22	342.19	31	267	Chemical	7
			60.6	•		Products	
37	726	32.97	302.44	02	116	Glass and	8
						Ceramic	
						Materials	

		_				_	_
9	Metal Products	343	03	379.71	6.00	1827	12
	(Goods)					40=	
10	General	233	24	490.31	33.80	1072	84
l	Engineering						
11	Electrical and	190	04	212.62	10.54	938	19
	Electronics						
12	Automobiles	22	03	20.56	4.20	97	09
13	Transport	17	-	18.60	6.60	<i>7</i> 7	-
	Instruments and						
	Spare Parts						
14	Ferrous and	20	01	19.60	41.43	105	04
	Non Ferrous						
	Products						
15	Repairs and	479	42	501.84	152.50	2099	102
	Servicing						
16	Other Services	835	133	1065.95	235.54	3370	331
17	Other Different	618	50	1014.42	_	2980	305
	Industries						
	Total	5866	470	8128.48	1057.14	28209	1692

The talukwise registered small scle industries towards the end of March 2002 have been detailed in the table 5.11

Table 5.11

Sl. No.	Taluk	Small Industrial	Capital	No. of
		Units (Nos.)	(Rs. in Lakhs)	Workers
1.	Mandya	142	414072	585
2.	Malavalli	53	91.75	185
3.	Mad dur	105	285.89	367
4.	Krishnarajpet	37	23.90	80
5.	Nagamangala	38	117.49	142
6.	Srirangapatna	55	19.40	152
7.	Pandavapura	40	104.99	1 <i>7</i> 7

The small scale industries engaged in the manufacturing of food and soft drinks, textiles and Ready made garments, furnitures and domestic equipments, plastic articles, chemical components, glass and porcelain items, metal utensils, machineries, repair and other services and other products. It is estimated that there are about 10% small industries and micro enterprises are unregistered but are continuing to function.

Food and Beverage Industries

Agro-based (food and beverage) industries manufacturing comprises of Floor mills, Animal/Meat and poultry food items, edible oils, Ice cream manufactur-

ing, Bakery products Paha mandakki and beat rice avalakki preparations, Beedi rolling; Sericulture reeling from cocoons, yarn making, sugarcane juice, Jaggery manufacturing and Rice floor mill etc. About 1,244 registered agriculture related industries were functioning by the end of March 2000. A capital investment of Rs.2077.03 lakhs had been made provided employment to 6,675 labourers. Out of them in Mandya taluk alone 550 Food and Beverages units were operational and had capital investment of Rs.973.82 lakhs and had provided employment for 2,919 workers. Mandya Taluk had occupied first place. The talukwise figures were Malavalli (170), Maddur (147), Pandavapura (125), Srirangapattana (105) and Krishnarajpet (102) taluks. Nagamangala with 45 units occupied the last place.

Glass and Ceramics

Towards the end of March 2000 the district consisted of 113 Glass and Ceramic small and micro enterprises were functioning. It had capital investment Rs.302.44 lakhs had been made. These units had provided employment for 726 workers. These industries included lime (Kiln) manufacturing, Table mould Bricks, Mangalore tiles, Stone cutting and polishing, Mosaic tiles, Cement pipes, Asbestos powder, Chalk stick, articles made out of stones and others. These units were mainly concentrated in Mandya taluk (25) units and occupies first position. The remaining positions were obtained by Malavalli (20), Krishnarajpet (19), Nagamangala (9), Srirangapattana (13) taluks respectively. Maddur occupied the lowest position with 10 units and Pandavapura with ten units.

Leather and RexineIndustry

Under the preview of this industry besides manufacturing leather footwear, playing equipment, fancy item and also includes the tanning of skins. Towards end of the March 2000 the district consisted of 81 leather and Rexine industrial units. The total investment capital of Rs. 73.84 lakhs have been invested in this industrial unit and as provided employment of 411. The Mandya taluk occupies the first place in the district with 23 units. And subsequently K.R.Pet (16), Malavalli (13), Srirangapattana (10), Maddur (09) and Pandavapura (08) industrial units respectively. Nagamangala taluk only with two unit occupies the last place.

Textile and Hosiery Industries

Under the small and tiny industries the manufacturing of textile as well as hosiery industry and the production of towels and napkins are also covered. By the end of March 2000, the district had 523 textile and Hosiery manufacturing

units. A total investment capital of Rs. 582.53 lakhs had been made and these units provided employment for 2,174 labourers. Pandavapura taluk which had 103 units occupies the first in the district. The number of units in the district respectively was Malavalli (99), Mandya (94), Srirangapattana (67), Krishanarajpet (66) and Maddur (59). Nagamangala taluk with only 35 units occupies the last place.

Wood and Domestic Furniture Industries

The district consisted of the wood and domestic furniture industries with a total capital investment of Rs. 533.24 lakhs and had provided employment for 2442 labourers. These industrial units mainly engaged in the manufacturing of timber cutting, furnitures, windows, bullock carts, plying equipment, photo frames, wooden inlay works and such other articraft. Mandya taluk with 172 units occupies the first place. Other taluks respectively consisted Pandavapura (74), Maddur (72), Srirangapattana (62), Malavalli (56) and Nagamangala with 34 units occupies the last place in the district.

Printing and Stationery Industries

Under the scope of this industry items such as printing press, computer stationary, paper tape, gum, cardboard, wax coated paper, paper cover and paper bags are being manufactured. Towards the end of March 2000, 273 such units were registered and was functioning in the district. A total investment capital of Rs.321.80 lakhs have been made in these units and provided employment for 1334 labourers. Mandya taluks with 97 unit had provided employment for 484 labourers occupies the first place 484 labourers occupies the first place in the district. The positions of other taluks respectively were Maddur (45), Malavalli (36), Pandavapura (26), K.R.Pet (23), Nagamangala (23) & Srirangapattana (23).

Rubber and Plastic Manufacturing

The manufacturing of Rubber and plastic items such as ploythine, plastic items, nylon bags, tyre-retreading, P.V.C.pipes, Hawi chappalas, Ball pens and ball pen refil, plastic garments plastic bottles, Fibre glass and etc. Towards the end of March 2000, the district had 106 registered rubber and plastic manufacturing units with an initial capital of Rs. 172.17 lakhs and provided employment for 573 labourers. These units had been distributed talukwise were Mandya taluk 54 units occupied the first place and remaining places respectively were Malavalli (16), Maddur (16), Nagamangala (10), Srirangapattana (06) and K.R.Pet (03), Pandavapura taluk with only one unit occupied the last place.

Manufacturing of Chemicals and Chemical Components

Under this manufacturing industrial products like paints and varnish, cement distemper, agarbhathi, printing ink, liquid soap and phenyl, laundry soap, detergent cake and powder, writing ink, match stick, perfumed powder, Bleaching powder and several others. The total number of register chemical manufacturing industrial units towards the end of March 2000 was 267. The total investment capital of Rs.342.19 lakhs were made and provided employment opportunities for 1356 labourers. Mandya taluk with 106 such industrial units occupied the place and had provided employment for 510 labourers. The talukwise distribution of these units respectively were, Srirangapattana (70), Maddur (23), Malavalli (21), Nagamangala (17) and Pandavapura (16). Krishnarajpet taluk with 14 units had provided employment for 72 labourers at the last place.

General Engineering

Several manufacturing industrial products such as spare parts for oil mills, rice mills, agricultural equipments, rolling shutters, fabrications, steel furniture, oil engines, automobile spares, welding and turning, hardware for builders, bolts and nuts, aluminum vessels and copper and brass vessels and such other product come under the purview of this industries and is also called General Engineering industries. The district had 33 such registered general engineering units with an investment capital of Rs.490.31 lakhs towards the end of March 2000. Totally 1072 labourers had been provided employment in such units. Mandya taluk with 81 units occupied the first place. The taluk wise distribution of these units respectively were Maddur (30), Nagamangala (29), Krishnarajpet (26), Pandavapura (24), Malavalli (23), and Srirangapattana (20).

Repair and Services

Under this heading several services like auto repair and services, photo studio, watch repair, laundry and Dry cleaning, cycle, shop, X-ray, clinics, STD and ISD Booths, Radio and Television repair, Job Typing, Computer graphics, Data processing, Auto x-ray, Battery charging, Tape record repairs and others. Under this sector Rs.501.84 lakhs capital investment had been made by 2000 March and small and tiny industrial units numbering 479 were functioning according to the registered figures of District industrial centre. About 2,099 labourers had been employed under this sector. The District consisted of Mandya (193), K.R.Pet (69), Malavalli (66), Maddur (52), Nagamangala (46), Srirangapattana (40) and Pandavapura (13) taluks. The figure given in the brackets indicate the numbers of such industries.

Other Productive Works

Under this heading several industrial units like handlooms, powerlooms, brass and other metallurgical products, silk yarn manufacturing, manufacturing of cane stand, manufacturing of coffee powder, printing of cloths and dying, screen printing knitting of woolen sweters, Jute making, decorative and ornamental materials, coir products, modern earthen utensils and brass sculptures. The total amount of Rs.2080.37 lakhs capital investment had been made in about 1,453 such small and tiny industrial registered units in the district industrial centre by the end of March 2000. The Mandya taluk, which had 823 units provided employment for 3,709 labourers and thus occupied the first place in the district. The other positions were held by the taluks respectively are Maddur (307), Malavalli (197), Nagamangala (181), K.R.Pet (157), and Srirangapattana (137). The Pandavapura taluk with (131) units occupied the last position in the district.

Talukwise registered number of Small Scale Units and industries as well as the investments made and number of workers has been given in the Table 5.12 see page 330.

Jaggery Manufacturing

Jaggery manufacturing was familiar to the people of the district during the later part of 18th century itself. The system of producing Jaggery by using sugarcane was rather and unscientifically done. Due to this method only 50-60 percent of crushing sugarcane juice was possible. Such collected sugar cane juice were stored in big earthen jars or huge copper pans and later on mixed it with lime water and slowly boiled hot solutions used to be poured into jaggery moulds. The same jaggery solution were also formed into big rounded balls by hand after cooling its sufficiently. After a lapse of time, several reforms were introduced such as instead of wooden or stone mills (Gana). Later on iron mills came to be replaced for crushing sugarcane by using electricity, perhaps revolutionised the production of sugar cane juice. Towards the end of March 2000, the district consisted of 1728 sugarcane mills and out of which the Mandya taluk alone consisting 1,217 mills and occupied in the first place. The respective positions of the taluk Maddur (302), Srirangapattana (81), Pandavapura (64), Malavalli (40), K.R.Pet (16) and Nagamangala (08). During the same period the district comprised of crystallised sugar cane manufacturing units respectively at Mandya (02), Srirangapattana (02), K.R.Pet (02).

Table 5.12

L					Small Scale	Small Scale Industries Report	port				
	Food and	Textile	Wooden	gu	Leather	Rubber	Chemical	Glass	General	Other	Total
	Beverages	and	Furntiures		industry	and Plastic	Materials	and	Engineering	industries	
		Ready	(Domestic	S		Production		Ceramics	Others		
		made	& Others)	Artides					Services		
		Gamileills			Mag	Mandan Talut					
	L		1	5	-	uya raluk	707	ľ		000	
ъ,	250	3 7	172	2/6	23	42	106	25	344	823	2288
٩	973.82	138.11	216.28	141.14	27.34	108.09	207.65	30.34	660.77	1070.36	3573.90
C	2919	419	839	485	123	300	510	126	1755	3709	11185
					Mala	Malavalli Taluk					
а	170	66	56	36	13	16	21	20	83	196	710
Ъ	315.80	80.08	35.80	23.35	5.22	7.80	16.10	11.28	53.88	141.37	89.069
J	921	451	265	177	64	98	91	102	416	1016	3589
					ľ	Maddur Taluk					
В	147	26	72	45	60	16	23	10	88	307	9//
Ъ	222.54	78.08	83.28	54.47	10.29	19.35	26.27	119.39	99.28	552.97	1265.92
C	808	237	375	220	48	68	122	91	440	1114	3544
					Krishn	Krishnar ajpet Taluk					
В	102	99	29	23	16	03	14	19	81	157	510
Ъ	145.30	91.13	35.96	24.28	12.88	7.38	99.6	14.57	70.74	153.47	565.37
o	467	236	119	103	72	13	2	113	379	636	2210
					Nagam	Nagamangala Taluk					
В	45	35	34	23	02	10		19	82	181	444
<u>م</u>	44.26	22.59	24.42	22.84	1.22	22.82	10.72	11.63	49.85	222.45	432.80
C	230	124	157	92	10	54	85	62	316	752	1970
					Srirang	Srir an gapattana Talu k	k				
а	105	29	62	23	10	90	70	13	75	137	568
Ъ	156.62	58.02	58.30	22.20	9.05	5.87	57.35	66.93	95.17	211.35	741.26
O	552	280	305	115	52	28	386	111	384	637	2850
					Panda	Pandavapura Taluk					
В	125	103	74	26	80	10	16	10	92	131	520
Ъ	218.69	114.53	79.20	33.49	7.27	0.87	14.44	55.30	111.33	230.24	865.56
C	728	427	382	139	42	90	06	86	377	586	2863

a: No. of units, **b**:capital Rs. in lakhs. **c**: No. of workers. **Source**: District industrial centre, Mandya

Rice Mills

By the end of March 2000, in the Mandya District there were 664 Huller, 274 Sheller and 235 modern rice mills. The table 5.13 gives the details of talukwise distribution rice mills. By the end of March 2000. This clearly shows that the district comprised of 664 Hullers, 274 Shellers and 235 Modern rice mills.

			Ü	
	Taluk		Riœ Mills (No	o.s)
		Huller	Shuller	Modern
				Mills
1	Mandya	150	94	94
2	Maddur	70	48	48
3	Malavalli	<i>7</i> 5	35	27
4	Pandavapura	85	28	02
5	Srirangapatna	37	26	26
6	Krishnarajpet	156	36	32
7	Nagamangala	91	07	06
	Total	664	274	235

Table 5.13 Talukwise Rice Mills During the Year 1999-2000

Khadi and Village Industries

It is to the pride of the Khadi and Village industries for having provided self dependent jobs for uneducated and unemployed youths as well as women of the rural areas over the several decades after independence. This has further eliminated the migration of rural youth and women to cities by way of protecting the traditional hereditary occupations of ancient times. Mahatma Gandhiji revived the traditional occupations by heralding a National revolution in Khadi and Village Industries. During the freedom movement more impetus was given for wearing Khadi and thereby revolutionizing the use of swadeshi products. Gandhiji insisted for producing cotton yarn by using wooden charaka. This movement not only helped the improvespinning yarn the development of the village industries can be traced. During the same period several organisations like All India Weavers Association, Charaka Association, Serva Seva Association and such other organisation came to be united and this finally resulted in the establishment of All India Khadi and Village Industries Board. Even in modernising the khadi and village industries several technical as well as modern researches were evolved. Instead of the traditional handlooms technically refined handlooms were replaced which resulted in large scale production. As production increased steps are being taken for the expansion of khadi and village industries product in large scale. Under the khadi industries both sericulture and woolen products have also been included.

In 1956 Khadi Village Industry Act was passed to promote the industry. In April 1957 Khadi Board, ie., All India Board was entrusted with more executive powers and this led to the formation of National Khadi Commission. Its functions include collection and distribution of raw materials, distribution of readymade goods training and supervision of enterprises and offering technical consultancy. Through experts, supply of improvised materials conducting technical research and offering support to gramodyog and expanding loan facilities also in big cities to set up and build Khadi Bhavans so as to enable marketing of the goods in a big way. The Government of India with a view to encourage the activities concerning the Khadi and village industries spread over different parts of the district undertook several measures to improve the marketing of the finished products. As early as 1957 the Mysore District Khadi and Village Industries Board came into existence. Even earlier to this, there were Khadhi centre at Badanavalu and Aimangala being run by the government. Along with this the Khadi Gramodyoga Bhandar at Bangalore were brought under the preview of the Central Khadi Board. The All India Khadi Commission and Karnataka State Khadi and Gramodyoga Board adopted and under its control several activities of Khadi such as cotton khadi, woolen khadi, silk khadi, muslin khadi and poly textile were included. Several traditional cottage industries both mineral based, forest based agriculture based as well as food oriented production, polymer and chemical based units, Engineering and non-traditional power based industries, textile (except khadi) several services units were divided totally numbering 160 industrial activities under broad purview.

During year 1990-00 the total Khadi and Village Industrial Units in the district were 977. Among them only 325 unit were functioning. Towards the end of March 2000 the district had achieved the record marketing the finished products at a cost of Rs.277.90 lakhs, with a production capacity of products worth Rs. 210 lakhs. A total labourers of 1738 were actually working during March 2002. The **table 5.14** in page 310 gives the details of number of working units, value of finished products, marketing value of products and total number of labourers working during March 2002. The **table 5.15** gives the taluk wise and class wise distribution of khadi and village units in the district by the end of March 2002.

Towards the end of March 2000, the Khadi and Village Industries Board had invested Rs.7.00 lakhs in 75 co-operative institution, 95 registered association (4310 lakh investment) and this scheme totally helped 1009 individual beneficiaries with an overall investment of Rs.728 lakhs. The Board has also ad-

Table 5.14

	Industries	No. of	Price of	Sale of		No. of Wor	kers
1		Units	Manufacture	Manufacture	Part	Fulltime	Total
1			d Goods (Rs.	d Goods (Rs.	time		
			in lakhs)	in Lakhs)			
1	Woolen Khadi	1	3.50	2.30	6	6	12
2	Silk Khadi	2	33.00	16.00	25	35	60
3	Lime (Klin)	3	4.00	5.00	5	3	8
4	Pottery	49	15.00	14.00	125	110	235
5	Garment	8	1 <i>.7</i> 5	2.15	8	8	16
1	manufacturing						
6	Matchbox and	80	20.00	24.00	200	150	350
1	Agarbathi						
7	Edible oils	1	2.00	2.50	1	1	2
8	Rural Technology	65	11.50	14.00	100	150	250
9	Cane and	37	3 <i>.7</i> 5	4.75	25	40	65
1	Bamboo						
.0	Grains	35	25.00	30.00	150	35	185
1.1	Leather industry	10	3.50	4.00	15	50	65
.2	Handmade paper	3	3.00	4.50	20	10	30
.3	Service industry	33	-	-	80	33	113
.4	Others	70	40.00	60.00	500	140	640
	Total	397	166.00	183.20	1260	<i>7</i> 71	2031

Source: District Khadi Village Industries Mandali, Mandya

Table 5.15

Sl	Taluk	Categ	orywise Kł	nadi and Gra	modhyog l	Units
No.		SC	ST	Minority	Others	Total
1	Krishnarajpet	10	5	20	91	126
2	Nagamangala	10	5	10	86	111
3	Pandavapura	5	2	5	51	63
4	Man dya	55	5	40	150	250
5	Maddur	20	5	25	106	156
6	Malavalli	40	10	10	71	131
7	Srirangapattana	20	5	10	117	151
	Total	160	37	120	672	988

vanced loans amounting Rs.1045 lakhs for the needy beneficiaries. Among the 75 Co-operative Khadi Associations, Sree Vinayaka Silk Industries Association Nidaghatta, Vijay Khadi and Village industries Association, Somanahalli and Visheswaraiah khadi and village industries association are primarily functioning in the district.

Sree Vinayaka Silk Industries Association, Nidaghatta

In the year 1992, Sree Vinayaka Silk Industries Association was started with the main purpose of producing silk khadi and silk thread at Nidaghatta in Maddur taluk. The total capital investment in this association was Rs.29.55 lakhs. This association collected an amount of Rs.8.79 lakhs from donors, Rs.9.10 lakhs from khadi and village industries board and Rs.11.66 lakhs as loan from various sources. This unit has marketed silk threat worth Rs. 8.23 lakhs and Rs.23.5 lakhs worth khadi silk and totally produced khadi silk worth Rs.24.58 lakhs and silk thread worth Rs.28.21 lakhs during the year 1999-00.

Vijaya Khadi Village Industries Sangha, Somanahalli

It was established in 1984 at Somanahalli in Maddur taluk with an aim to manufacture silk sarees and plain cloths. Its total capital investment was Rs.four lakhs. It also availed loan of Rs.7,82,500/- from Khadi and Village Industries Board. During 1999-2000 it has produced goods worth Rs.Six lakhs and has marketed goods worth Rs. three lakhs.

Sri Visweshraiah Khadi and Village Industries Society, H.Kodihally

In 1983 Sri Visweshvariah Khadi Village Industries Society set up its units at H.Kodihally in Mandya taluk, with the purpose of creating job opportunities to unemployed youth in rural areas. In the beginning it started manufacturing File rappers, File boards, Rag pulps. It was supplying Rag pulps to the National paper mills. Owing to the closure of National paper mill, the society stopped manufacturing rag pulps. It raised funds from its members and collected Rs.2.5 lakhs and utilized it as the initial capital for setting up the units. During 1999-2000 the society produced goods worth Rs.3.80 lakhs and marketed goods worth Rs. 5.85 lakhs. There is a great demand for the manufactured products of this unit from the State, Central and quasi government offices.

Bee-keeping (Apiculture)

Bee-keeping is an industry that makes rural unemployed youths and petty landowners in rural areas to find their means for earnings. Under this Honey keeping training programme, the state department of Industries and Commerce provides 15 days training for the interested individuals selected one from each taluk and also provides three months field man course facilities to those interested persons. Besides this special Bee Keeping technical training programme is given for a period of 9 months at C.B.R.T.I. Pune for 25 selected individuals each one from each district. During the course of the training special educational

tours with a view to create awareness and encouragement to the Bee-keeping activities. This institute is also engaged in providing special application of machinery for extracting honey, Bee-Keeping and arranging popular lectures about the Bees are some of the activities under taken. This naturally encouraged various Bee-keeping co-operative societies to work with great vigour. Out of the 419 agriculturists engaged in Bee keeping spread over 162 villages. In 1997-98 there were 237 Bee-keeping families. They possessed 965 Bee hive boxes and produced, 850 kgs of honey and 10 kgs of honey wax (Jenu Mena). During the same period the total number of 222 persons engaged in Apiculture had under gone training in the district. Further 16 Bee-Keeping families were living in the Government founded Maduvana.

Handloom and Powerloom

In order to establish control over marketing of textile the district possessed handloom industry as a major domestic industry from the ancient times and also had it own designing as well as dying methods. Even though these handlooms are forced to face competition from larger mills, have still survived mainly on account of Government support and interested consumers during the recent years. The places such as Melukote in Pandavapura taluk. Talagavadi in Malavalli taluk, Kodiyal in Srirangapattana taluk and Hosaholalu in Krishnarajpet taluk have gained popularity for manufacturing cotton textile like Dhoti, Sarees and shirting material of very high quality. Kikkeri in Krishnarajpet taluk is known for silk manufacturing. Towards the end of third five year plan the district comprised of 5500 handlooms engaged in the production of cotton, woolen and silk textiles. Out of which more than 4400 handloom were under the control of private co-operative societies. During the same period the Reserve Bank of India provided special funding through loans to these societies as working capital, besides giving technical advice to the members. According to a survey done by the Industries and Commerce Department recently the district comprised of 3,329 handlooms. Out of which 284 were engaged in silk weaving, 2,511 were engaged in cotton textile and 570 were engaged in manufacturing woolen blankets. It is to be noted that at present 1,186 handlooms are actively functioning where as the rest have become defunct. The annual production was 1.15 lakhs metre of silk cloths, 4.10 lakh metres of cotton textiles and 3.17 laklh metres of woolen blankets. In order to rejuvenated the handloom industry. The Government of India in 1952 established All India Handloom Board to provide necessary financial assistance. The introduction of powerloom through the financial assistance provided by the board to the co-operative societies naturally encourage speedy

production. Gradually several handloom industries were converted into powerlooms, But still the economic assistance extended by All India Handloom Board are still in practice. Towards the end of March 2000 nearly 25 Weavers Co-operative Societies got registered in the district and out of which nine societies were actively functioning and the remaining 16 hand become defunct. There were 310 weaving families which depended on powerlooms and 17 families were still depended on handlooms as per the census undertaken in the district during the year 1995-96. AN estimated 475 specialised labourers had been provided employment in 238 handlooms in the district. This comprised of 286 male, 133 female and 56 child labourers. Out of the 32 powerlooms only 30 power looms

Table 5.16

Sl.	Weavers Co-operative S∝ieties	Registrat	ion Number	Production	No. of
No.	Address	and	d Date	and Sale	Members
				Goods	
1	Sri Nanjundeshwara Powerloom	24735	14-10-1999		
	Weavers Society (Ltd.,) Tubinakere,			NA	NA
	Mandya Taluk				
2	Sale Handloom Weavers	22682	13-08-1997	Cotton Cloth	125
	Cooperative Units, Gundapura,				
	Malavalli Taluk				
3	Cotton Handloom Weavers	2980	17-01-19 <i>7</i> 9	Cotton and	320
	Cooperative Society (Ltd.,)			kanchi Cotton	
,	Talagawadi, Malavalli Taluk	574	40 44 40 /5	Cloth	2.22
4	Weavers Manufacturing	71	13-11-1965	Cotton and	323
	Cooperation Society (Ltd.,)			Silk Cloth	
5	Melkote, Pandavapura Taluk Pad mashala Cotton Handloom	467	24-04-1938	Cotton Cloth	321
)	weavers Cooperative Society (Ltd.,)	467	24-04-1938	Cotton Cloth	321
	Kodiyala, Sriranga pattana Taluk				
6	Sale Handloom Weavers	20671	25-08-1999	Cotton Cloth	121
	Manufacturer and Cooperative	200/1	25-00-1999	Cotton Cloth	121
	Society (Ltd.,) Gamanahalli,				
	Sriranga patta na Taluk				
7	Powerloom weavers Manufacturer	25667	20-07-1999	Polister Cloth	100
′	and sale Co-operative society (Ltd.,)	20007	20 07 1777	Touster Cloth	100
	Kodiyala, Sriranga pattan a Taluk				
8	Sri Lakshminarayana Cotton and	165	15-11-1914	Silk Cloth	285
	Silk Weavers Cooperative Society				
	Ltd., Hosaholalu, Krishnarajpet				
	Taluk.				
9	Silk Handloom weavers	788	07-11-1961	Silk Cloth	NA
	Manufacturers and Sales Co-				
	operative Society (Ltd.,) Kikkeri,				
	Krishnarajpet Taluk				

were functioning in the district had provided employment for totally 40 persons (28 male and 12 female). Recently a marketing and service centre has been established at Channappana Doddi to provide traditional weavers belonging to Scheduled Caste by the efforts of the district Zilla Parishat. This marketing and service centre had provided special training to the weavers in the manufacturing of Turkey towels, Napkins and well Designed Bedsheets. In order to manufacture them the centre had provided required modern technical specialties. The table 5.16 gives the details of activities under taken by the weavers co-operative societies during the year 2001-02.

Handicrafts Industries

Several traditional handcrafts have comes down to us from time immemorial and this district has also inherited them. Several handicrafts followed along with agricultural operations in the rural areas are mostly family cultivation. Artisans such as Kammara (iron harnesser), Chammara (Leather worker), Badagi (Carpenter), Akkasaliga (Jeweller) and Kanchugara (Metal worker) are abundantly found in the district Halagur in Malavalli taluk was a noted centre for iron manufacturing. The jewellers of the district besides producing ornaments were also well versed in minting of coins. The Bronze workers had the skill of manufacturing utensils bells, bugle, images of Gods and Goddess, artistic, candle sticks, ornamented mirror frames, palanquines and several other artistic items were manufactured in almost all the taluks of the district. The village carpenter swere excelled in manufacturing chariots, furnitures, agricultural implements, Bullock carts and several other domestic items. These carpenters had achieved refinement in creating fine carvings on wooden Doors, Pillars and artistic roofing of the houses. The cobblers have the special talent of harnessing leather, manufacturing leather items like, sandles, drumdoles (dolu and tamate) and several other things. The potters or kumbars excelled in artistically manufacturing household utensils and tiles for the roofs and other earthern utensils.

Malavalli taluk comprised of the cobblers in great number and is noted an important leather manufacturing centre. The earthen pottery industry flourished well at places like Maddur, Shilanere, Hullegala and Belligere where the Kumbaras lined in majority. Sindhaghatta and Nagamangala are noted for mat weaving the other cane-products. Great many handicraft workers are found engaged in manufacturing images of Gods and such other handicraft products used in the day-to-day life. Towards the end of the 1965 the district consisted of six industrial co-operative societies which provided both technical and financial assistance to its members. The wood and iron furnace workers co-operative society at

Table: 5.17

Sl.No.	Industry wise Skilled			Talukw	ise Artis	an (in nu	mbers)		
	labourers	Mandya	Malavalli	Maddur	Nagamangala	KR.Pet	Srirangapattana	Pandavap ura	Total
1 2	Carpenters Black Smiths	434 344	323 161	424 306	190 179	322 183	300 131	210 201	2,203 1,505
3	Potters	242	213	212	162	356	138	176	1,499
4	Cobblers	62	392	97	47	42	26	48	714
5	Basket weavers	100	250	72	83	69	102	35	711
6 7 8 9	Woolen weavers Cotton weavers Oil tappers (Ganigas) Cooks and others	125 430 97 1299	2041 91 94 1780	405 702 183 1,298	953 16 120 1,099	217 249 136 1,907	- 105 95 1,175	84 143 87 2,862	3,825 1,736 812 11,420
	Total	3,133	5,345	3,699	3,481	2,849	2,072	2,846	24,425

Ganjam in Srirangapattana taluk, Vishwakarma industrial co-operative society at Mandya, Srinivasa cobbler's co-operative society at Malavalli and Viswakarma industrial co-operative society at Nagamangala were some of the popular industrial society in the district. Ganjam was noted for manufacturing Bullock carts, wooden furnitures and agricultural implements. In order to encourage the jewellery work under a special plan Bellur in Nagamangala taluk and Mandya separate goldsmith industrial co-operative society were established. The table 5.17 gives the details of number of Handicrafts and number of artisans engaged in the district during the year 2001-02.

Since 1992-93 the district has achieved considerable progress in the production of fine handicrafts items. The handicraft workers specially engaged in manufacturing brass images and decorative carvings on metal items in the Nagamangala taluk have received the recognition in the international market. The handicraft items manufactured here are being marketed to U.S.A. great Britan, Canada, Germany, Australia, Middle East and South East Asian countries. The handicrafts export promotion council has been responsible in providing international market for these handicrafts items in the recent years. By the end of year 1992-93 the handicraft worth about Rs.15.55 lakhs have been exported. Subsequently Rs.16.80 lakhs in 1993-94, Rs.17.59 lakhs in 1994-95 and Rs. 18.85 lakhs in 1995-96. The **table 5.18** gives the details the number of handicraft workers and their distribution in accordance with their industry towards the end of March 2000 see page 318.

SILK INDUSTRY

The Silk industry besides being a domestic industry in the state is also supporting the agricultural operations. The Mysore province had a special love for this industry during the period of Tipu Sultan who initiated the import of the silk cocoons from China and thus encouraged silk rearing and this has been considered as an important historic achievement. It was the great ambition of Tipu Sultan to popularise the Mysore Silk in the world market. Several specialized variety of silk cocoons were imported from Italy during the year 1914. Later on,

Table 5.18

Details of the No. of handicraft workers in the district

Sl.No.	Industry wise	No. of Household	No. of	No. of Hired
	•	Artisans	Artisans	Artisans
1	Carpentry	204	317	162
2	Coirindustry	125	302	20
3	Goldsmith	53	72	13
4	Pottery	872	3,663	2,059
5	Tailoring	2,586	4,934	610
6	Canework	420	1,057	05
7	Tanning Industry	41	78	05
8	Woolen Industry	48	125	-
9	Blacksmith	354	778	102
10	Cotton (Handloom)	203	545	<i>7</i> 7
	weaving			
11	Mat weaving	137	391	22
12	Woolen weaving	521	1 <i>,7</i> 95	163
13	Cane and Bamboo work	21	55	-
14	Silk reeling and weaving	65	709	462
15	Sculpture	14	23	4
16	Toy Manufacturing and	49	77	-
	tiny industry			
17	Manufacturing of Metal	1	1	-
	products			
18	Agarbathi	185	567	121
	Manufacturing			
19	(Lime (Klin) Production	45	144	4
20	Cart Manufacturing	20	224	144
21	Embroidery	44	60	3
22	Broom Production	351	1,246	36
23	Laundry work	354	742	41

Source: District Industrial Centre, Mandya

around 1950 a special blend of Mysore Silk cocoons with Italian silk cocoons was developed. Almost during the same time several silk cultivation methods and silk worms rearing centres began functioning in the district. Maddur and Malavalli taluks in the district were noted for Mullbery cultivation as well as silk worm rearing activities. Chennapattana in Ramnagara district is noted marketing silk cocoons on a large scale.

The major activities like Mulberry cultivation, silk worm rearing and silk thread manufacturing are the prominent part of the growth of the silk industry in the district. The first activity of Mulbery cultivation come under the purview of Agriculture where as the third one completely comes under the industrial control. In almost all the taluks of the district Mulberry cultivation is undertaken as this district has congenial climate and irrigational facilities favourable for the same. Especially Maddur and Malavalli taluks are noted for large scale Mulberry cultivation in the district. The Mulberry seedlings such as S-36 and V-1 and silk worm varieties like C.S.R.-204, C.S.R.-402, and C.S.R.Hybrid are mainly responsible for the high Mulberry yielding in the district. Towards the end of the March 2001-02 a total hectare of 910.55 came under Mulberry cultivation spread over 1107 villages and benefit 32,074 families in the district. Out of these 330 villages in Malavalli taluks were engaged in Mulberry cultivation and occupied first place in the district. The other positions were respectively held by the taluks of Maddur, K.R.Pet, Pandavapura, Nagamangala, Srirangapattana and Mandya. The Malavalli taluk comprised of 4745.26 hectares of land engaged in Mulberry cultivation which occupied the first place. Totally above 16,659 agricultural families were engaged in the cultivation of Mulberry at Maddur taluk alone. The other positions were respectively held by Malavalli, Mandya, K.R.Pet, Pandavapura, Srirangapattana and Nagamangala taluks. Towards the end of March 2000 the district comprised of three Chawki Silk Rearing Centres. Model Chawki rearing centre at Basaralu at Mandya taluk, community development central special component plan was in operation at Poorigali in Malavalli taluk and another Chawki centre at S.I. Honnalagere in Maddur taluk have been functioning in the district. At Chikkenahalli in K.R.Pet taluk and Malligere in Mandya taluk have two seed farming centres in the district. Totally there were 22 technical centres in the district which were distributed as four at Mandya, three-Maddur, six-Malavalli, four-K.R.Pet, two-Pandavapura, one-Srirangapattana, and two Nagamangala taluks are actually functioning. The total yield of 100 cocoons of hybrid (42.6 kg) Bi-voltine (47.2 kgs) C.S.R (55.2 kgs) in the district. The total yield of silk cocoons were 2523.518 Metric tonnes which consisted of 250.551 Metric tonnes hybrid production, 13.837 Metric tonnes of Bi-voltine

production and 2259.100 metric tonnes of C.S.R. variety cocoons were produced in the district.

Towards the end of March 2000 the district comprised of seven (07) government seeds (Koti), centres and out of which three (03) and model seeds centres were opened at Mandya, Maddur and Halgur; Three (03) government seeds centres were opened at Malavalli, Poorigali and Belakavadi. One more P-1 seed centre started functioning at K.R.Pet. Besides these seeds centres there were about 100 private seed centres located at Maddur, Malavalli and Mandya Taluks. These seeds centres have the reputation of providing disease free cocoons (layings) for the agriculturists. Around 1999-00, a total number of 1,59,58,373 disease free cocoons were distributed to 38,865 beneficiaries. This also included CB 1,55,10,401 and B.V. 4,47,971 disease free cocoons. There is a Mulberry grafting nursery at Maddur. The district possessed two silk farms at H.Malligere and Chikkonahalli noted for best quality of Hybrid Silk worm rearing and high yield Mulberry Plantation in the district. These organisations besides undertaking research in Mulberry plantation also distributed high yielding Mulberry sticks to the needy farmers.

The district comprised of three silk cocoon marketing centre at Malavalli, K.R.Pet and Mandya. However, the Mandya marketing centre has been recently closed. In order to provide silk agriculturists measury training, the government has opened Silk Training Schools at Chikkonahalli in K.R.Pet taluk and H.Malligere in Mandya taluk. There is a silk industrial unit at Thorekadanahalli in Malavalli taluk.

The table 5.19 gives the details of number of traditional charakas, cottage basis, filatures, and Multiends located in the district during the years 1999-00 and 2001-02 March.

Table 5.19

Realing Equipments	Ur	uits	Mac	hines
	1999-00	2001-02	1999-00	2001-02
Charaka	68	71	239	196
Cottage Basis	2	-	4	-
Filatures	6	-	64	-
Multi end Appliances	2	2	16	2

Source: Sericulture Department, Mandya

The table 5.20 gives the talukwise details of silk cultivation and Mulberry plantation in the district towards the end of March 1999-2000 and 2001-2002.

Table 5.20

re area	Sericultu	Villages	No. of V	Taluk	Sl.No.
Hectares)	Mulberry (in				
2001-02	1999-00	2001-02	1999-00		
755.72	766.95	217	64	Mandya	1.
3007.56	3520.33	239	267	Maddur	2.
4427.65	4745.26	256	330	Malavlli	3.
259.90	233.60	53	72	Srirangapattana	4.
263.40	233.60	112	137	Pandavapura	5.
58.03	43.34	62	96	Nagamangala	.6.
338.29	522.26	168	195	Krishnarajapet	7.
9110.55	10065.34	1107	1161	Total	

Source: Sericulture Department, Mandya

The table 5.21 gives the details of the number of scheduled castes and scheduled tribe families engaged in silk cultivation by the end of March 2002 in the district.

Table 5.21

Total	Others	Minorities	Schedules	Scheduled	Taluk	Sl.No.
			Tribes	castes		
2532	2441	-	13	78	Mandya	1
12032	11286	-	52	694	Maddur	2
14179	12027	75	64	2013	Malavalli	3
670	651	5	1	13	Srirangapattana	4
1106	1056	16	-	34	Pandavapura	5
191	171	-	-	20	Na gamangala	9
1364	1297	4	17	46	Krishnarajpet	7
32074	28929	100	1.47	2898	Total	

The table 5.22 gives the details of the percentage yield of silk cocoons towards the end of March 2002.

Table 5.22

	gs (in Kgs)	Yield for 100 egg	in Metric tons)	Sericulture cocoons (
	46.9	Hybrid	6710.988	Hybrid
	50.0	Dichotomous	721.300	Dichotomous
ı	50.2	C.S.R.	7432.288	Total

The table 5.23 graphically gives the progress achieved under different plans in the district by the end of March 2002.

Table 5.23

Plan	Target	Achievements	Percentage
	(Rs. In Lakhs)	(Rs. In Lakhs)	achievement
Annual Plan	27.60	23.348	84.5
Special Component	7.06	6.799	96.3
Plan			
Departmentals	1.08	1.20	111
(Special component			
Plan			

Infrastructure and facilities

Several facilities such as Transport, Roads, Communication, Technical Training, Financial assistance, Industrial Estates, Industrial Area, Marketing, power and other facilities are necessarily to be available along with natural resources for the industrial growth. The national Highway (48) passes through Nagamangala in the district for a distance of 29 Kms and the national Highway (17) Bengaluru Ooty passes through the taluks of Maddur, Mandya and Srirangapattana. Yet another national high (209) Bengaluru-Coimbattore passes through Malavalli taluk (44 kms) of the district. These national Highways along with state, district and taluk Roads actively connect all taluk centres and major Towns and cities of the district. This infrastructure facilities has been a contributing factor for the industrial growth as the district comprises 8,309 kms of roads. Among this 5,753 kms roads are high quality and the remaining 2,556 kms roads are termed as kachcha roads. From the tourists point of you the road which runs between Bidar - Srirangapattana (No.19) is a state highway connecting 19 districts of the state. Of late the tourism department has under taken the development has undertaken the development of this road and a warfoot basis. The district also consistence of Mysore-Bengaluru and Mysore-Hassan Broad gauge railway lines providing Fastest Transport facilities. The first railway line passes through Maddur, Mandya, pandavapura and Srirangapattana taluks, where as the second railway line passes through the taluks of Srirangapattana and K.R.Pet. The total distance of 83 Kms. of railway line is available for fast transport. The Mandya taluk alone consists of 25 kms of railway line in the district. Though the district does not have air strips it depends on the Air ports of Bengaluru. The Mysore Air Port is rather nearer than Bengaluru it cannot be depended as it is not functioning in full proportion. In the field of communication, there are 65 telephone exchanges, (41500 telephone connections) 137 telegraphic offices and 365 post offices towards the end of March 2002 in the district.

Various Financial Agencies, like NABARD, National Small Scale Industries Development Corporation, Karnataka State Financial Corporation, Industrial Cooperative Banks, Nationalised Commercial Banks and several others are fulfilling the financial needs of industrial entrepreneurs. These agencies advance money in accordance norms of the R.B.I. National Small Scale Industries Development Bank established in 1990 is providing re-financial assistance for several sick industries. The KSFC as opened a single window plan and National equity fund provide advance on a long term basis for small scale industries. The national Small Scale Industries Development Bank besides giving several financial facilities such as Modernisation industries, Development entrepreneurship and reservation of several plans exclusively for women and provides other facilities in the district. In order to encourage the youth to under go technical training along with productive oriented activities, several technical institutes like Engineering College, Handicraft training institute and 14 Industrial Training Institutes located in the district. Along with these institutes several private institutes were also permitted by the Government to function in the district. The District Industrial Centre conducts periodical Economic as well as technical surveys in the district with a view to encourage private undertakings along with guiding progressive industrial entrepreneurs. In this task several agencies like Small Scale Industries Service Centre, National Industrial Development Corporation and Technical Consultancy Organisation.

Most of the machineries installed were purchased from national or international market and have been introduced in the Large and Medium Scale Industries in the district. Their by they were able to secure expanded marketing facilities. The products produced the district have been marketed in national as well as international markets. For the local market mostly products produced by Small and tiny industrial units as well as domestic industries were marketed. In order to gain prospectus into the national market several marketing institutions functioned as mediating agencies. In the same manner the district marketing association looked after sales of Khadi Bhandar, Karnataka Small Industries Marketing Corporation, Karnataka State HandiCraft Development Corporation, Karnataka State Powerloom Development Corporation and Agricultural produce Marketing Committee and several others have not only looking after the marketing of the finished products, but also helps them with raw-materials and other necessary items in the production of finished goods. The Mysore Sales International (MSIL) and Central Home Industries sales outlets have undertaken steps to facilitate International market. Along with these organisations several consumer Cooperative Associations and weekly shandies are looking after the marketing industrial goods in the district.

Industrial Estates and Industrial Area

The Small Scale Industries corporation has undertaken the task of developing and Allotting industrial area as well as Industrial Estates to the selected industries in the district for the last 20 years. This corporation is also providing several infrastructures such as electricity, water, communication facilities for the growth of industries in the district. Towards the end of the 1992 this corporation had distributed 44 Industrial Sheds in the first stage and 39 sheds in the second stage in Mandya, Eight sheds in Somanahalli (Maddur Tq), Eight Sheds in Harahalli (Pandavapura Taluk) and Eight sheds in Nagamangala. The Small Scale Industries functioning in these industrial estates have spent minimum amount towards the repair of machineries with the help of minimum facilities such as workshop etc. produced by the industrial estates. The Karnataka Industrial Area Development Board has developed two industrial sites in the industrial area of the district. In the Somanahalli by KIADB in the year 1974, a total area of 140 acres of land acquired and developed 93 sheds and distributed them. In the Tubinakere Village of Mandya taluk KIADB in the year 1984 acquired 135 acres of land and built 130 industrial sheds and distributed them.

The table 5.24 gives the details of total number of industrial sheds developed till the end of March 2000. By the Small Scale Industries Development Corporation in the district.

Table 5.24

Taluk	Place	Sheds	Model (Meters)		Year of
		(in Nos.)			Construction
Mandya	Stage I	44	B-4	50X50	20 years ago
			C-20	30X50	, ,
			D-12	25 X 30	
			S.M8	24 X 20	
	Stage II	38	B-6	50X50	12 years ago
			C-14	30X50	
			D-4	25X30	
			S.M4	24 X 20	
Srirangapattana	Ganjam	38	C-20	30X50	10 Years ago
			D-6	25X30	
			S.M8	24 X 20	
			M-4	12X20	
Maddur	Somanahalli	8	C-2	30X50	1992
			S.M8	24 X 20	
Pandavapura	Harohalli	8	C-2	30X50	1992
_			S.M8	24 X 20	
Nagamangala	Nagaman gala	8	C-4	30X50	1996

Table 5.25 and 5.26 gives the details of the number of industrial areas developed and distributed by the end of March 2000.

Table 5.25

Name of Area and	Set up	Land acquired	To be allotted	No. of already	No. of
Taluk	Year	(in. Acres)	(in Acres)	allotted plots	remaining plots
Toobinakere	1984	135	116	116	(Not set up/not
Mandya Taluk					Distributed)
Somanahalli	1974	140	129	129	(Not set up/not
Maddur Taluk					Distributed)

Table 5.26

Name of Area Taluk		No. of Plots set up		No. of Plots Distributed		Balance of units		
Toobinakere, Mandya Taluk,		130		130		(Not set		
Somanahalli, Maddur Taluk		93		93		up/not Distributed) (Not set up/not		
						Distributed)		
Name of	Units Setup	Operating	Manufacturing	Silk Units	Units	Units that are		
Taluk	in Industrial	Units in	Units (Nos)	(Nos.)	that are	not being		
	Area (Nos)	Industrial			ready for	started (Nos)		
		Area			start up			
					(Nos)			
Toobinakere,	92	32	28	4	4	46		
Mandya								
Taluk								
Somanahalli	80	44	32	12	9	27		
Maddur								
Taluk								

Industrial Sheds built under VISWA Programme

The Industrial Sheds Developed in the district were K.R.Pet (11), Maddur (07), Malavalli (05), Mandya (05), Nagamangala (09), Pandavapura (06), and Srirangapattana (07), Totally about 50 sheds built and distributed under the Viswa Programme in the district by the Industries and Commerce Department.

Training Institutions

Industrialization is prominently based on the education and technical training received by the concerned people. In order to involved by the local educated youths in beneficial production activities several training centres have been es-

tablished with special emphasis on technical training. The government of Karnataka having released this is providing special encouragement for the research in the Training Institutes. These training institutes have been provided with modern equipments in order to enhance is specialization of the student. As a result the youths are naturally encouraged to undertake self-employment as well as engage them self in certain skilled works in several industrial units. Towards the end of March 2000 the district is comprised of 14 industrial institutes and one handicraft training institute which exclusively provide technical training to the interested youths.

Handicraft Training Institute, Nagamangala

This training institute started functioning 29th September 1956. The candidates for training are deputed from all Block Development Offices. Training such as Sewing, Kiln work, Carpentry, Cotton and Woolen weaving manufacturing of images brass vessels and such other related skilled works. The minimum qualification prescribed for the trainees is pass in 4th standard the age limit was 14 to 30 years and the duration of the training is 18 months. Later on, a special internal training for a period of six months had to be undergone in any model workshop, factory or private organisation. Such trainees were eligible to receive a monthly stipend of Rs. 20 to 30 depending on the subject of the training and the duration. Presently candidates are being selected to undergo training in subject like Kiln-work, Carpentry, Brass work, Cotton and Woolen weaving. Depending on the demand for each subject candidates numbering 15 to 20 will be select. The duration of the training will be normally from 6 to 18 months. For those who intend for higher training will be deputed to Sri Jayachamarajendra Technological institute. For such candidates the monthly scholarship of Rs.300 will be sanctioned. Normally those who passed fifth std. and within the age group of 18-35 years are eligible for training. From the years 1960 to 2000 the total numbers of 2000 candidates have undergone training and out of which 50 percent have taken of self-employment and the rest 50 percent of the candidates are employed in different Government Department. Out of the total number of 129 candidates 43 men 86 women have undergone training for the years 1995 to 2000. During the same period this training institute have marketed finished products worth of Rs.58,754. This institute presently (1987) functions under the purview of Zilla Panchayat Mandya, but earlier from 1960 to 1986 was functioning under the department Industries and Commerce.

Karnataka Leather Industries Development Corporation Ltd.,

Under the agies of this company the training centre was established in the year 1983-84 with a view to provide training for tanning of skins, manufacturing

of leather items and related chemical. A special training is imparted for the manufacturing of footwear and other finished leather products. Normally persons belonging Scheduled Castes and Scheduled tribes are recruited for training. The trainees should be of the age group of 18 to 40 years. The duration of the training was for 3 to 6 months depending of the subject selected this institute normally gives training for 30 to 60 persons every year.

Handloom Textile Designing Training Centre

The textile designing training centre established at Talagawadi in Malavalli Taluk. With a view to provide special training in textile designing. Handloom cloths can be printed by using moulds and design in different fashion. This institute trains such candidates for a period of 6 months and normally 30 candidates are selected in each batch. Towards the end of March 2000. There were 14 Industrial Training Institutes in the district out of which five were government and the rest 9 were managed by private agencies. Training for trades like fitters, electrician, mechanical, draftsman and several other items. A minimum qualification of S.S.L.C is prescribed for candidates undergone the training period is limited to two years and a monthly stipend of Rs.50 for general candidates and Rs.150 for those belonging to Scheduled Castes and Scheduled Tribes.

Under different five year plan a few artisans have been selected and given necessary training. The services of such trained artisans can be utilised in future for several upcoming training is imported in trades like cotton weaving, basket making, rexine product manufacturing, manufacturing of readymade garments, carpentry, coir products, mat weaving, motor mechanics and Auto-riksha repair's etc. under the rural artisans plan training is imported to trades like manufacturing readymade goods, radio repair, watch repair, working on metallic sheets, Nitting, printing, Kiln-work, woolen weaving and several others. Special training is also imported under TRYSM scheme trades like sewing, typing, leather works, manufacturing of silk threads, radio repairs, basket making, poultry, forming, carpentry, sheep rearing, mat weaving, pottery making, Borewell repairs, kilnworks, printing, manufacturing of woolen blankets, welding cycle repair, manufacturing of dolls and several others. Under the handloom development plan training is given in handlooms weaving. The district also possesses a special training scheme for bee-keeping activities. Those who undergo training in above mention trades are the real beneficiaries under various five years plan. As such they can take to self employment or available themselves for running several industries.

Towards the end of March 2000 the number of Industrial Training Institutes in the district are given here: Government ITI, Sakkarenagar, Mandya; Gov-

ernment ITI, Malavalli; Government ITI, K.M.Doddi (Bharathi nagar), Maddur taluk; Government ITI, Leelavathi layout, Maddur; Sree Adichuchanagiri Industrial Training Centre, Melukote; Pandavapura taluk; Nalvadi Krishnaraja Wodeyar Industrial Training Centre, Mysugar High School, Mandya; Sree Ranganatha Industrial Training centre, Baburayana Koppalu, Sreerangapatana; Tavaregere Industrial Training Centre, Near Government High School, Tavaregere, mandya; JPM Industrial Training Centre Halaguru, Malavalli taluk; Rachana Industrial Training centre, K.R.Pet; B.L.S. Industrial Training Centre, M.C.Road, Kallahalli Layout Mandya-1; Jnanesha Industrial Training centre Kanakapura road; Malavalli and Jnanaganga Industrial Training Centre near Railway station Shivapura.

HOTEL INDUSTRY

Since the district has several places of interest, pilgrim centres, 15 Large and Medium Scale Industries, Engineering and medical colleges naturally attracts Tourists, devotees, job aspirants and students not only from the state, but also different parts of the countries will be frequently visiting the district. The hotels play a pivotal role in providing food, tasty eatables and comfortable lodges. Mandya district is yet to have a star hotel. The Brindavan Gardens has a posh hotel managed in western style and provides different varieties of facilities. The table 5.27 gives the details of number of Hotels and strength of workers for the decades 1999-00 and 2001-02.

Sl.No.	Taluk	No. of Hotels		Labourers	
1.	Mandya	134	141	536	457
2.	Maddur	43	48	146	104
3.	Malavalli	60	51	180	205
4.	Srirangapattana	23	42	96	98
5.	Pandavapura	15	31	33	43
6.	Nagamangala	45	45	175	175
7.	Krishnaraja pet	25	25	125	125
	Total	345	383	1291	1207

Table 5.27

Bio-gas and Myriad Astra ovens

The bio-gas is manufactured out of the animal wastes (dungs). As per the 1997 line stock census the district consisted 2.13 lakh Buffalos and 3.40 lakh cattle population. By utilising the animal dungs the bio-gas is produced in a more

scientific manner. The remaining animal wastes are also utilised as manure in the agricultural operations. It has been scientifically certified that the animal dungs is the most yielding manure for agriculture. The Zilla Panchayat has taken up the task of providing technical assistance for the manufacturing of the Bio-gas with a view to facilitate the rural people for the use of Bio-gas, the government has been providing financial assistance to each such unit. Even the nationalized banks are also advancing money for these units.

MISCELLANEOUS OCCUPATIONS

The district comprises 7.32 lakhs artisans out of the total population 16.44 lakhs as per the 1991 population census. Out of 6.36 lakhs main workers 0.96 lakh are marginal workers. The miscellaneous occupations have been identified has those which does not come under the purview of already recognised major occupations. Though the strength of those workers is negligible, their contribution to the economic progress of the district is very prominent. In the recent past the demand for such workers in the rural areas of the district is diminishing most of them have naturally migrated to the towns and cities. The main occupations undertaken by these self employed workers are advocates, doctors, public service, hotel workers, transport workers, machinery workers and different service provides have been counted upon as miscellaneous occupations. Earlier these workers living in usual areas, were self employed in various occupations such as washerman, barbers, tailors and also followed traditional occupations like kilnwork, carpentry, pottery making, leather workers. Jewellary workers, house construction, gardening, basket making, mat making and such other odd jobs. These occupations being followed by though a negligible number, they provide helps in the Economic development of the district. The skilled workers who come under this brad heading are responsible for continuing the traditional occupations which have come down to us from time immemoriable.

POTENTIALITIES FOR DEVELOPMENT

The Mandya district is said to possess rich natural resources for the growth of industries depending mainly upon the demand for production. There are four large and medium scale sugar industries being supplied with subsidiary sugar crushing units and there is also provision for the manufacturing of paper by utilising the sugar cane wastes. The paper mill industry at Belagola was established with a view to produce high quality paper by utilising the sugar cane wastes. Due to several reasons this paper mill has been recently closed and therefore there is a need to open a Small Scale Sugar Industry to meet the requirement. Since the district is estimated as a largest sugar cane growing region, there is a

demand for establishing the manufacturing of Khandasari sugar industries as the district has the capacity of crushing nearly 50 to 100 tonnes of sugarcane. The rich mineral wealth of the district particularly corundum and chromate are very prominent by utilising this minerals there is a provision to develop industries such as cement, As Bestos and Aluminum Sulphate cans. Since the cobbler community are living is considerable majority in the Malavalli taluk, there is a demand for expanding the leather industry. The manufacturing of leather chapples in traditional method needs to be modernised by introducing advanced machines in the production of leather goods. Leather oriented industries such as leather tanning, manufacturing of suit cases, medicine kits, attractive hand bags, vanity bags, leather purse and such other items can be developed as there is great demand in the district. By doing so, the leather production can be converted into a profitable industry. The district is endowed with rivers like Cauvery, Hemavathi, Lokapavani, Shimsha and Veeravaishnavi. The K.R.S. Dam built across the Cauvery river provides irrigational canals in the wide spread area of this district. Besides these rivers there are 344 big Tanks and 503 small tanks which provides water for an area covering nearly 400 kms. The area irrigated by these canals is over 29,050 hectares of land covering with water naturally provides for fisheries co-operative societies functioning in the district. There is excellent is provision for the development of fish processing and fish manure producing industries and fisherman have been provided with modern boats, nets and such other facilities. Since the taluks of Nagamangala K.R.Pet, Maddur and Mandya are filled with rich coconut grows, there is an opportunity to establish copra powder processing unit, coir industry and advanced coir products manufacturing units.

There is a possibility of establishing accessories needed for factories and manufacturing of agricultural implements, compost manure, manufacturing of bricks, rice mill and such other items. The domestic industrial units can be encouraged as they manufacture agricultural implements and construction materials. There is also a need for establishing modern industrial units which undertake the production of modern plough, weeding and harvesting implements. As the supply of fertilisers and manures to the agriculturist is rather inadequate there is provision for establishing fertilisers and manure industries in the district. In this direction a small scale industry with regard to fertilisers and manures can be opened.

The building construction works has been considered profitable and since the construction work is undertaken all through the year, there is a possibility for establishing construction material industries in the district. Since the rice mills and the sugar factories are in great number there is a need for establishing spare parts and other accessories turing like, Agarbathi, readymade garments, rearing of silk worms, vehicle repairs, cotton and woolen yarns etc.,

There is provision for establishing medium scale industries like granite tiles, cold storage for fruits, tomato sauce, banana chips, oil extraction from husks, fruit juice powder and such other products in the district. There is also international marketing facilities for these goods. There is also a possibility of establishing small scale industries like floor mill, animal and poultry products, ice-cream manufacturing, tooth powder from paddy husks, paper from ragi grass, modern pulses mills, manufacturing of silk and cotton yarn and such other profitable units in the district. In the same manner there is a provision to establish small scale industries manufacturing goods like ragi malt, copra powder, strawboard, hand made paper, A.C.pipes, cover, leather tanning, bone manures and such other units in the district.

NEW INDUSTRIAL POLICY 2001

Mission

Karnataka's Mission is to achieve an economic growth rate of 8% to 9% over the next decade by promoting the rapid growth of a market driven, knowledge based, efficient and competitive industrial sector. This will be done by providing industry access to high quality infrastructure, extending institutional support for technology upgradation, deregulating the business environment for an efficient, proactive and transparent administrative framework and catalysing the entrepreneurial as well as creative capabilities of the human resources.

The proposed Industrial Policy will therefore aim to achieve an average industrial growth rate of 10% to 12% per year and attract investments of atleast Rs.20,000 crores per year and create, on an average employment potential of atleast 1.5 lakhs per year.

Objectives

In achieving this Mission, the focus will be on the objectives set out below:

- a) Encourage rapid growth of sectors and markets in which Karnataka has strategic advantages.
- b) Enhance value addition in products and processes through rapid technology upgradation.
- c) Enable optimal utilisation of capacity and resources in different sectors viz., Agriculture, Horticulture, Animal Husbandry, Minerals and Human capital.
- d) Enable industry to access new markets domestic and export through new products that meet global standards of quality and competitiveness.
- e) Give impetus to knowledge based industries and the service sector.

- f) Create a market driven environment with the private sector being the primary engine for growth.
- g) Provide Industry access to high quality infrastructure.
- h) Fully tap the potential of the Small Scale Sector and encourage establishment of new tiny and Small Scale Industries, particularly in the rural areas to achieve the twin objectives of employment generation and utilisation of local resources

Towards this end Government will undertake, through an expert group, a detailed study of the small scale industrial sector in the state to ascertain their present status; problems and prospects and come out with a separate policy on employment generation in the industrial sector which among other things would also include a suitable incentives scheme linked to employment generation. This study will be completed in the next six months time.

Strategy

In order to achieve these objectives the following strategy will be adopted.

- a) Forge a strong partnership with the private sector in all aspects of Industrial Policy and its implementation to provide for a demand driven decision making process in an increasingly market oriented economy;
- b) Create a policy framework to facilitate competitiveness of local industry and enabling ease of doing business;
- c) Enhance public and private expenditure to built efficient and competitive industrial infrastructure;
- d) Give impetus to technology upgradation by forging symbiotic and mutually beneficial institutional arrangements between Government, Academic R and D Institutions and Industry;
- e) Focus on catalysing comparative advantages that Karnataka has in the Global market by increasing its exports in information technology, food processing, electronics and communication, garments, machine tools and precision engineering goods;
- f) Assist the tiny, small and medium scale industries to upgrade their technologies and manufacturing processes to face the increasing competition; &
- g) Radical restructuring of the State Public Sector undertakings as well as Government infrastructure agencies and Financial institutions by promoting private sector initiative in these activities.

CHAPTER V **INDUSTRIES**

2000 see page 318.