

CHAPTER V

INDUSTRIES

83. General

The geographical isolation of the district, combined with its lack of communications, transport facilities and power-supply, makes large areas of it industrially and economically underdeveloped in spite of its rich mineral and forest wealth and surplus of agricultural products.

84. Old-time industries

Old-time industries were few and their growth was limited to local needs. People needed then, as they do now, necessities of life, i.e., clothes, oil, iron, utensils, agricultural implements, house fittings and furniture. Therefore, there were weavers, potters, bell-metal workers, blacksmiths and carpenters. There was no machinery. Manual labour was being employed to produce the requirements on a small scale that lay within the capacity of a small number of workers. Products were few in number and crude in finish though the process was ingenious. These industries exist mostly in the rural parts even to this day. These are, however, unable to compete with imported factory products and are gradually disappearing.

Among the old-time industries mention may be made of pottery, basket-making, weaving, oil extraction, smelting and smithy, carpentry and wood-carving. These old-time industries reveal the primitive art and tradition of the land. Pottery and basket-making marked civilisation at the neolithic stage and these industries continued in more or less complex form and varieties in the historic period, remaining in the cottage stage. The tribal communities of Koraput have exhibited considerable skill in basket-making, products of which are often decorated with 'cowri' shell. Pottery of the tribals is still in the stage of neolithic culture. Water-pots and earthen utensils are seldom decorated.

Spinning and weaving are the most important old-time industries of Koraput and till today the art of weaving is compulsory among the girls of certain hill tribes. It is said that a Gadaba girl is not given in marriage unless she knows weaving. Bonda and Gadaba women extract fibre from the bark of the Kerang plant to turn it into yarn, after which they weave the cloth on small tension-looms. The Saora and Kondh girls prepare excellent cotton yarn on a hand-spindle.

Another important old-time industry, which is still continuing in the cottage stage, is smelting of iron. It occurs in the neighbourhood of Umarkot where millions of tons of high grade iron-ore have been located. The people belonging to Khati and Lohar castes still make

iron by their crude process with charcoal as the fuel. What comes out of the furnace is steel, which is used in the manufacture of agricultural implements and few other articles of common use. They display their skill in the forging of 'tangis' with fancifully carved blades. The best example of this art is to be found in the neighbourhood of Tentulikhunti. The Lohars in the past manufactured manganese steel from a mixture of iron and manganese-ores. Lohars near Mathili use low grade iron-ore in underground furnace and produce steel. The steel produced by the two processes does not rust easily.

Oil-pressing is done in three different ways. Where a little oil is required the seed is crushed with the help of a stone to break the crust and then boiled in water. The oil floats and is poured out. Almost every Adivasi household knows this process.

Community oil-pressing is done by a wooden wedge weighed down by a heavy stone. The seed is warmed and crushed. It is then put in a bag made out of *Siali* fibre. The bag is pressed between two planks tied at one end and weighed down by a heavy stone at the other end. The third method is the ordinary Ghani where instead of a bullock four men contrive to push the pressing column round by manipulating two cross-bars.

Carpentry and wood-carving are still in a primitive stage. The doors and pillars of the houses are usually of crude type and the household articles consist of a rickety cot, husking lever (*Dhenki*) and a few implements. Different types of combs are found among the tribals; pipes of decorated bamboos for smoking tobacco are also popular mostly among the Kutia Khonds. Looms and spindles continue even today in their primitive form. So also the drums and musical instruments.

Most of the old-time industries which still exist in the district are of remote origin and they reveal the tribal characteristics of the district offering quite interesting study.

85. Power

(i) Machkund Hydro-electric Project

The Machkund river flowing at an elevation of 3,000 feet has been dammed at Jalaput to form the Jalaput reservoir and at Duduma it has been diverted by a diversion weir and through a series of tunnels to produce a head of 850 feet over the power house where hydro-electric power is generated. The magnificent water fall of 540 feet at Duduma is no longer there. In its place, a treacle of waterflows down the precipice.

Machkund Hydro-electric Project is a joint scheme of Orissa and Andhra Pradesh Governments. Each State has full right to the use of 50 per cent of the ultimate power generated by the project, but according to the inter-State agreement the Government of Orissa transferred

to the Government of Andhra Pradesh* for a period of 99 years from the date of signing of the agreement (on 14th January 1946) its right to use 20 per cent of the ultimate power generated by the project and on the expiry of the period of 99 years the Government of Orissa shall be entitled to claim 50 per cent of the total output.

In consideration of transfer of 20 per cent of power, Government of Andhra Pradesh are paying to Government of Orissa annually at the rate of Rs. 20 per K. W. on 20 per cent of their actual maximum demand. This term of payment is liable to revision after 30 years from the date of the contract. The two Governments pay maintenance and operation charges in proportion to the power taken by them. Out of Orissa's share of 30 per cent about 10.5 M. W. of power is now being utilised by Orissa and the balance is utilised by the Andhra Pradesh Government.

The cost of the project comes to Rs. 1,356.93 lakhs which includes Rs. 331.51 lakhs towards the cost of the Jalaput Dam. The share of Government of Orissa which is 30 per cent of the total cost of the project comes to Rs. 407.08 lakhs. The installed capacity of Machkund Power House as envisaged in the project is 102,000 K. W. of power.

The Government of Orissa has made its own scheme for distribution of power. At present electricity is being supplied to Borigumma, Nowrangpur and Jeypore by a 33 K. W. transmission line from Jeypore. From Machkund to Rayagada a 132 K. V. transmission line has been constructed, from which electricity is being supplied to Aska, Berhampur and other places of the district of Ganjam.

The following statement gives a picture of the demand in 1960-61 and forecast of the demand in 1965-66 for supply from Machkund, as well as Talcher Thermal station.

	1960-61	1965-66
	K. W.	K. W.
1. Jeypore Sugar Co., Ferro Maganese plant, Rayagada.	7,000	10,000
2. Other large industries ..	1,450	3,000
3. Rayagada Ferro-Manganese Plant ..	..	20,000
4. Paper Mill, Rayagada ..	1,000	2,500
5. Small and medium industries ..	1,400	2,500
6. Irrigation in Ganjam and Koraput districts.	1,000	5,000
7. Domestic supplies and bulk supply licences.	1,650	5,000
8. Aluminium Plant of J. K. Group ..	1,650	50,000

*The agreement was made with the Government of Madras, as Andhra Pradesh was not formed at that time.

(ii) Balimela Hydro-electric Project

The other source of power is the Balimela Hydro-electric Project which is expected to generate 240,000 K. W. at 60 per cent load factor. This is also a joint enterprise of the States of Orissa and Andhra Pradesh. Agreement between these two Governments regarding the location of the dam at Balimela on the Sileru river was reached on 4th September 1962. According to this agreement the total estimated cost of the dam would be shared equally by the two Governments provided, however, that the share of the Andhra Pradesh Government would not exceed Rs. 12 crores. The Government of Orissa is in charge of execution of the project which is being done under the control and supervision of the Control Board of which the Chief Ministers of Orissa and Andhra Pradesh act as Chairman every alternate year.

Half the total inflow into Balimela reservoir at Balimela will be let down towards the Andhra Pradesh share and the other half into the Balimela High Head Power House of the Orissa Government. The flow to the power stations of both the States will be as per actual requirement. The tail water will subsequently be utilised for irrigating about 2.4 lakh acres of land in Malkangiri-Motu plains.

86. Mining

(i) At present six manganese mines owned by Messrs. Jeypore Sugar Company, Ltd., Rayagada, two graphite mines owned by Messrs. Hanuman Mining Company, Kakinada, one mica mine owned by Sri Ramkrishna Deo, ex-Zamindar, Jeypore and another mica mine owned by Sri Kamalanath Ray of Jeypore are in operation. Except Kuttinga manganese mine of Messrs. Jeypore Sugar Company, Ltd., which is supplying manganese to the Ferro-Manganese Plant at Rayagada, the other mines are being worked on a small scale.

(ii) Kuttinga manganese mines

The mine is situated ($19^{\circ} 05' N$, $83^{\circ} 19' E$) at 23 miles from Rayagada and 45 miles from Koraput. The deposit is assessed at 0.3 million tons. The quality of ore is 38—40 per cent. The mining operations were started in 1943 and 107,000 tons of ore have been extracted up to 30th June 1959. 226 persons are employed in the mine of which 200 are unskilled workers, 21 semi-skilled and 5 on the supervisory staff. The rocks in the neighbourhood of the manganese deposits consist of granite, sillimanite and quartz (khondalite). The general strike direction is N. N. E., S. S. W., but in some cases it is S. W. The khondalite is also traversed by veins of quartz and pegmatite and it has been granitised in the proximity of granite. Near Kuttinga, manganese-ore occurs along the contact zone of the khondalite and granite. Manganese occurs in the form of bands and lenses in the khondalite site. The large masses of pure ore is mainly pallomolane. The

ore is often stained with limonite and the general structure of the ore is botryoidal and kidney-shaped. The general composition of the ore is mostly of low grade iron with high phosphorus content.

Besides the above, the State Government have kept reserve about 10 square miles of manganese area near Debajholla, Mandhara and Fulbadi as it is expected to contain good quality manganese.

A large number of applicants want grant of prospecting licences and leases for different minerals, such as manganese, graphite, mica, limestone, marble stone and bauxite.

87. Large-scale industries

Among the large-scale industries of the district mention may be made of Sugar Factory and Ferro-manganese Plant at Rayagada, Ferro-silicon Plant at Theruvali, Paper Mill at Jaykaypur and the Aero-Engine Factory at Sunabeda. Details about these industries are given below :

(i) Sugar Factory

The Jeypore Sugar Co., Ltd., Rayagada, has an authorised capital of one crore of rupees and subscribed and paidup capital of Rs. 44,780. The construction of the factory was completed in April 1937 and it went into production during the month of December of the same year. Now altogether 218 people are engaged in the factory. Out of this, 32 are skilled workers, 61 semi-skilled workers, 78 unskilled workers, 30 clerical staff, 9 technical personnel and 8 officers. Monthly wages of the people working come to about Rs. 20,000. The crushing capacity of the factory was only 150 tons per day at the time of construction and it has since increased to 600 tons per day. The Company owns sugarcane farms of about 2,000 acres and the estimated quantity of sugarcane grown in about 600 acres from the Company's own plantations is about 9,000 tons. Besides this, there are other local sugarcane growers having about 1,400 acres yielding nearly 15,000 tons of the cane every year. In addition to this, the Company imports about 10,000 tons of cane from Andhra Pradesh every year. The factory annually produces 30,000 bags of sugar.

(ii) The Ferro-manganese Plant

The Ferro-manganese Plant at Rayagada was established by the Jeypore Sugar Co., Ltd., on 2nd July 1958. The plant was of 3,500 K. W. power, with a capacity of 600 tons of ferro-manganese per month. The second plant with double the capacity of the first was commissioned in June 1960. Now 112 persons are employed in this plant. Out of these, 90 are skilled and semi-skilled labourers, 8 clerical staff, 7 technical personnel and 7 officers. Rs. 9,500 is being paid as monthly salary to the workers. The capital outlay of the first plant is Rs. 13,00,000 and of the second plant is Rs. 27,00,000.

Ferro-manganese is produced by smelting manganese-ore, coke and limestone together in required proportions in electric furnace. The heat required for smelting is provided by the electric power. The molten metal along with the slag is tapped out regularly at an interval of $2\frac{1}{2}$ to 3 hours. On solidification the slab, being lighter, collects itself on the top and is easily removable from the solid metal lying below. On cooling to the atmospheric temperature the metal blocks are broken into small pieces ranging from 2" to 8".

The factory authorities have successfully completed experiments for making standard grade ferro-manganese from low grade manganese-ore (30—32 per cent) available from their mines at Kuttinga. When they completely switch over to this process they can avoid importing nearly 30,000 tons of high grade manganese-ore (46—48 per cent) per year from Madhya Pradesh. The factory is to depend on supplies of 15,000 tons of limestone per year from Bilaspur in Madhya Pradesh. But steps are being taken to develop the Pottangi area for limestone. The finished produce, ferro-manganese ingots, are consumed by the Steel Plants in India and a part is exported to America.

(iii) Ferro-silicon

A Ferro-silicon Plant with an annual installed capacity of 7,500 tonnes is under construction at Theruvali, about 12 miles away from Rayagada. Ferro-silicon is an essential ferrous alloy in the manufacture of alloy steel and is at present being manufactured by only one unit in India, namely, the Mysore Iron & Steel Works, Ltd. The total project cost is estimated to be 1.50 crores of rupees.

The project is sponsored by Messrs. India Metals & Ferro-Alloys, Ltd., a Public Limited Company registered in Orissa. The Industrial Development Corporation of Orissa Ltd., a Government of Orissa undertaking, has made substantial investments in the share capital of the Company and the Company has received assistance from the State Financial Corporation, the Industrial Credit Investment Corporation of India and the Industrial Finance Corporation of India.

The plant is expected to go into production towards April 1966. Quartz forms the principal raw material and is available at a short distance from the plant site.

The main furnace and certain other ancillary equipments are being supplied by Messrs. Elektrokemisk A. S., Oslo, Norway. The promoters of the project have plans also for expanding the capacity to 15,000 tonnes and to go in for production of silico-manganese and silico metal in due course.

(iv) J. K. Paper Mills

J. K. Paper Mills, a unit of Straw Products, Ltd., have been set up at a cost of nearly Rs. 6.5 crores. The Managing Agents are Messrs. J. K. Agents Private, Ltd. The erection of J. K. Paper Mills was completed in a record time of 10 months and production started, with effect from 18th October 1962. The present capacity of the Mills is 18,000 tonnes per annum of writing and printing paper. It is proposed to expand the Mills by raising its capacity to 43,000 tonnes per annum. At present 1,650 persons are employed in the Mills and various offices of this unit in the State of Orissa. Besides, about 5,000 labourers are engaged seasonally in the forests for extraction of bamboo. Total monthly wages and salaries of the employees come to Rs. 2,35,000 and the wages for the seasonal labourers in the forests come to Rs. 1,52,000 approximately per month. The leased forests located in South Orissa are the main source of raw material (bamboo) supply to the Mills. Paper is being manufactured in the Mills from bamboo with the Fourdrinier Machine by Sulphate process. The main varieties of paper produced are white printing, cream-wove, coloured wove, cream-laid, azure-laid, white and coloured board, map litho, etc., which have market throughout India.

(v) Aero-Engine Factory

An Aero-Engine Factory with the township is under construction at Sunabeda near Koraput. Plans are also under way for constructing a Civil township adjoining the Project area.

88. Medium-scale industries

Among medium-scale industries the most notable are rice mills and saw mills. Of industries which concern themselves with utilisation of the agricultural products, the principal is rice-hulling. This is generally a subsidiary occupation carried on by women-folk, but in recent years some power-driven mills have been established, where rice is hulled for export to the plains.

(i) Rice Mills

Nearly 54 rice mills are functioning at present. Most of them are located near Jeypore town. The other rice mills are located in Koraput, Kotpad, Borigumma, Nowrangpur, Rayagada, Vikrampur and Gunupur. Except one or two mills which were started nearly twenty-five years ago, all others have been constructed after 1955. Some ricemill-owners have installed flour mills and oil-pressing mills along with the rice mills as subsidiary occupation.

(ii) Saw Mills

There are 14 saw mills at Jeypore, 2 at Nowrangpur, 3 at Muni-guda, 2 at Ambadola and 1 at Jemidipeta, notable among which are R. K. Himatsinka Saw Mill, Patel Saw Mill, Laxmi Saw Mill and Sanka

Saw Mill, all at Jeypore. The main products are railway sleepers and sized wood for construction of houses.

89. Small-scale industries

Miscellaneous

There are six printing presses. Out of these three are located at Jeypore town and the rest at Nowrangpur, Koraput and Kotpad. There is a small ice factory at Jeypore which was started in 1957 to meet the local demand during the summer season. There are 4 bakeries, one factory for making agricultural implements and radio repairing shops, all at Jeypore. Several motor repair garages, vulcanising and retreating shops have been established at Jeypore, Rayagada, Machkund, Jalaput, Koraput and Nowrangpur. There are two small soap factories. There is a chemical factory at Jeypore making snow, scented oil, chewing tobacco, etc.

90. Cottage industries

(i) Under Intensive Area Scheme, All-India Khadi and Village Industries Board started six intensive development areas in Orissa. Out of these four were in Koraput (the other two being in Balasore and Ganjam). Each of the four areas, e.g., Boipariguda, Nandapur, Narayanpatna and Kalyansingpur, is under a Society registered under the Societies Act and is called Chatra Samiti. Their programme for village industries is financed by the Khadi and Village Industries Commission. Forty centres were started by 1957 of which 14 are in existence. Villages being scattered and thinly populated the centres cover larger areas than in other districts. Emphasis has been shifted to industries based upon forest products.

(ii) Weaving

The most important cottage industry is weaving. Women of certain tribes, such as Gadabas and Bonda Porajas, make clothes for themselves out of Kerang fibres. It is only the Doms who weave cloth for sale and earn a livelihood. They make coarse white cloths which are more durable and expensive than mill-made cloth. They use looms of old type with push shuttle and weave mill yarn.

According to 1951 Census, there were 7,070 textile establishments in the district with 7,679 looms. 14,545 whole-time and 1,205 part-time persons were employed in this industry.

HANDLOOM WEAVERS' CO-OPERATIVE SOCIETIES

There were only 8 Yarn Distribution Co-operative Societies up to the year 1954-55. Since 1955-56 the Weavers' Co-operative Societies have progressed with grants from the Cess Fund. There are about 10,600 weavers in the district, out of which 2,722 weaver families

were enrolled as members of the Co-operative Societies up to the 30th June 1959. The progress of the Weavers' Co-operative Societies for the 5 years preceding 1963-64 is given below :

Year	Number of Weavers' Co-operative Societies	Number of Members	Working Capital (in rupees)	Production (in rupees)	Sale (in rupees)
1959-60	.. 33	3,147	1,49,365	78,936	78,229
1960-61	.. 34	3,131	1,31,868	85,849	1,17,122
1961-62	.. 34	3,048	1,32,261	4,867*	5,703*
1962-63	.. 38	3,201	1,38,989	36,813	36,114
1963-64	.. 38	3,175	1,67,443	54,594	12,361

The Intensive Area Development Scheme started Ambar Charkha training at Jeypore and subsequently at Nandapur and Padwa. In 1961-62 about 100 Ambar Charkhas were plying and 5,000 to 6,000 hanks per month were produced. About 15 weavers were engaged in Khadi weaving in Nandapur area. The monthly production came to 1,200 square yards.

(iii) **Oil-pressing**

Oil is extracted from *Mahua*, castor, linseed (gingelly) and niger seeds *Alsi* by grinding in the usual wooden mills called Ghana. Oil-seeds worth rupees four lakhs are annually exported. Local consumption is very low. To Adivasis, bullock-driven Ghani is a novelty. Two model Demonstration-cum-Production Centres were operated at Raya-gada and Gurandhi by Sarva Seva Sangh to attract local people to be trained in this technique. Oil-pressing is done by a Co-operative Society at Kalyansingpur with funds supplied by the Orissa Khadi and Village Industries Board. The Dandakaranya Project has an Oil-pressing Centre at Jeypore.

(iv) **Paddy-hulling**

Paddy-hulling with the help of *Dhenkis* is a traditional industry most common to all households. Both the Dandakaranya Development Authority and the Intensive Area Development Authorities have tried to promote this industry. By 1962, about 500 *Dhenkis*, some of them manufactured by the settlers themselves, were in operation and the administration have arranged for the purchase of several thousand maunds of paddy to be issued to the settler families participating in the scheme.

There were 9 Hand Pounding Co-operative Societies in this district in 1961-62. These societies received working capital loan to the extent of Rs. 60,700 from the Orissa Khadi and Village Industries Board up to

*Excluding the Rayagada Co-operative Circle

30th June 1959. There were 648 members with a paid-up share capital of Rs. 1,222. These societies purchase paddy from the local areas with the working capital loan and dehusk the paddy through their members. Hand-pounded rice is sold locally at the prevailing market-price.

(v) Soap-manufacturing Co-operative

Financed by the Orissa Khadi and Village Industries Board, Soapery Units have been constructed at Nowrangpur and Sikarpai and production of soap from non-edible oil has been started on experimental basis.

(vi) Carpentry

The carpenters as a hereditary class did not exist in Koraput villages. There were a few in towns of indifferent skill. When extraction of timber started, classes which would weave baskets and mats began working on wood and became expert sawyers. This is an occupation not of any particular caste in Koraput as is usual in other districts. The Dandakaranya Development Authority has opened a centre at Boipariguda for making baskets and mats from bamboos and wood-working centres at Boregan and Umarkot. The wood-working centres produce planks mainly for bridges and culverts and also make ploughs, furniture, etc.

(vii) Toys and jewellery

The Chitra Ghasis were manufacturing heavy brass jewellery for the women of the hill tribes, but the industry was killed by imported jewellery of German silver. Work in gold and silver is done by a few Oriya 'Sunaris' and Telugu 'Kamsalis' living in towns and larger villages.

A few families of the Sunari caste in Nowrangpur have gained reputation for making fancy objects, such as chains, bangles and fly-whisks, from lac and by coating nests of boxes with lacquer patterns. Near Tentulikhunti boxes and toys are made by ingeniously stitching paddy seeds together. Images of deities, birds and animals are made with clay for the amusement of children.

(viii) Pottery

In Koraput, villages inhabited mainly by potters is a common feature. The hill tribes show great interest in earthenware. Most of their household utensils are made of clay. Even spoons, lamps and toys are made of clay. The potteries are attractive in shape and colour but thick and heavy because suitable clay is scarce. Through Governmental effort brick-laying is making headway in towns and their neighbourhood. But the inferior social status attached to potters is standing in the way.

(ix) Jaggery

Sugarcane is pressed for jaggery in bullock-driven presses in the Jeypore and Nowrangpur areas. The output is small and only sufficient for local consumption.

(x) Tobacco-curing

Tobacco curing is an occupation of some importance in the Rayagada subdivision. The local tobacco is of good quality. The majority of cultivators cure the leaves before selling them. This is done by hanging them for twenty to twenty-five days and then heaping them in layers in a dark room or a pit in the ground for about a fortnight after which they are ready for sale.

91. Other minor industries

Establishment of Saranjam Karyalaya at Rayagada was one of the earliest of Sarva Seva Sangh programmes designed to train mostly the Adivasis in soap manufacture, bee-keeping, etc. But it was found that the Adivasis were not interested in this workshop and the Sangh utilised this training centre for candidates coming from comparatively advanced areas.

92. Panchayat industries

Under Panchayat Samiti Industrial Programme one open crystal sugar unit has been established at Bongolaguda in Borigumma area. It has gone into production. One Panchayat Industries Officer has been posted at Nowrangpur to look after the work of the sugar unit. The Borigumma Sugarcane Processing and Marketing Co-operative Society has been formed and duly registered. It consists of 116 persons who are worker-members. So far, Rs. 2,20,000, Rs. 24,000 and Rs. 1,563.50 P. have been collected from Government, Panchayat Samiti, Borigumma and from members of the above society, respectively, towards the share capital of the industry. The crushing capacity of the industry is 1,000 maunds per day.

One Mangalore Pattern Roofing Tile Factory is being set up at Kotpad. A Co-operative Society called Mangalore Pattern Roofing Tile Manufacturing Co-operative Society Ltd., Kotpad, has been formed with 30 Worker-members. It has also been decided to establish a Production-cum-Training Centre at Nowrangpur and the construction work of it is now in progress. Other industries, namely, the Carpentry unit at Nowrangpur, the Saw Mill-cum-Carpentry Workshop at Sunabeda, the Crystal Sugar Unit at Nairaghaga, Rice-huller and Oil Mill at Pampuni and Bhatigan, Oil Mill at Bandhgan and an Agricultural implements Factory at Jeypore have been set up.

93. Labour and Employers' Organisation and Welfare of industrial labour

There are a number of large-scale industries besides some medium and small-scale industries in the district. A considerable number of industrial labourers are employed by these establishments. The skilled labourers are generally recruited from outside the district and from among the non-Adivasi residents of the district. A large number of Adivasis are employed as unskilled workers. The labourers in most of these industries are not properly organised except in a few major ones like Jeypore Sugar Factory and J. K. Paper Mills. Details about these Labour Organisations are given below:

(i) Jeypore Sugar Factory, Rayagada

The labourers of this factory along with the labourers of the Ferro-manganese Plant have got a Registered Trade Union to look to the interest of the labourers. For the welfare of these employees the Company is running a free elementary school with provisions for teaching both in Oriya and Telugu. Books and other articles are supplied to the students free of cost. In addition to this, a Welfare Centre has been started to provide educational and recreational facilities to the workers. The Centre gives one scholarship to deserving student of each class in the local High School. The scholarship covers the amount of school fees and cost of books required by the student for that year. Financial help is also extended to deserving students who are studying in educational institutions outside Rayagada.

The Company is running a free dispensary with a qualified Medical Officer, a Compounder and a Midwife. In addition to this, medicines are purchased by the Welfare Centre referred to above and supplied to the employees at subsidised rate. Financial help is also given to the workers by the centre who takes patients for treatment outside Rayagada under the recommendation of the Medical Officer.

Playgrounds are provided by the Company for the employees to play tennis, football, volley-ball, badminton and other outdoor games and the Welfare Centre referred to above meets the expenditure necessary for the outdoor and indoor games, such as Card and Chess. The Company is maintaining a library. The Welfare Centre has been arranging free cinema shows of cultural value periodically to the employees.

The Company is running a canteen for providing meals and tiffin to the workers at reasonable rates. A dairy farm has also been started and milk is sold at a cheap rate to the employees.

Almost all the permanent employees of the Company are provided with free quarters in the Factory colony. The construction of 10 double-decked tenements and 40 single-round tenements has been made under the Subsidised Industrial Housing Scheme.

(ii) Hydro-electric power

Although many of the labourers engaged in the Machkund Hydro-electric Project have been disbanded the Union still exists and all the welfare work is continuing. Extensive anti-malaria measures are being carried out in the Project area, free medical aid is being provided to the workmen and their families in the Project. There are also recreation clubs with community radio sets. There are workers' welfare centres at Onakadelli and Jalaput which provide recreational and cultural facilities to the workers. Library facilities are also provided to the workers by the centres.

(iii) J. K. Paper Mills

About 1,600 persons are at present employed as skilled, semi-skilled and unskilled workers, whose monthly wages amount to Rs. 2,35,000 approximately. The Company has provided various amenities for the welfare of the employees and their families.

The Company has opened a Kindergarten and a Primary School up to 5th class, where free education is imparted to the children of the employees. Books and stationeries are also supplied free of cost. All establishment expenses of the schools are met by the Company.

A well-equipped dispensary with a whole-time Medical Officer is being maintained where free medical treatment is given to the employees and their dependents. Besides, an annual health survey is conducted amongst the employees as a preventive measure. The management attaches great importance to Family Planning movement.

Residential quarters constructed by the Company are made available to the employees at a nominal rent. The Company runs a canteen which is open for 24 hours to cater to the needs of the workers.

The Company has given financial assistance to a Co-operative Store of the workers which deals in the essential commodities including foodstuff.

Various sports and cultural activities are organised both by the Company and the Workers' Club. Feature films and documentaries are exhibited every week for entertainment of the employees.