

CHAPTER V

INDUSTRIES

OLD-TIME INDUSTRIES

Cuttack, like other parts of the country, is mainly an agricultural district and most of its people live in villages. In a caste-based rural society a particular craft was practised by a particular caste hereditarily. Even today weavers produce cloth, carpenters work in wood, blacksmiths engage themselves in iron works, goldsmiths work in gold and silver, potters take up pottery works. They, since ages, form the component part of the village organisation and have acquired necessary skill in their own trades. Products like brass and bell-metal utensils, coarse cotton cloths, potteries, toys, gold, brass and silver ornaments, and various iron and wood works were included in the traditional industries of the district. These were mainly manufactured for local consumption. Very beautiful round figures found in the Buddhist site at Ratnagiri and Udayagiri prove that the art of stone dressing and stone masonry developed to a great extent in this region during early period.

During early part of this century Utkal Gourab Madhusudan Das, the founder of modern Orissa, actively encouraged local handicrafts and cottage industries. It was he who encouraged the filigree and horn workers and established the Utkal Tannery at Cuttack in 1905 for production of quality leather goods by the artisans of the soil. His tannery became famous even outside the country and filigree articles earned a name for the local artisans and were exported to European countries. Late Bhikari Charan Pattnayak, who also belonged to this period, started an industrial unit to manufacture unbreakable toys mainly made of paper pulp, and other articles both for daily necessities and decorations.

Formerly manufacture of salt was a profitable industry. During Maratha rule in Orissa, Cuttack salt had immense commercial importance. Weaving of cotton cloths was carried on at Gulnagar, Jankoti and Kisannagar and in most of the interior villages of the district. But this flourishing industry suffered from competition with imported goods. The fine muslins of Cuttack disappeared from the market as people preferred to buy cheap machine made clothes. Cuttack is one of the few places in the state where gold and silver works are carried on with great skill. The instruments used earlier for manufacture of these articles were of a simple kind and the equipments of the workshop were equally primitive. The artificers patiently working by a trying light in ordinary earth-paved huts with the crude implements, turned out articles of extreme delicacy

and finish, and often of exquisite design. The majority of ornaments were intended as tributes to feminine vanity. In addition, they were also manufacturing various silver fancy articles and ornaments of filigree works.

The weaving of tussar silk on a small-scale was carried on in village Gopalpur in Dharmashala police-station. The silk industry, like the cultivation of betel-leaf, was introduced by a few Bengalis, who migrated to Cuttack from Bardwan or Midnapur. Almost every family of that village owned looms and managed to earn about two annas (Re. 0.12) a day per person without having to take any subsidiary profession. The tussar cloth, which these weavers produced, was of a coarse and inferior quality. The bulk of the out turn/production was taken by traders of Madras and other places of Southern India.

During the beginning of thirties of the century other industries of the district were few in number and of little significance. One or two tanneries managed to pay their way in Cuttack. In particular the curing and drying of the skins of large lizards which abounded in the estuarine tract, had found a profitable, if temporary, outlet for use in the manufacture of ladies shoes. Shoes of ordinary leather, trunks, suitcases, etc. were also manufactured by the local tanneries. A small colony of stone-carvers settled at Lalitagiri about 34 miles (55 km.) from Cuttack were making images of deities and ornaments for temples in conventional designs. Locks, nails, nut-crackers, etc. were made at Barada and Kalapathar in the Banki police-station. The carpenters of Cuttack town were making cabinets and furniture with great skill. In Cuttack the manufacture of toys and sticks from buffalo horn was a speciality. The other indigenous industries which appeared to prosper were manufacture of brass and bell-metal utensils and ornaments. This industry did not suffer from the competition of foreign or machine-made articles, though gilt ornaments of German silver were said to find favour with many women as they were light, cheap and glossy.

The report of Inspector of Factories in the year 1929 shows 10 factories within the meaning of the Indian Factories Act. These consisted of two Government factories, namely the Public Works Department workshop at Jobra at which the steel and wood work required for the maintenance of the anicuts, locks and canals was turned out, and the workshop attached to the Orissa School of Engineering; two printing presses, one railway workshop, one rice mill, two Dal mills, one match factory and one tannery. In between 1936 and 1947 two factories worth mentioning were established in the district. The first of the two,

a small glass factory at Barang started production in 1937 and the construction of the other factory, viz., the Orissa Textile Mills began at Chaudwar in 1946. The last named factory was the brain-child of the Oriya industrialist of late forties Shri Biju Patnaik who later became the Chief Minister of Orissa. He also promoted another flourishing industrial concern, viz., M/s. Kalinga Tubes Ltd., at Chaudwar which started production of steel galvanised pipes and tubular truss from 1st June, 1956 both for export and for internal marketing. The factory ceased functioning in the early part of eighties due to labour unrest.

One re-rolling mill at Cuttack was established in 1951-52 by another industrialist Shri Naba Kishore Mohanty for production of iron rods, etc. and later sold off as it became sick. The purchaser revived production but subsequently due to labour unrest it again became sick.

POWER

Power supply to the district is being made by three electrical circles of Cuttack, Bhubaneswar and Jajpur Road and the Athagarh Rural Electric Co-operative Society Limited, Athagarh.

The Cuttack town was the only place of the district which was electrified in the year 1931. Initially the power supply to Cuttack town was being managed by the installation of power houses at Ranihat in 1931, Jobra in 1948 and Chaudwar in 1952. The Ranihat power house had a capacity of 1 M. W. which was subsequently enhanced to 4 M.W., the diesel power house at Jobra was having the capacity of 0.75 M. W. whereas the thermal power house at Chaudwar was having 2x1.5 M.W. These three power houses supplied powers to Chaudwar also. But in course of time all these power houses were closed when the supply of power was made available from Hirakud. Presently power supply is made by hydro-electric and thermal power stations through different grid stations such as 132 K.V. sub-stations at Chaudwar, Cuttack, Duhuria, Paradeep, Mancheswar, Jajpur Road, etc.

The Cuttack Electrical Circle controls the Jagatsinghapur Electrical Division for Jagatsinghapur, the Cuttack Distribution Division, Cuttack, the Cuttack Electrical Division for Cuttack and the Kendraparha Electrical Division No. I and No. II for Kendraparha and Marshaghai. The length of the distribution lines of the above divisions except the Divisions Nos. I and II of Kendraparha are 1405.95 km, 453.6 km. and 1737.18 km. respectively. The length of distribution line of the Kendraparha Division Nos. I and II combined is 2958.91 km.

Under this circle, five towns, i.e., Cuttack, Chaudwar, Kendraparha, Pattamundai and Jagatsinghapur and 3615 villages were electrified till 31st March, 1990. The statement showing the consumption of electricity by various consumers in this circle during 1990-91 is given below:

Category	No. of consumers	Units sold
Domestic	107,966	77,916,249
Commercial	20,759	93,378,550
Large-scale Industries ..	66	14,45,87,868
Medium-scale Industries ..	239	60,529,652
Small-scale Industries ..	3,619	
Agriculture/Lift Irrigation ..	4,368	48,047,909
Public Health Department	131	7,756,226
Street lights ..	171	1,987,601
General purpose ..	66	60,691,883
Kutir Jyoti ..	818 (included in domestic category)	
Public Institutions	110,279

The Banki subdivision (excluding all the villages situated on the left embankment of the Mahanadi) of the district comes under the jurisdiction of the Khordha Division, controlled by the Electrical Circle, Bhubaneswar. Till 1961, there was no supply of electricity to Banki. After the formation the Orissa State Electricity Board in the year 1962, it was decided to extend electricity to Banki initially with 33 K.V. from Barang-Naraj line. Finally in February 1963, Banki town was electrified through 33.4 K.V., 250 K.V.A. sub-station.

Apart from the town of Banki, 160 villages were electrified by 31st March, 1990 through 132/33K.V. Khordha grid sub-station with an independent 33 K.V. feeder emanating from grid sub-station to Banki via Baghamari. Total length of the distribution lines in the subdivision is 342.4 km. The area of jurisdiction of the Khordha Electrical Division extends, besides the Banki-I and Banki-II Community Development Blocks also parts of Begunia and Bolagarh Community Development Blocks of Puri district.

The consumption of electricity by the Banki Revenue subdivision for the year 1990-91 is given below:

Category	No. of consumers	Units sold
(1)	(2)	(3)
Domestic ..	5,583	4,689,720
Commercial ..	700	378,920
Industrial ..	90	540,880
Irrigation ..	33	115,515
Lift Irrigation Points ..	85	595,325
Public Health Department ..	10	960,545

The Jajpur Road Electrical Division under the Electrical Circle of Jajpur Road extends its jurisdiction over Jajpur subdivision of the district. Mainly two towns, i. e., Jajpur and Jajpur Road and 1,075 villages were electrified till 31st March, 1990 by this circle.

The consumption of electricity in the Jajpur Revenue subdivision of the district for the year 1990-91 is given below :

Category	No. of consumers	Unit sold
(1)	(2)	(3)
	(1989-90)	(1990-91)
Domestic	25,981	53,781,114
Commercial ..	4,321	1,313,176
Small and Medium-scale Industries ..	873	12,332,176
Large-scale Industries and General purpose	14	173,566,399
Street light ..	60	90,219
Agriculture and Irrigation ..	1,468	9,062,995
Public Health Department ..	10	265,000

The Athagarh Rural Electric Co-operative Society Limited, Athagarh came into being in the year 1974, with its headquarters at Athagarh. Its area of operation extends over the entire Athagarh Revenue subdivision and all the villages of Banki subdivision situated on the left embankment of the river Mahanadi and five villages of Tangi-Chaudwar Community Development Block. The society receives powers from the Orissa State Electricity Board through 33 K. V. feeders, i. e., from Chaudwar 132/33 K. V. A total number

of 390 villages, 46 hamlets and 252 Harijan Bastis and the town of Athagarh were electrified till 31st March, 1991. The length of distribution line was 684.122 km.

The following statement shows the sale of electricity by the society to various categories of consumers during 1989-90.

Category	No. of consumer up to 3/91	Units sold in 1988-89 in lakhs
(1)	(2)	(3)
Domestic	10,176	53.128
Commercial	1,142	7.713
Kutir Jyoti ..	1,520	..
Agriculture ..	365	4.881
Industrial		
Large H. T. ..	2	} 77.591
Large L. T. ..	3	
Medium ..	23	
Small ..	221	
Public Health Department ..	19	0.6959

During 1990-91 the Rural Electric Co-operative Society purchased 4,79,43,000 units of electricity from the State Electricity Board for supply to its consumers.

At present power generation, transmission and distribution in the district of Cuttack is looked after by the Orissa State Electricity Board, and the sources of power supply are the Machhkund, Balimela and Hirakud hydro-power stations and Talcher thermal power station of the state.

MINING

Sukinda valley of the district is the leading producer of chromite ore in the country. The total proof reserve of chromite in the state is of the order of 140 million tonnes. Thus 95 per cent of the reserve is located in the Sukinda valley. Besides chromite, high grade fireclay of Banki subdivision tops in quality in the entire state and caters to the need of many refractory industries located both inside and outside the state. Certain fireclay deposits also occur in the Sadar subdivision which is used for refractory industries.

Iron-ore deposits of Tomka and Daitari (Kendujhar district) with a reserve of 50 million tonnes also meet the requirement of various countries through Paradeep port.

In the field of chromite M/s. TISCO Ltd. were the pioneers in the Sukinda valley and they obtained lease as far back as 1953 from the erstwhile zamindars of Sukinda Estate. This company is also operating the Saruabil Chromite Mines since 1954. Subsequently a number of leases have been held by the Orissa Mining Corporation Ltd. and others.

A statement showing the name of the lessee, name of the chromite (both working and non-working) mines, location, date of execution and lease area is given below.

Name of lessee	Name of Mine	Mineral	Area in hectares	Date of execution
(1)	(2)	(3)	(4)	(5)
WORKING MINES				
1. Misrilal Mines (P) Ltd.	Saruabil Chr. Mine	Chromite	259·000	15-5-1974
2. M/s. TISCO Ltd.	Sukinda Chr. Mine	Chromite	1261·476	12-1-1973
3. M/s O. M. C. Ltd.	Kalarangi Chr. Mine	Ditto	936·220	9-12-1966
4. M/s. O. M. C. Ltd.	Kaliapani Chr. Mine	Ditto	971·245	8-7-1967
5. M/s. O. M. C. Ltd.	South Kaliapani Chr. Mine	Ditto	552·457	22-1-1980
6. M/s. O. M. C. Ltd.	Sukarangi Chr. Mine	Ditto	382·709	29-9-1980
7. M/s. O. M. C. Ltd.	Tailangi Chr. Mine	Ditto	236·738	8-4-1969
8. B. C. Mohanty & Sons (P) Ltd.	Kamarda Chr. Mine	Ditto	107·240	22-2-1968
9. M/s. FACOR Ltd.	Ostapal Chr. Mine	Ditto	72·843	13-8-1985
10. M/s. O. M. C. Ltd.	Daitari Iron Mine	Iron-ore	1812·990	27-1-1966
11. M/s. O. M. C. Ltd.	Tomka Iron Mine	Ditto	1225·027	29-1-1981
12. Smt. S. Sisu	Sukaran Quartzite Mine	Quartzite	87·211	7-8-1978
13. Shri P. N. Sahoo	Salijanga Quartzite Mine	Ditto	43·276	6-6-1981
14. Shri D. B. Naik	Ditto	Ditto	53·317	6-6-1981
NON-WORKING MINES				
15. M/s. O. M. C. Ltd.	Balipadia Chr. Mine	Chromite	185·810	9-9-1970
16. M/s. O. M. C. Ltd.	Kamarda Saruabil Chr. Mine.	Ditto	23·243	29-1-1981
17. M/s. IMFA Ltd.	Chingiripal	Ditto	26·202	5-2-1986
18. M/s. IMFA Ltd.	Kamarda	Ditto	108·860	25-2-1986

Sukinda valley is connected by a 20 km. all-weather road from Mangalpur, a village on Jajpur Road-Bhuban road. It is also connected from Tomka by a 24 km. road. Tomka is located 15 km. away from Daitari and is on the side of the Expressway which connects Daitari Iron Mines to Paradeep port.

The relief of the valley is 160 to 180 metres M.S.L. whereas Daitari and Baliparbat is 400 metres M. S. L. The rock sequence met within the area is detailed below:

Recent	}	Soil-Aluvium, Laterite
		Quartzite, conglomerate
Archean	}	Unconformity
		Quartzvein
		Dolerite
		Granite
		Amphibolite
		Ultrabasic (Gabbro, Peridotite, Nickeliferous unconformity-Cherty-Quartzite, Chrome ore veins)
		Iron-ore Series (Quartzite, Quartz schist, phyllite, Ferrogenous shale)

Chrome ore bodies run as many as 7 bands which is least contiguous along the flanks of the road. The ore is mostly of 2 types, hard lumpy ore at the foothill of Mahagiri and other type is friable ore. It is mined by opencast methods. A number of quarries operate in the leasehold area. Quarries No. 1&2 of Kaliapani chromite mines are 60 metres deep and are the deepest quarries in Asia. The minerals are mined mainly by open cast method and brought to bank to be sorted and screened for sale in the market.

On an average 4 lakh tonnes of different grades of chromite are produced and 3.5 to 3.7 tonnes are despatched to different consuming centres and also to the Paradeep port for export. Out of the entire production about 74 to 75 per cent ore is consumed by various ferro-alloys industries like ferro-chrome plants, charge-chrome plants, refractory plants and chemical industries, etc. within and outside the state.

About, 4,720 persons work in different chromite mines of Sukinda valley and 1,132 persons earn their livelihood from the iron-ore mines of Daitari and Tomka.

Up to 1983, the Orissa Mining Corporation Ltd. and M/s. Tata Iron and Steel Company Ltd. invested Rs.9.42 crores and Rs.83.70 crores respectively for establishment of township, machinery, hospitals, road, etc. and also for development of mines. A chrome ore beneficiation plant in Sukinda mines with an outlay of Rs.24.94 crores for washing 3 lakh tonnes of subgrade chrome ore is being set up by the Tata Iron and Steel Company Ltd.

An one lakh tonne chrome-ore beneficiation plant is being set up at Kaliapani by the Orissa Mining Corporation. One ore handling plant was set up also by the Orissa Mining Corporation for washing and screening iron ore at Daitari (Kendujhar district) having a capacity of 2.5 million tonnes with an approximate investment of 19 crores in the year 1974 which is functioning till date.

Production and despatch of chrome-ore and iron-ore are indicated below :

Name of ore	Year	Production in lakh tonnes	Despatch in lakh tonnes
Chrome-ore	.. 1983	1.75	1.79
	1984	2.45	1.94
	1985	3.51	3.96
	1986	4.28	3.71
	1987	4.13	3.36
Iron-ore	.. 1983	2.97	1.92
	1984	2.28	2.50
	1985	2.49	2.95
	1986	2.72	2.73
	1987	3.94	3.00

Mining revenue (in lakhs of rupees) of the district for five years is given below:

Year	Revenue	Cess
1983-84	106.59	57.74
1984-85	90.27	93.11
1985-86	220.18	115.90
1986-87	512.25	159.14
1987-88	431.56	246.07

In the field of ferro-alloys, there is one ferro chrome plant operating at Jajpur Road of the district, apart from two charge chrome plants which are located in the adjoining districts of Baleshwar and Kendujhar. Another charge chrome plant at Chaudwar of this district has also been established.

The Sukinda valley possesses the only known commercial deposits of nickel ore in the country. There are prospects, that some ferro-alloys industries like sponge iron plant and alloy-steel industries may come up in the near future.

INDUSTRIES

Large and Medium Scale Industries

Till Independence no major or medium industry was established in the district except a small glass factory which was operating at Barang since 1937. The Orissa Textile Mills Ltd. started production at Chaudwar in 1949. Since then a number of major and medium industries have been set up in the district. An account of these industries is given below.

Orissa Textile Mills Ltd., Chaudwar

The Orissa Textile Mills which was established at Chaudwar in 1946 started production in 1949. This mill is running with a capital investment of Rs. 74.12 lakhs as on the 31st March, 1991. It provided employment to 4,887 persons, both skilled and unskilled. Cotton, viscose and staple fibre procured from Orissa and some other states like Punjab, Maharashtra, Gujarat and Andhra Pradesh are usually used as raw materials. During the years 1988-89, 1989-90 and 1990-91, this mill utilised 43.06 lakh kg., 44.03 lakh kg. and 49.70 lakh kg. of raw materials respectively. It produced yarn and fabric as the finished products in the form of poplin, long cloth, bedsheets, drill, *dosuti*, canvas, cambric, etc. Marketing of these finished products is made throughout the country.

Shree Durga Glass Private Ltd., Barang

Shree Durga Glass Private Limited, Barang was established in the year 1936. The paid-up capital of the unit is Rs. 33.5 lakhs. It has provided employment to 639 persons, both skilled and unskilled. This industry is operated both by electricity and manual labour. Soda ash, silica, sand, quartz, arsenic powder, sodium nitrate, broken glass, etc. are used as raw materials for its production. All these raw materials are procured from different parts of South India, besides Rourkela, Barbil and Allahabad (Uttar Pradesh). A few of the materials are also imported from abroad. During the year 1987-88, 1988-89 and 1989-90, this factory utilised raw materials of 303 metric tons, 2,657 m.t. and 4,018.5 m.t. respectively. It produced finished articles like tumblers and lampwares, which occupy a sound marketing base throughout the country.

Indian Charge Chrome Limited, Chaudwar

The Indian Charge Chrome Limited was established in the year 1982, after taking over M/S. Kalinga Tubes Ltd. set up by Sri Biju Patnaik. It is a 100 per cent export-oriented unit, promoted by the Indian Metals & Ferro Alloys group of industries. It is equipped with a 48 MVA furnace supplied by ELCEM, Norway and a 108 M.W. Captive Power Plant to ensure uninterrupted production. Rs.389 crores were spent as on the 31st March, 1991 towards its capital investment. It provides employment to 900 persons. The entire unit is operated by electricity. The plant used the raw materials like coal, chrome-ore, reductant, carbon paste, quartz, bauxite, etc. some of which are procured inside the country whereas others are imported from foreign countries like Germany, Norway, Turkey, Australia, etc. The quantities of raw materials consumed by the factory during the year 1988-89, 1989-90 and 1990-91 were 16,344.9 m.t., 2,53,230,389 m.t. and 5,43,654,986 m.t. respectively. It produced power of 27,619.4 MWH, 3,08,448.2 MWH and 5,03,799.7 MWH during the above years respectively. It also produced ferro-chrome of 80 m.t. and 20.105 m.t. during 1989-90 and 1990-91 respectively. The marketing of the products are done at Captive Consumption, Indian Metals & Ferro Alloys Ltd., Orissa State Electricity Board, Tata Iron and Steel Company (conservation job) and also exported to Krupp, Germany.

Electricity generation from the power plant, after meeting the captive requirement, is supplied to the State Electricity Board's grid.

Paradeep Phosphates Ltd., Paradeep

Paradeep Phosphates Limited (P.P.L.) is located at Paradeep about 80 kilometres from the city of Cuttack. It was established as a joint venture of the Government of India and Island Republic of Nauru in 1981. The Phosphatic fertiliser complex which is based on world's latest fertiliser technology has been built in two phases. The first phase of the project comprising diammonium phosphates (DAP) plant of capacity 2,400 m. t. per day (7.2 lakh m. t. per annum) along with a score of necessary off-site facilities was successfully commissioned in 1986, whereas the second phase was commissioned in 1990 which comprised a phosphatic acid plant of capacity 750 m. t. of P_2O_5 per day (2.25 lakh m.t. per annum), sulphuric acid plant of capacity 2,000 m. t. per day (6.6 lakh m. t. per annum) and captive power plant of capacity 32 M.W.

The total project cost was Rs. 630.82 crores and the authorised capital is Rs. 120 crores. The total enrolment of employees of the plant as on the 1st July, 1991 was 875 including 487 non-supervisory staff. The raw materials used and the quantities of fertilisers produced from 1988-89 to 1990-91 are as follows :

Year	Raw materials (in m.t.)	Quantities produced (in lakhs m.t.)
(1)	(2)	(3)
1988-89	.. 5,41,000	6.265
1989-90	.. 2,14,000	2.470
1990-91	.. 3,26,500	3.289

The production is marketed throughout the country. The total sale of fertiliser touched a record of 7.70 lakhs m. t. with a turnover of about Rs. 320.82 crores during 1990-91.

Shree Sarala Weavers' Co-operative Spinning Mill Limited, Nausira, Tirtol

Shree Sarala Weavers' Co-operative Spinning Mill, which was established in the year 1981 at Nausira, Tirtol started production from October 1985. Its capital investment was Rs. 528.20 lakhs upto the end of 1990-91. It has provided employment to 1,285 persons

both skilled and unskilled. This mill is controlled by a Board of Directors and has produced yarn of 25.24 lakh kg., Rs. 25.35 lakh kg. and 24.72 lakh kg. during the years 1987-88, 1988-89 and 1989-90 respectively.

Konark Jute Ltd., Dhanmandal

The Konark Jute Limited, Dhanmandal incorporated on the 27th January, 1975 is the outcome of a joint venture agreement between the Industrial Development Corporation of Orissa Ltd., Bhubaneswar and the National Agricultural Co-operative Marketing Federation of India, New Delhi. This is the first and the only modern and integrated jute mill of the State of Orissa. This Company functions under its Board of Directors consisting of 13 members in the maximum. The total employees on regular roll of the company including both technical and non-technical is 1,862 persons. Jute, the basic raw material for the industry, abundantly grows in Orissa. When the jute is not locally available, the factory procures the same from other states like Andhra Pradesh, West Bengal, Bihar and Assam. The raw jute consumptions of this electrically driven factory during the period 1988-89, 1989-90 and 1990-91 were 8.844 m. t., 7,806 m.t. and 7,271 m. t., and the finished products for these years were 8,755 m. t., 7,657 m.t. and 7,427 m. t. respectively. The products of the factory are supplied to different cement factories, rice mills, private customers, etc. in the state. Sometimes these are also sold to outside states like Madhya Pradesh. The average sales range from 850 to 900 m.t. per month.

The company has incurred huge losses so far (1990-91) owing to non-remunerative sale price, low productivity, *intra* and *inter* union rivalry, power crises, absentism, etc. However, the factory is making all efforts to explore market within the state and outside to get higher sales revenue in order to reduce the losses.

Shree Jagannath Weavers' Co-operative Spinning Mills Ltd., Nuapatna

Shree Jagannath Weavers' Co-operative Spinning Mills Limited, Nuapatna (Tigiria) of Cuttack district was established in the year 1980 with a capital investment of Rs. 904 lakhs. The mill which is completely run by electricity has given employment to 937 persons both skilled and unskilled.

A Board of Directors manage the mills. It manufactures cotton yarns of 40s, 60s, 80s and 100s count with single and double yarn. It has the facility of bleaching, dyeing and mercerizing. The quantity of goods produced by the mills during 1988-89, 1989-90 and 1990-91 were 7.28 lakh quintals, 9.47 lakh quintals and 9.62 lakh quintals respectively. The products of the mills are sold to handloom weavers, Apex Societies Corporations of the State as well as outside the State and also to private parties. The mill also has started exporting yarn to Bangladesh since 1985.

Ferro Chrome Plant, Jajpur Road

The Ferro Chrome Plant, Jajpur Road with a licensed capacity of 10,000 m. t. of low carbon ferro chrome (L.C.F.C.) was commissioned in 1969. Besides L.C.F.C., it produces H.C.F.C. Ferro Chrome is an alloy of iron and chromium and is used in the manufacture of stainless steel and special steels. Since 1969 the plant has exported ferro chrome valued at Rs. 157.00 million to countries like U.S.A., Japan, Italy, Korea, Australia, Rumania and Philippines. With a view to overcome the perennial power problem, the unit is setting up a captive power plant with a capacity of 9.5 M. W. with an investment of Rs. 150.00 million to be commissioned in 1991-92. The capital investment in this plant is Rs. 234.64 million. 687 persons are directly employed in it. The present annual net turnover of the plant is Rs. 300 million approximately.

Konark Ceramics Private Limited, Khuntuni

This was established at Khuntuni in the year 1964 with a capital investment of Rs. 10 lakhs. It provides employment to 61 persons both skilled and unskilled. Fireclay, china clay, quartz and felspar are used indigenously for production like ceramic and refractory goods as per ISI specifications. It is marketed through the wholesale dealers and also sold to private consumers.

Eastern Metals and Ferro-Alloys Limited

This was established in the year 1981 at Haridaspur with a capital investment of Rs.92 lakhs. The factory provides employment opportunities to 99 persons including officials and daily workers.

Aluminium ingots, chromite ore, manganese ore, ilmenite sand, vanadium sludge, moly oxide and pyrochlore concentrate are used as raw materials in this factory to produce ferro-alloys like ferro-titanium, ferro-molybdenum, ferro-manganese, ferro-vanadium, low carbon ferro-chrome and ferro-aluminium as finished items. This factory, in which 8,881·083 m. t. of raw materials were used during the last three years from 1988 to 1991, is run by electricity and also by manual labour. The factory manufactured 1,569·309 m. t. finished goods during the said years. The consumers of these products are the steel plants and ordnance factories located in different parts of the country and the Bharat Heavy Electricals Ltd. However, efforts are being made for diversification of its products of higher grade for export.

East Coast Breweries & Distilleries Ltd., Paradeep

The company was an assisted unit of the Industrial Development Corporation of Orissa which started commercial production during July 1979. The management of this unit was taken over by IDCOL in March 1983. The annual capacity of the plant is to produce 60,000 hectolitres of both light and strong beer. The unit has maintained high quality of its products which has been well accepted in the market in all states. After the management was taken over by IDCOL, its performance both physical and financial has improved considerably. Capital investment in this unit is Rs. 42·2 million. About 153 persons are directly employed in it. The present annual net turnover is Rs. 80 million.

Badamba Co-operative Sugar Factory, Badamba

A co-operative sugar factory at Badamba was established in 1983-84 with an installed capacity of 420 m. t. of sugar per 8-hour shift. The working capital and the share capital of the factory which benefited 4,462 sugar-cane growers of 343 co-operative societies were Rs. 13,25,93,000 and Rs. 6,57,00,000 respectively. Before the factory was leased to a private company in 1990-91, 56 persons were appointed on regular basis, in addition to a number of casual labourers engaged in the factory. During 1989-90 the factory produced 2,000 m. t. of sugar and the quantities of sugar sold was valued at Rs. 7 lakhs.

Ballarpur Industries Limited, Chaudwar

The Titagarh Paper Mill located at Chaudwar was established in 1960 with an annual capacity to produce 18,000 tonnes of paper and pulp approximately. 1,500 employees were working in this unit. But

this mill became a sick unit and the production was totally stopped for some years. On 1st May, 1991 it was taken over by Ballarpur Industries Limited. The production has started again.

Orissa Cotton Mills, Bhagatpur, Cuttack

The Orissa Cotton Mills, Bhagatpur was originally initiated by Pandit Godabarish Mishra, one of the founding fathers of Orissa. This mill was started in the year 1946 and worked upto 1954 and since then it was closed till 1962 and again started functioning upto 1965. Thereafter, it remained closed until it was taken over by the Government of India in 1972 and finally became nationalised with effect from 1st April, 1974. It started production in December 1973, under the National Textile Corporation Ltd., which is running till date. Till 31st March, 1991, this establishment had invested Rs. 577.78 lakhs and has provided employment to 880 persons both skilled and unskilled as on 31st July, 1992. The quantity of raw materials consumed during last three years 1989-90, 1990-91 and 1991-92 are 10.73 lakh kg., 10.51 lakh kg. and 10.85 lakh kg. of cotton respectively. It also produced finished materials of 9.38 lakh kg, 9.18 lakh kg, and 9.58 lakh kg. of yarn respectively in the above years.

Small-scale Industries

Although Cuttack, the headquarters of the district, has remained a place of commercial importance since long, the industrial development of the district in all sectors till Independence was very insignificant. During the last forty years, government have taken various measures for infrastructural development and to motivate people for setting up small-scale industries. Industrial Estate Programme started towards the end of the 2nd Five-year Plan with objective of locating industrial centres in important places of the district. Supply of readymade factory sheds were the direct incentive to the entrepreneurs to set up small-scale industries in the industrial estates. The District Industries Centres were formed for the districts on 1st July, 1978 to act as the nodal point for assisting the entrepreneurs in supplying all services and supports required for promotion, establishment and follow up action in respect of small and village sectors under one roof. Before the establishment of the District Industries Centre, the number of small-scale industries (S.S.I.) in the district was 2,539. With the assistance of the District Industries Centre the industrial activities increased considerably. By the end of 1988-89 the number of small-scale industrial units nearly doubled with a total investment of Rs. 6,304.88 lakhs. These units generated employment for 33,731 persons.

Till 31st March, 1990 there were 6,921 small-scale industries of various categories in the district as described below:

Food and Allied Industries

Processing of paddy, wheat, oil-seeds and establishment of bakery, rice hullers, Atta-Chakies, preparation of pickles, snacks/confectioneries, etc. fall under the category of food and allied industries. The total number of such units set up under this category during the above period stood at 652 with total investment of Rs. 967.81 lakhs. These units provided employment to 4,293 persons and are mainly concentrated in urban and semi-urban areas of the district.

Chemical-based Industries

Various items like homoeopathic dilution, Ayurvedic medicine, acids, phenyl, paints and chemicals, candles, soaps, industrial grease, sodium starch, Gudakhu, etc. are manufactured under the category of chemical-based industries. The total number of such industries were 227 with a capital investment of Rs. 612.60 lakhs. These industries, mainly located at Cuttack, Jagatpur, Chaudwar, Paradeep, Jakara, Banki, Athagarh, Kendraparha, etc. generated employment for 1,473 persons.

Electricals and Electronic Industries

Manufacture of various electrical fittings such as electrical bulbs, power and distribution transformers, repair of electrical appliances, T.V. antenna, tape-recorder, radio, storage of battery come under the category of electrical and electronic industries. The total number of such industries in the district till 31st March, 1990 was 78 with a capital investment of Rs. 256.74 lakhs. These industries which provided employment to 582 persons are mainly located at Cuttack, Jajpur, Paradeep, Jagatpur, Kendraparha, etc.

Engineering and Metal-based Industries

The engineering and metal-based industries, mainly located at Cuttack, Jagatpur, Paradeep, Pratapnagar, etc. are ancillary in nature. Articles like fabricated gates and grills, agricultural equipments, steel and aluminium utensils, M.S. rods and rolling materials, C.I. gas light engineering works, etc. are manufactured by these industries. These industries are 698 in number with a capital investment of Rs. 1,221.65 lakhs and have provided employment to 4,738 persons.

Forest and Food-based Industries

Though the district of Cuttack is poor in forest, still the timbers coming from the adjacent districts have led to the growth of a large number of forest-based industries. There are 870 such type of industries in the district which provide employment to 5,219 persons. These industries located in different parts of the district were established with a capital investment of Rs. 502.08 lakhs.

Glass and Ceramic Industries

The glass and ceramic industries are mainly manufacturing sanitary wares, wash basins, crockeries, refractory bricks, articles on glass, etc. These are mainly located at Cuttack, Athagarh, Baranga, Chaudwar, Jagatpur, etc. The total number of such industries were 321 in number with a capital investment of Rs. 391.52 lakhs and employment potentiality for 4,702 persons.

Livestock and Leather Products Industries

This district has got sufficient livestock resources. Various industries with leather as basic raw material have been established. Manufacturing of shoes, Chapals, the repairing of shoes and tanning of leather come under this type of industries which are mainly located at Cuttack, Jajpur, Kendraparha, Jagatsinghapur, etc. There are 49 such industries in the district giving employment to 400 persons and have been established with a capital investment of Rs. 100.30 lakhs.

Paper and Paper Products Industries

Manufacturing of paper, paper bags, printing and binding of books, paper cups, paper plates, etc. are placed under this category of paper and paper products industries. The total number of such industries in the district was 100 in which a sum of Rs. 171.24 lakhs has been invested. The industries provided employment to 679 persons.

Textile Industries

Small-scale industries engaged in various hand-loom products like *lungi*, *gamuchha*, *saree*, *Janata dhoti*, etc., and various power-loom products come under the category of textile industries. The total number of such units working up to 1989 was 696 with a capital investment of Rs. 624.60 lakhs. The industries provided employment to 4,890 persons,

Rubber and Plastic Industries

The small-scale industries engaged in tyre retreading, resoling, manufacturing various rubber products, plastic pens, plastic combs, P V C cables, fishing floats, toys and baskets, polythene bags, plastic container, spectacles-frames fall under the category of rubber and plastic industries. There were 57 such industries in the district with a capital investment of Rs. 261.95 lakhs. It provided employment to 378 persons. All these industries were mainly located at Cuttack, Jagatpur, Paradeep, Kendraparha, Jajpur, Athagarh, etc.

Repair and Servicing Industries

Servicing of auto engines, body building of heavy motor vehicles like buses and trucks, repairing of bi-cycles, rickshaws, welding of motor vehicles, spray paintings, etc. are included in the repair and servicing industries. The total number of such units established in the district were 646 with a capital investment of Rs. 452.23 lakhs. These industries mainly located at Cuttack and other urban areas of the district generated employment for 975 persons.

Miscellaneous Manufacturing Industries

Industries engaged in manufacturing coal briquettes, corrugated card board boxes, P. S. C. Poles, stone crushing, block printing, etc. come under the category of miscellaneous manufacturing industries. There are 621 such units established with a capital investment of Rs. 742.16 lakhs. These industries provided employment to 3,402 persons.

Source of raw materials supplied to the Industries

The raw materials are procured from various sources. In case of indigenous raw materials, the same are directly procured by the entrepreneurs. Certain scarce raw materials are procured by the Orissa Small Industries Corporation (O. S. I. C.) and distributed to the deserving small-scale industrial units on the recommendation of the General Manager, District Industries Centre. The raw materials required to be imported, are procured through the Joint/Assistant Controller of Imports and Exports.

Hand-loom Weaving

Hand-loom industry in the district has its own origin and dignity. The fashionable silk tussar, *pata* and *bapta* sarees of Nuapatna and Maniabandha area of the district have earned enviable reputation and

fame for texture, modernity and durability. The multi-coloured sarees of Ragadi, Badabag, Tulasipur and Gopalpur occupy a place of prominence in the hand-loom trade.

The weavers of Gopalpur area have an ingrained artistic knowledge in the weaving of silk and *pata matha* sarees like the weavers of Nuapatna areas of Tigiria Community Development Block. Most of the weavers of Nuapatna, Maniabandhha, Birabarpur, Muktanagar, Abhimanpur are locally known as 'Sarak' whereas the weavers living in Adhainundi, Kanapur, Gambilo of Narasinghapur Community Development Block, and Tulasipur, Kalapathar and Jagannathpur of Banki Community Development Block are locally known as 'Rangani'. The weavers of Nuapatna area are Buddhist. The 'Sarak' and 'Rangani' weavers are vegetarian. Some of the weavers living in Jajpur and Jagatsinghapur subdivisions are also vegetarian.

In this district the weaving industry was a caste profession of Saraks, Tantis, Patras and Ranganis. But now other caste people are also engaged in this industry. During the pre-Independent period the rural artisans were weaving plain fabrics through their throw-shutter pit-looms. Gradually this system was replaced by fly-shutter frame looms. To safeguard this age-old industry, steps have been taken to organise more weavers' co-operative societies so that all types of Government aids, subsidies and assistance can effectively be provided to the member-artisans and their products can properly be marketed. In order to boost up the productivity and scope of product range, time-saving devices such as dobby, jaequard and take-up-motion have been introduced.

There were 111 hand-loom weavers' co-operative societies in the district with 17,186 weavers enrolled as members as on the 31st March, 1990. These societies, which employed 26,088 persons, were established with a capital investment of Rs. 747.32 lakhs. The quantity of raw materials consumed by these societies during the years 1987-88, 1988-89 and 1989-90 were 16.93 lakh kg., 16.62 lakh kg. and 11.34 lakh kg. respectively. They produced 135.47 lakh sq. metres, 132.94 lakh sq. metres and 90.75 lakh sq. metres of cloths as finished goods during these 3 years respectively.

There were 13,044 looms in operation out of which 11,783 looms had adopted modern techniques by 31st March, 1990. The main centres of activity of these co-operative societies are Nuapatna, Kendraparha and Chhatiabata.

To know the socio-economic condition of the weavers, a National Hand-loom Census was undertaken in the year 1987-88 by the Central Government through respective State Governments. From the report published by the Government of India, it is found that there were 12,716 weavers households with looms, 1,073 households without looms and 65 non-household units in the district. The total weaver population and the total looms position of this district were 76,113 and 20,139 respectively. Concentration of this community is mostly found in Jagatsinghapur, Raghunathpur, Rasulpur, Tigiria, Narasinghapur and Banki Community Development Blocks of the district.

The Orissa Hand-loom Weavers' Co-operative Ltd., procures the products from the Primary Weavers' Co-operative Societies to market them through its sale outlets situated in the urban and semi-urban areas, both inside and outside the district.

Moreover, the fashionable hand-loom sarees of Nuapatna and Maniabandh with its superb and attractive designs, texture and colour is having worldwide appreciation. It has a good market in different metropolies of the country and is sometimes exported abroad. Measures like organization of exhibitions allowing rebates on sale of hand-loom clothes on special occasions, are being taken to popularise the hand-loom fabrics. In spite of all efforts by the Government regarding financing the artisans, the non-availability of specific and adequate raw materials, lack of marketing facilities, transportation difficulties, insufficient technical know-how, linking of products with marketing and want of consumption pattern survey at regular intervals, constituted largely for non-improvement of the economic status of the artisans. The wages earned by the weavers are not adequate to maintain their day-to-day life. The poor and illiterate weavers of the district are ignorant about the financial pattern and schemes of the government lunched from time to time. The keen competition with mill-made clothes and power-loom products also poses serious challenge to the growth and development of hand-loom industry.

In the following statement is given information about the name and location, year of establishment, line of operation, quantities of finished products, capital investment, persons employed and management of the power-looms of the district.

	Baladevjew Power-loom W. C. S., Kendraparha	Chhatia Weaving Mill, Chhatia	Sri Parbati Power-loom W. C. S., Rahama	Maa Bauli Power-loom, W. C. S., Athagarh
(a) Year of establishment	1959	1958	1988	1988
(b) Line of operation	Operated by Electricity	Operated by Electricity	Operated by Electricity	Operated by Electricity
(c) Finished products (lakh. m. t.) :				
1987-88	2.06	6.61
1988-89	0.10	12.28
1989-90	13.62	14.45	10.66	..
(d) Capital Invest- ment (Rs. in lakh) (1989-90)	27.33	8.20	63.00	58.00
(e) Persons employed	200	200	300	300
(f) Management	Handed over to O. S. T. C. on lease basis with effect from 25.2.1989	Handed over to C. S. T. C. on lease basis with effect from April 1984	Co-operative	Co-operative

Panchayat Industries

Under the Panchayat Industries Programme 10 units were set up in 1961-62 by the State Government out of which three Panchayat Samiti Industrial (P.S.I.) units are now functioning under the Cuttack District Industries Centre. The details of these industries are given below:

Name of the Co-operative Society	Share Capital invested by Government	Working capital loan granted
1. Salepur Wood Works (P.S.I.)	1,42,000	1,26,277.85
2. Madhusudan Blacksmith Industrial	1,60,000	35,678.12
3. Binishpur Oil Mill (P.S.I.)	2,40,200	..

Cottage Industries

The district enjoys a pride of place in the state for its rich traditional handicrafts. The popular crafts on silver filigree, golden grass and tie and dye fabrics are widely appreciated. These crafts have thrived through the ages for their artistic appeal and traditional characteristics. The clay modelling craft has gained popularity due to the matchless skill of the clay modellers in giving lively forms and shapes to various gods and goddesses during cultural and religious fairs and festivals like Durga Puja, Kali Puja, Bali Jatra, etc. The other important handicrafts of this district are the horn craft, wood carving, costumes, dress and jewellery for use in theatres and operas, *pattachitra*, tie and dye textile, paintings, stone carving, papier-mache, brass and bell-metal works, Dhokra castings and cane and bamboo works.

The village industries viz., carpentry, blacksmithy, pottery, brick making, leather, cane and bamboo, Gur and Khandsari exist in almost all parts of the district. The artisans engaged in these industries use the raw materials which are locally available and they depend solely on the local market for marketing their products. They use the traditional tools and implements. These village industries are being patronised by the State Government and the Orissa Khadi and Village Industries Board for their improvement. Under the Rural Industries Programme of Government, the village artisans are imparted training to upgrade their skill. They are trained to use modern sophisticated tools and implements. Financial assistance in form of loans and grants are given by the Khadi and Village Industries Board to the village artisans at a low rate of interest. Both capital expenditure and working capital loans are granted in favour of individual artisans to set up home units.

Block-level Artisan Industrial Multipurpose Co-operative Societies have been functioning in all the Community Development Blocks of the district and financial assistance is granted to the artisans of different category through the co-operative societies. The societies also arrange to supply raw materials to the artisans and take up marketing of the finished products. The artisans are also being assisted under the Integrated Rural Development Programme to set up cottage industries units in rural areas.

Silver Filigree Works

The district has a long tradition of meticulous and sophisticated craftsmanship in silver filigree works, which are highly appreciated in national and international markets mainly for their superb designs. They are presented as souvenirs and gifts by important functionaries

including the State Government to persons of national and international eminence visiting the state. The artisans engaged in this craft are concentrated in Cuttack city and its near-by villages. This craft had sufficient encouragement during the Mughal period but subsequently suffered for lack of encouragement and marketing facilities. Most of the artisans engaged in the trade had to seek other avenues for their livelihood under difficult conditions. In 1952, the State Government took a bold step to ameliorate the conditions of these artisans by bringing them in its co-operative fold.

It has been estimated that about 5,000 filigree artisans are now engaged in the craft. Attempts have been made to bring them to the co-operative fold by organising more co-operative societies and strengthening these societies by supplying raw materials and providing market facilities. The number of filigree societies now working in Cuttack city and near-by areas is given below:

Sl. No.	Name of the Co-operative Society	Membership (No.)	Share capital investment (Rs.) (4)	Other arrangements received from Government (Rs.) (5)
(1)	(2)	(3)		
1.	Orissa Filigree ..	187	84,600	9,700
2.	Jaganath Filigree ..	50	11,250	5,400
3.	Shriram Filigree ..	12	2,650	4,500
4.	Shri Maa Chandi Filigree	20	4,500	5,400

Horn Craft

Horn work is another important craft of Cuttack city. More than 200 artisans are engaged in this craft in the city itself. Varieties of fancy articles, utility articles and decorative pieces are made of horn. The plastic industry has very badly affected this craft. But on account of artistic and durable nature, there is great demand for these products in and outside the state. One co-operative society under the name "Utkal Gaurab Madhusudan Co-operative Horn Works Ltd." is functioning in Cuttack since 1973. The Cuttack Gramodyog Marketing Co-operative Society Ltd. and the Orissa Co-operative Handicraft Corporation help in the sale of these products.

Wood Carving

Even though the Orissan style of wood carving is widely practised in this district, its products have a special attraction for their modern design and lively touch. The artisans working in this craft live in Cuttack city, Barambagarh, Gopalpur, Sankhameri, Maniabandha, and in Kendraparha and Sukinda areas. About 200 artisans are reported to have been engaged in the craft out of whom at least 25 belong to very skilled category.

Theatrical Dress and Jewellery

The artists engaged in making theatrical dresses and jewelleries procure raw materials from Calcutta and produce theatrical dresses and jewelleries as per the requirement of opera parties. The artisans who are few in number and mainly concentrated in Cuttack city find engagement in this craft all the year round.

Pattachitra

Patta painting is a unique art of Orissa having some concentration in the district. The artisans reside in Manapur near Tigiria, Champatipur near Sampada and Badamba. They depict through beautiful colour combination gods, goddesses and mythological anecdotes. The raw materials required for the craft are tamarind seed paste, waste cloth and different colours which are locally available.

Clay-toy and Statuary

The clay toy and statuary industry of the district is famous for its artistic works. The artisans live both in urban and rural areas of the district and make very attractive life-like toys which have a great demand throughout the state. The toy makers have inherited the art by tradition. They get seasonal work during festivals like Durga Puja, Kali Puja, Ganesh Puja, etc. The statuary is one of the impressive items of handicrafts in the district. Statues of gods and goddesses are installed in the form of idols during festive occasions. It is this tradition of creation and appreciation that has kept up this art industry alive.

Tie and Dye Textile Painting

The artisans (weavers) practising tie and dye textile paintings are found mostly in Nuapatna, Tigiria, Maniabandha and Badamba areas of the district. This is a traditional industry. Weavers' co-operative societies have been organised among the artisans to develop the craft.

Stone Carving

The traditional stone carving of Orissa has its linkage at Lalitagiri and Sukhuapada. The artisans of Lalitagiri are better trained in giving shape to statues. At Sukhuapada stone ware articles are made, Two co-operative societies have been organised at these places to assist the artisans to improve the craft. About 80 artisans are engaged in this craft.

Papier-mache

The main raw material for the papier-mache craft is waste paper pulp. Temple figures, animals and modern statues are made from this raw material mostly for the purpose of decoration. The artisans of this craft mainly reside in Cuttack city, Badamabagarh, Bindhanima and Community Development Block areas of Raghunathpur and Bari. Beautiful papier-mache articles are made in the Orissa Poor Industries Cottage, Cuttack. The artisans get part-time employment in the craft. The unbreakable toys produced by the artisans in Orissa Poor Industry Cottage are very famous in and outside the State.

Brass and Bell-metal

The artisans of this industry are concentrated at Baidyrajpur (Jeypur) Bindhanima (Tigiria), Bhattimunda, Ganraba and Kanpur villages. They produce bell-metal utensies and decorative items in their traditional style and sell the products locally. The Bell-metal Industrial Co-operative Societies have been organised in the district and about 1,500 artisans are now engaged in the craft. The industry provides employment to the artisans throughout the year.

Dhokra Casting

Dhokra casting is a tribal craft. On account of its primitive nature the Dhokra articles have export demand. The artisans concentrate at Badasinga of Badamba and Narasinghapur areas. The articles are sold through the Orissa Handicrafts Co-operative Corporation,

Golden Grass Works

Expression of art through golden grass is a speciality of the district. This craft is popular among ladies and children. The weed used as raw material is generally available in water-logged low-lying areas of Kendraparha area. The craft is prevalent in coastal belt especially in Gadamadhapur, Kujang, Jajpur and Kendraparha areas. About 500 artisans are partly employed in this craft. The ladies in their leisure time make the articles of golden grass in their homes.

These products have export potentiality and are channelised for sale through the Orissa State Handicrafts Co-operative Corporation Ltd., Bhubaneswar and private traders. There is also demand for the products in local markets inside the state. Financial assistance is being given to the co-operative societies organised among the artisans. Two production centres have been set up at Jajanga and Gadamadhpur to supply raw materials to the artisans and to collect the finished articles for sale through the Orissa State Handicraft Corporation Ltd., Bhubaneswar. Two handicraft schools are functioning at Samalpur and Jaganathpur near Kendraparha to impart training to the girls in golden grass craft. The intake capacity of these two schools is 40 per annum.

Cane and Bamboo

The bamboo articles are meant mostly for domestic purposes. The traditional cane and bamboo artisans are widespread in the district. Government crafts school has been set up at Ghasiput in Banki-Dampada Block to train up children above the age of 14 years in the craft. The weaker sections of the society usually take up this craft for their livelihood. The artisans of Kendraparha, Patamundai, Banki-Dampada areas produce cane and bamboo baskets, cane sofa sets, etc. for domestic use.

Carpet Weaving

Among the new crafts introduced in the district, woollen carpet weaving is significant. Training centres have been organised in Telengapentha, Tirtol, Raghunathpur, Rahama, Baranga, Kantapada and Rajkanika to provide training to local people especially the ladies in woollen carpet weaving with technical collaboration with M/s. Triveni Carpets, India.

About 150 artisans are now engaged in producing woollen carpet of high artistic design of export value. The products get marketed through the Triveni Carpets, India. This new craft has gained popularity among the rural women folk. Co-operative societies have been formed in each of the above places taking the passed out trainees as members of these societies. Government assistance in shape of share capital contribution and managerial subsidy is being provided to strengthen the activities of these societies.

Coir Industries

Cocoanut cultivation exists mostly in the coastal area of Jagatsinghapur and Kendraparha subdivisions of the district. In other two subdivisions i.e., Cuttack Sadar and Jajpur, cocoanut cultivation is also fast developing. It is estimated that about 6,85,700 cocoanut trees exist in the district. The subdivision-wise break up in production of cocoanuts is given below:

	Nos.
1. Jagatsinghapur Subdivision	6,901,000
2. Kendraparha Subdivision	5,900,000
3. Cuttack Sadar Subdivision	4,765,000
4. Jajpur Subdivision	1,538,000
5. Banki Subdivision	466,000
6. Athgarh Subdivision	1,000,000
	20,570,000

Out of the total production, about 40 per cent of cocoanuts are used at its tender stage for 'drinking purposes. The husks of mature cocoanuts are suitable for the coir industry. Though this is not a traditional industry of the district, it has wide scope for development. Basically this cottage industry is labour-intensive and it provides ample opportunity to the rural women, particularly weaker sections of the community to earn their livelihood at their homes. Coir spinning and rope making are very popular among them. The coir yarn which is being produced by hand spinning or by using wooden or steel Charakhas is utilised in making coir ropes, door mats, mattings, sustained coir, etc. These products have a good market within the district as well as outside the district.

In this coir industry, Cuttack occupies second position in the state next to Puri district. The industry is now fast developing both in private and co-operative sectors. Keeping in view the potentiality for the development of coir industry in the district, training is being imparted under

TRYSEM and other schemes. The following training centres on coir were functioning in the district during 1990-91.

Name of the Institution	Year of starting	Persons trained so far
1. Alanahat Coir Training-cum-Demonstration-cum-Service Sub-Centre, At/Po. Alanahat	1979-80	130
2. Vocational Training Centre, Baranga	1985-86	82

Training is also imparted under different programmes/institutions like TRYSEM & Coir Field Training Centres of Coir Board, etc.

The following small-scale industries on coir have been set up in the district. These industries cater to the needs of basic raw materials (i. e. coir fibre) by the cottage units.

1. Sarala Coir Unit at Balitutha (Erasama Community Development Block)
2. Saraswati Coir Rope Unit, At/Po-Sikudi (Rajakanika Community Development Block)
3. Unique Coir Rope Unit at Majuraj (Kantapada Community Development Block)
4. Rebraj Coir Industry at Kesharpur (Derabis Community Development Block)
5. Mohanty & Sons, Chandol (Salepur Community Development Block)
6. Dipti Coir Unit at Gopalpur (Balikuda Community Development Block)

Under co-operative fold, 16 Coir Industrial Co-operative Societies are now functioning with a total membership of 3,660. Government assistance in shape of share capital investment, managerial subsidy, modernisation of machinery and construction of godown-cum-show room is being provided to the Coir Industrial Co-operative Societies. Coir Board is also supplying improved tool-kits to trained persons and investment subsidy to the registered coir units. Industrial units developed under small-scale industry sector, get 25 per cent subsidy from the Coir Board on fixed capital assets and enjoy other incentives admissible to small-scale industries.

Ancilliary Industries

Large and medium scale industries before and after their set up require building materials, spare parts of machinery and other services which the ancilliary industries supply. In case, such industries have not been set up, they are encouraged at a later stage.

Though remarkable achievements have been made in setting up small-scale ancilliary industries in the district, a proper linkage with the requirements of large and medium scale industries was not attempted until recently.

A list of some small-scale ancilliary industries is given below:

Sl. No.	Name of Units	Items
(1)	(2)	(3)
1.	M/s. Manishree Refractories & Ceramics, Industrial Estate, Cuttack	Refractory bricks etc.
2.	M/s. Bharat Foundry, I. E., Cuttack	Foundry (non-ferrous) Brass, gunmetal
3.	M/s. Universal Screw Factory, Telengapentha	Bolt, nut, dies, screws
4.	M/s. Key Bee Chemicals, I. E., Jagatpur	Alum
5.	M/s. Ss. Popular Chemical Industry, Kajdita, I. E., Cuttack	Sealling wax and Candle Wax, Bees Wax, Carnanba Wax
6.	M/s. Ananya Nut & Bolts, I. E, Jagatpur	Nut & Bolts
7.	M/s. Kalinga Transformer, I. E., Cuttack	Electrical Goods
8.	M/s. Power & Controls, I. E., Cuttack	Electrical Goods
9.	M/s. Mini Wire Nails, I. E., Paradeepgarh	Wire, Nails and Board Wire
10.	M/s. Ajya Engineers (Kalinga Engineers), Paradeep	PPT, Manufacturing and repairing of marine machines
11.	M/s. Auro Plastics	PPT

Down Stream Industries

Large and medium scale industries have a lot of waste bi-products which can be utilised in subsidiary industries for their effective utilisation. Down stream industries are encouraged for proper utilisation of these raw materials. A few waste/bi-products which have been identified for productive utilisation are furnished below :

Sl. No.	Name of the Unit	Item	Item for manufacture
(1)	(2)	(3)	(4)
1.	Paradeep Phosphates Ltd., Paradeep	Phosphor gypsum	Gypsum Block
2.	Indian Charge Chrome Ltd., Chaudwar	Fly ash	Briquette
3.	M/s. Badamba Sugar Industries Ltd., Badamba	Molasses	Liquor, Spirit

Steps have been taken for obtaining production know-how and analysis from research organisations after which project reports will be prepared for setting up some down stream industries.

District Industries Centre

All the industrial activities in the districts are channelised through the District Industries Centre, Cuttack which came into being in 1978. Prior to 1978, the industrial activities in the district were being looked after by the District Industries Officer.

Due to increase in the work load in Cuttack District Industries Centre it was decided by the Government to open another District Industries Centre at Jagatpur which started functioning from 1st April, 1990. The jurisdiction of this District Industries Centre extends to all the Community Development Blocks of Jajpur and Athagarh Revenue subdivisions, and Tangi-Chaudwar Community Development Block of Cuttack Sadar subdivision.

These district level organisations constantly endeavour to identify potential entrepreneurs and groom them up to set up successful industrial ventures. These centres also help in establishing new industries by supplying identification of suitable schemes, preparing feasibility reports, arranging machinery, equipments and raw materials, credit facilities, power, land, factory shed, etc., and inputs for marketing, apart from extension services under one roof at the district level.

Each District Industries Centre is headed by a senior class-I officer designated as General Manager. To assist him several functional managers (of the rank of class-I junior) heading different sections like small-scale, raw materials, credit, cottage industries, etc. are attached to the District Industries Centre. Besides, Assistant Managers in class-II of the State Service are also posted for effective monitoring and supervising different industrial programmes. At the Community Development Block level, Industries Production Officers (IPO) are posted to oversee the programmes.

The two District Industries Centres are also involved in implementing various anti-poverty programmes such as Orissa Khadi and Village Industries Programmes, Integrated Rural Development Programmes, Training of Rural Youth for Self-Employment Programme, etc. and taking up various artisan training programmes in the district. The programmes for providing self-employment to educated unemployed youths through industry, service and business was launched by the Development Commissioner, Small-Scale Industries, Ministry of Industries, Government of India in 1983. The DICs were assigned with the operational responsibility of the schemes over and above their existing activities on the basis of the guidelines prescribed by the Rural Planning and Credit Department of Reserve Bank of India. Thereby the scheme for providing new opportunities for productive gainful self-employment to the unemployed educated youths was worked out from the year 1983-84. The year-wise targets fixed and achievements made under the scheme in the district are given below :

Year	Target fixed	No. of Youths Rehabilitated	Financial assistance accorded by Bank (Rs. in lakhs)
(1)	(2)	(3)	(4)
1983-84	.. 2,000	1,963	318.46
1984-85	.. 1,750	2,019	379.08
1985-86	.. 2,383	1,914	258.87
1986-87	.. 2,390	1,787	353.76
1987-88	.. 1,212	1,036	185.37
1988-89	.. 2,400	1,370	258.20
1989-90	- 763	465	112.19
1990-91	.. 800	Continuing	

State Assistance to Industries

The State Government have provided many facilities for the development of the existing industries as well as for the establishment of new industries (both small-scale and cottage). However, Government have been formulating industrial policy from time to time and assistance to the small-scale, large and medium-scale industries are provided as per the provisions made in the Industrial Policy Resolutions. So far three Industrial Policy Resolutions (IPR) have been issued, one on 31st July, 1980, another on 13th May, 1986 and a third on 1st December, 1989. The Government have extended assistance in the form of subsidy on fixed capital assets, power subsidy, electricity duty exemption, sales tax exemption, octroi tax exemption, subsidy on projects and feasibility reports, provision of Government land at concessional rates, etc., besides free technical advice. Many training centres have been established to train students and artisans in different technical trades. The most important of them is the Industrial Technical Institute (I.T.I.) at Madhupatna, Cuttack where 870 trainees are being trained in one-year and two-year courses in 1992 in trades like, Welder, Moulder, Blacksmith, Carpentry, MMV, Wiremen, Diesel mechanic trade, Draughtsman(Civil), Draughtsman (Mechanical), Electronics(G), Painter(G), Instrument, Refrigerator & Air Conditioner, Electrician, Fitter, Turner, Machinist, Grinder, Pattern maker, Sheetmetal, Stenography in Oriya and English.

The Orissa Financial Corporation, Orissa Small-Scale Industries Corporation, Orissa Khadi and Village Industries Board, Directorate of Export Promotion and Marketing, Industrial Development Corporation Ltd., the Director of Textiles and Handloom Development Corporation arrange financial as well as technical assistance to different industrial co-operative societies of the district.

The details of the assistance provided by the State Government to the small-scale industrial units are furnished below:

Sl. No.	Type of assistance extended by Government	Under IPR 1980	Under IPR 1986
		No. of SSIS	No. of SSIS
(1)	(2)	(3)	(4)
1.	Land	283(No. of plots)	
2.	Shed	—	404(Nos. of shed (constructed))
3.	Octroi exemption on plant and machinery and raw materials	80	177
4.	Sales Tax exemption on purchase of raw materials and machinery	771	146
5.	Sales Tax exemption on sale of P/P	Nil	146
6.	Electricity duty exempted	26	34
7.	Electricity duty loan	04	..
8.	Sales Tax loan	82	..

During the period from 1980-81 to 1989-90, small-scale industrial units numbering 2,165 have been assisted with capital investment subsidy amounting to Rs.12,48,20,248, the details of which are given below:

Year (1)	No. of SSI Units assisted (2)	Amount (in Rs.) (3)
1980-81	.. 259	78,40,375'00
1981-82	.. 303	1,16,58,226'00
1982-83	.. 279	1,38,83,486'00
1983-84	.. 320	2,08,36,560'00
1984-85	.. 201	1,70,49,272'00
1985-86	.. 320	1,95,84,810'00
1986-87	.. 169	97,92,860'00
1987-88	.. 124	1,10,89,990'00
1988-89	.. 136	95,63,269'00
1989-90	.. 54	35,21,400'00
Total	.. 2,165	12,48,20,248'00

Most of the small-scale industries are run by private entrepreneurs. In case of large and medium-scale industries as the State Government contributed the share capital, representatives have been included in the Board of Management of the concerned industrial units.

On the basis of the new Industrial Policy Resolution issued on 1st August, 1992 the state has been divided into three zones for the purpose of incentives depending upon the industrial backwardness of different areas and a subdivision has been treated as a unit zone. No subdivision in Cuttack district has been categorised as zone A. Banki, Athagarh, Jagatsinghpur, Kendraparha and Jajpur subdivisions have been treated as zone B and Cuttack Sadar subdivision as zone C. Under this Industrial Policy Resolution many additional incentives will be made available to new industrial units, i.e., a unit when fixed capital investment is made after 1st August, 1992 while the industrial units covered under the earlier Policy Resolutions shall continue to enjoy the incentives admissible under the relevant IPR for such periods as were available then.

Industrial Estates

There are 8 industrial estates in the district. The detailed position of these industrial estates as on 31st March, 1989 are furnished below:

Sl. No.	Location of Industrial Estates	Area	No. of Sheds constructed	No. of Sheds allotted	No. of SSI units established
(1)	(2)	(3)	(4)	(5)	(6)
		(Ac.)			
1.	Cuttack	45.46	143	143	143
2.	Paradeep	33.10	17	10	12
3.	Kendraparha	17.66	12	12	08
4.	Chaudwar	411.99	26	05	05
5.	Athagarh	10.00	06	06	06
6.	Jaraka	20.00	10	Nil	Nil
7.	Jagatpur (Old)	26.65	14	14	14
8.	Jagatpur (New)	337.42	172	136	136

The industrial estates have been provided with various facilities like developed roads, sites, electricity and water (in most of the industrial estates). There is proposal to construct industrial estates at Phulnakhara, Salapur, Jagatsinghapur, Chhata (Derabis Block), Telengapentha and Gopalpur.

Industrial Potential Plan for Future Development

Action is being taken for potential survey of the resources available for putting up of mainly forest and consumer type industries in this district. Accordingly, the Small Industries Service Institute (SISI) located at Cuttack conducted industrial potential survey in Paradeep area and suggested that at least 300 entrepreneurs can be encouraged to put up trawlers for catching exportable varieties of fish and develop fish trade. Besides this, it has also been suggested to establish ship building yard and ship repairing workshop. Accordingly, one ship repairing workshop, i. e., M/s. Utkal Marine, Paradeep has been set up. Ice plants and modern cold storage also have been identified to have potential in the area.

Apart from the above, Industrial Promotion and Investment Corporation Ltd. of Orissa has given suggestion for establishment of some industries in the district which are expected to come up in this area in the organised sector. In addition to this, some large and medium-scale industries are also viable to be set up in Paradeep area.

After the advent of the District Industries Centre Programme, the future prospects of the village industrial and industries set up by the co-operative societies seem to be bright with the arrangement of technical know-how, adequate financial assistance, comprehensive training to artisans and marketing of their products in one window.

Labour and Employees' Organisation

The working class of the district may be broadly divided as factory workers and miscellaneous workers. About 29,445 labourers have been regularly employed in 424 registered factories of this district till 31st December, 1990. Apart from this, there are many unregistered factories with a number of casual workers. Many of them have been employed in the textile spinning mills, printing press, engineering establishments, etc. Most of the factory workers have their wage scales.

There are 287 registered trade unions with 1,12,734 members in the district till 31st December, 1990. Generally the workers of the registered factories have formed trade unions to safeguard their interests. All these trade unions are affiliated to all-India organizations like that of A. I. T. U. C., I. N. T. U. C., A. I. N. P. E. F., A. I. C. C. of SAIL Employees Union, BMS, BEFI, AILICEF, AIDDWF, DLICEF, etc.

Industrial Labour

Almost all the major factories of the district have provided amenities to their employees. As per the different provisions of the Factories Act, 1948 the required facilities have been provided and necessary welfare measures have been taken by the factories for the industrial workers. The welfare measures include establishment of recreation clubs, restsheds, canteens and hutments, and provisions for first aid, drinking water, medical facilities, etc. The State Government is providing welfare facilities for industrial workers through multipurpose labour welfare centres at Raja-bagicha, Khapurja, Jajpur Road and Chaudwar in the district. Government have also constructed industrial tenements and provided housing facilities to the industrial workers. Besides, the State Labour Department also takes necessary steps for proper implementation of various labour laws (21 in number) in force in the district through their district level office located at Cuttack. Central Government also ensures similar measures in respect of Central Government undertakings.

Details of the labour welfare measures of the district have been dealt with in Chapter XVII (Other Social Services).