

## CHAPTER V

# INDUSTRIES

### 77. Old Time Industries

It is clear from old dumps of slag scattered in different villages in the south-western part of the district in and around Bangomunda that smelting of iron-ore was being practised by the local people of that region. It is from this cottage industry that agricultural implements like ploughshares, sickles, axe and weapons of ancient warfare like swords, daggers, arrow heads and shields were being manufactured. Although it is not possible to say when this cottage industry started, it continued right up to modern times and stopped only when scrap iron became available from different sources. Even today the village blacksmiths make ploughshares, sickles and arrow heads in their smithies out of scrap.

The existence of mediaeval temples from the 10th to the 14th centuries show that there must have been large number of skilled workmen carving and engraving on stone and these workmen were not confined to any particular area. Temples exist from Ranipur-Jhari in the south to Sonepur in the north. Brick structures in ruins at Ranipur-Jhari, Titilagarh and Tusra could only have been made by brick layers molding clay and burning raw bricks.

The district is famous today for hand-woven textiles. Spinning and weaving of a high grade must have been existed in the mediaeval times as is evident from the apparel shown on stone figures in mediaeval temples. The textiles were made not merely of cotton, but probably also of tassar silk. The weaving of tassar-silk today is of an equal standard of excellence with that of cotton fabric.

Images of deities of brass and bell-metal are found in old temples and they are brought to remote village markets (hats) for sale. The braziers excelled in brass and bell-metal casting in mediaeval times.

Other industries which existed in early times were making bamboo mats and baskets, making ropes from thatching grass and Sabai grass, clay pottery, extraction of oil from oil-seeds, etc.

### 78. Present Day Village Industries

A village industry of outstanding excellence is weaving, both cotton and silk fabrics. Coarse cloth even with attractive design is woven by Gandas and the finer variety is woven by Bhulias. Silk cocoons are reared by Gandas and Panas. Silken textiles

are woven mainly by **Kosthas**. Textiles woven in this district have found markets in distant places like **Delhi** and **Bombay** and have even been appreciated in **America**.

Another industry which continues from ancient times is extraction of hides from dead animals by **Gandas**. Now-a-days the hides are collected in a tannery for curing. Till recently lac was being grown in the forest and prepared in cottages. But it has now stopped for want of market.

## Power Stations

### (a) Balangir Power House

Electricity was first made available to **Balangir** town in 1911 from a thermal station. The initial installed capacity of the power house was then 12 K. W. only. The supply in the beginning was restricted to the palace, a few officers' residences and to some institutions. During 1927-28, two more D. C. sets of 19 K.W. were installed. One 75 K.W. D. C. generating set was added to the power house in 1934. In 1948 consumers were 200 and the total revenue was Rs. 3,000 only. Since, then, there has been a substantial increase as indicated from the following figures:

Capacity of Power House	1948-109K.W.	1951-159K.W.	1952-214K.W.	1961-493KW
Units generated and consumed.	42,168	90,864	81,333	2,63,507

In 1950 one 66 K.W. D.C. set was installed. As the electric load of the town was gradually increasing, the whole system of supply had to be changed. The same year, the D. C. current supply was changed to A.C. The installed capacity of the power house and the L.T. distribution inside the town had increased considerably. In 1954, one 66 K.W.A.C. set was installed. Three sets of 100 K.W. , 50 K.W. and 55 K.W. were installed in the next year. Another set of 272 K.W. was installed in 1958 bringing the total capacity of the Power House to 493 K.W. Each of the 5 sets are successively used to meet the consumer's demand. The power station maintains 16 miles of L.T. distribution line and 2 miles of H.T. distribution line. The number of consumers using electricity was 590 of which 20 were industrial consumers. Total power-consumption in 1960-61 was 263,507 units.

Apart from the local supply, the power house transmits power to **Tarbha** and **Sonepur**. Besides, there were two more diesel power houses, one at **Sonepur** and the other at **Titilagarh**.

**(b) Sonepur Power House**

The diesel power was working on D. C. generating sets. The initial installed capacity during pre-merger period was 10 K.W. D.C. The State Government took over the supply and distribution system in 1948. The installed capacity was raised to 17 K.W. during 1951-52. To meet the increasing power load, an additional 15 K.W. set was installed in 1958. The D. C. current distribution was changed to A.C. during the second plan period (1956-57 to 1960-61).

**(c) Titilagarh Power House**

Electric power was supplied to the town from 15th March 1957 from a power house installed with 4 A. C. generating sets. It has an installed capacity of 619 K.W. The capacity of the power House was raised by erecting an additional 200 K.W. set during the second plan period. Total units of power consumed during 1960-61 was 190,901 K.W.

**(d) Electricity from Hirakud Hydro-electric Project**

Electricity from Hydro-electric project was made available at Balangir on the 2nd May 1964 and at Titilagarh on the 9th April 1965. The towns and villages connected to the 33/11 K.V. line in Balangir sub-station are Balangir, Chudapali, Bhainsa, Rampur, Patnagarh, Tarbha, Saragaj, Bhainsar, Sibtole and Sonepur. The following places are connected to the 33/11 K.V. sub-station: Titilagarh, Bango-munda, Gohirapadar and Kantabanji.

The villages which are on the main 33 K.V. line and getting supply are Dunguripali, Salebhata, Loisinga, Degaon and Saintala.

Rampur and Binka are getting power supply from Bargarh-Barpali 11 K.V. line.

Supply from Hirakud Project is also given to:

- (1) Graphite Factory at Titilagarh,
- (2) Graphite factory at Rampur,
- (3) Government Tannery at Titilagarh,
- (4) Tile Factory at Titilagarh,
- (5) Gun-metal and Aluminium Utensil Industries at Balangir,
- (6) Carpentry units at Patnagarh and Titilagarh,
- (7) Rice mill at Rampur and Rice hullers.
- (8) Oil mills at Balangir and Patnagarh Panchayat Industries.

## 80. Mining

Except scratching the surface for iron-ore, there was no mining activity in this district until 1917 when a prospecting licence was given for graphite which lasted for 6 years. A mining lease for graphite was granted in 1923, but no mining operation was carried out and the lease was surrendered in 1932. In 1937-38, graphite was found in isolated pockets in 14 villages. The vein of graphite in Lohakan was large enough to employ a daily labour of 333 persons and to produce 323 tons that year. Graphite was exported in the form of plumbago, graphite lumps and powder for pencil and paint industries. The main consumers were Tata Iron and Steel Company, Indian Iron and Steel Company and the Railways. Graphite had also been found at Budhibahal and at Dhaura Khaman which is 5 miles from Hari Shankar Road Railway Station. In 1942, 380 tons of graphite were raised of which Baraghati mine alone produced 280 tons. In 1954 permission was given to raise graphite in 16 villages covering an area of 139.74 acres. The total royalty from graphite came to Rs. 6,128.

Manganese had also been found and worked in a small scale. In 1940, 377 tons were exported. In 1941, there was a mineral survey of Balangir district and neighbouring areas. Manganese was found in more than 70 villages. In 1954, a prospecting licence for manganese was given covering an area of 1,23,735 acres producing a licensing fee of Rs. 1,300. In 1956, there were 10 prospecting licences for manganese, 1 for mica and 3 for graphite. The total area covered was 126.86 acres and a sum of Rs. 40 was raised as licence fee. The mining licence in force that year was 1 for manganese and 8 for graphite. The total royalty received was Rs. 32,268.

In 1960-61, there were 21 prospecting licences for graphite, 19 for manganese and 2 for mica covering an area of 18,065 acres. The mining leases were 9 for manganese and 3 for graphite covering an area of 1,980.36 acres.

In the year 1964, 17 prospecting licenses and 12 mining leases were granted. Of these, one is for China clay and the rest for graphite.

Graphite and manganese ore are the only minerals that are produced in the district. Most of the graphite produced in the district are utilised in the plant set up by Patna State Graphite Mining Co. at Titilagarh. Another plant has been set up recently at Patnagarh for the same purpose. Figures of production for the last three years are as follows:

	1964	1965	1966
Graphite ..	1,061 tonnes	1,242 tonnes	961 tonnes
Manganese ore ..	..	1,019 tonnes	1,125 tonnes

The mineral revenue of this district during 1966-67 was Rs. 83,718'00. The State's revenue from the said source during this period was Rs. 1'66 crores.

A statement showing the working mines in the district is given in Appendix I.

### 81. Cottage Industries

A considerable number of persons depend for their livelihood on cottage industries. The Bhulias, Gandas and Kulis form the weaver class. Many other industries such as metal working, smithy, carpentry, bamboo-work, tanning and leather work, pottery, oil-milling and rope twisting are conducted on a cottage scale.

#### (i) Textile Industries

Among all the cottage industries, textiles employ the largest number of persons a fact borne out by the following report <sup>1</sup>: "Textile industry is the principal industry of the State, one-tenth of population being of weaving community. This industry was in a state of decline due to competition from expert weavers of the neighbouring districts and also from that of cotton mills. Most of the weavers were manufacturing generally 'dhotis and napkins' in which the competition from outside was very keen".

The Durbar administration made efforts for the development of this industry as it provided livelihood to 60,000 people (1935-36). Improved types of loom, accessories, dyes and chemicals were introduced amongst the professional weavers, especially the 'Bhulias', who were the most conservative weavers. A weaving demonstration centre was opened in 1935-36 at Saintala to help introduce fly-shuttle looms and a small private handloom factory was organised at Tendapadar with the assistance of Industries Department to give impetus to local cloth and yarn dealers. The dobby machine was also experimented. During 1937-38 the administration allowed import of yarn and export of cloth free of duty. The same year a demonstration centre was opened at Balangir for weaving of various designs of cloth and use of pit fly-shuttle looms.

A weaving factory started in 1940-41 with a modest capital of Rs. 1,000 excluding the value of some useful looms and of parts which had been collected by the Industry Department. Within a short period

1. Annual Report on the Administration of Patna, 1934-35, P. 25

it produced beautiful, cheap and durable finished goods. Later, it became a residential institution with accommodation for the labourers and their families. In 1941-42, the administration helped in the establishment of small handloom factories by local people. Accordingly, three such factories were started at Belgan, Haldi (Titilagarh subdivision) and Bandra (Balangir subdivision). The Patna State Weaving Factory started during 1942-43 at Balangir with an initial capital of Rs. 25,000. By 1946, many modern improvements had been introduced in this weaving factory, which was being worked out on a commercial basis.

By 1951, the total number of establishments dealing with cotton spinning, clearing and pressing were 1,195 and the total number of persons employed in these establishments 2,946 and the total number of persons employed in cotton spinning, sizing and weaving was 25,737.

Villages with a preponderance of textile establishments are Chadai-pank, Subalaya, Kendupali, Jamurapali, Binka, Menda and Panisiala in Sonepur subdivision ; Bartanda of Titilagarh subdivision and Agalpur of Balangir subdivision.

There are two textile organisations at Sonepur, one being Government Textile Organisation and the other Pattern Making Factory. The former organisation was originally established in 1945 by the Durbar of Sonepur and was named "Maharaja Birmitrodoya Weaving and Dyeing Factory, Sonepur". The Pattern Making Factory was established in 1954.

#### (a) GOVERNMENT TEXTILE ORGANISATION

Sonepur claims to be the originator of Tye and Dye design fabrics widely known all over the country. All varieties of textile popularly known as Sonepur patterns are woven here. These include sarees, bed-spreads, curtains, table cloths, shirtings, etc. All kinds of looms used by the old weavers are found here. The most modern looms with modern devices such as jacquard machines, dobbies are also in use. Long warping and sizing system are in vogue, and all the processes are conducted by manual labour.

There are nearly 30 skilled labourers employed under the organisation. Semi-skilled weavers number about 20. Scope is extended to the skilled weavers for training in the pattern making factory. Weavers from the co-operative fold are taught the use of improved equipments in the handloom industry. The weavers of the organisation are imparted Refresher Training from time to time for keeping them in touch with modern devices.

Raw materials are mostly purchased from local markets like Sonepur, Bargarh and Sambalpur. The Apex Co-operative Society,

the Orissa State Handloom Weavers' Co-operative Society Ltd., control production and tackle the problem of marketing of the products. This is a Government sponsored organisation with a capital outlay of Rs. 1,20,712.

**(b) PATTERN MAKING FACTORY**

The Pattern making factory is a separate organisation for imparting training to workers. It is under the Handloom Development Scheme of the Government.

**(c) HANDLOOM**

The district plays an important role in development of handloom co-operatives. The number of weavers' co-operative societies in 1966 were 54 with 5,777 members and equal number of looms. The paid up share capital of the societies amounted to Rs. 75,260. The amount of credit limit sanctioned and disbursed to different weavers co-operative societies in the district was Rs. 50,000. Some of the largest societies are located at Deulpadar and Sagarpali in Sonepur Block. The Society in Sonepur town has 150 members with equal number of looms. A list of these co-operatives is given at the end of this chapter. Five of these societies along with other industries is given in appendix III have been affiliated to the Orissa State Handloom Weavers' Co-operative Society. A handloom sale depot has been opened at Titilagarh on behalf of the Apex Society. The Handloom marketing organisation and the Pattern-making factory are located at Sonepur and a subsidised dyeing unit is located at Gogarpali..

**(ii) Khadi and Village Industries**

A number of co-operative societies of various village industries exist in the district. Of them, 8 are Handpounding Co-operative Societies, 13 Oil Co-operative Societies, 3 Leather Co-operative Societies and 2 Soap-making Societies. For the spread of Khadi industry two Ambar Parishramalayas were started each at Balangir and Bhainsla in 1959-60 and 1957-58, respectively and two Ambar production centres were also started later at these two places. There are two sale centres located at Balangir and Titilagarh since 1956-57 and 1960-61, respectively.

**(iii) Brass and Bell Metal Industries**

A large number of Kansaris work in bell-metal which constitute an important industry in the district. A number of artisans belonging to Khadura and Kansari castes are concentrated at Balangir, Bairasar Tarbha, Bhainsa and Khumsamala. The articles most commonly turned out are bowls, basins, plates, saucers, drinking mugs, can and lamp-stands.

Curious boatshaped anklets worn by many women in the district are also prepared by local artisans. The total produce is greater than the local demand.

Gold and silver ornaments are made by artisans of Sunari caste. The ornaments most commonly made are the khagla which is worn on the neck, bangles, armlets, anklets, ring and flexible silver waist belts. The usual gold ornaments are armlets, necklaces, nose-buttons, ear-rings and finger rings. Tarbha in Sonepur subdivision is reputed for its silver ornaments. There are good concentration of goldsmiths at Balangir, Titilagarh, Patnagarh, Kantabanji, Binka, Sonepur, Sukha, Kamasara, Belpara, Saintala, Belgaon, Loisinga, Tusra, Agalpur and Khaprakhol. During the Durbar administration, there was one Patna Silver Manufacturing Company at Bairasar for manufacture of silver ornaments.

(iv) **Lac Industries**

Much was done during the Durbar administration to boost up this industry. But the industry did not make much headway as it could not command a good market.

(v) **Bidi Factories**

Kendu leaf is an important produce of the district and although part of the produce is exported outside the district, a considerable portion is used in the manufacture of Bidis for the local demand. The Bidileaf contractors of Balangir have started a factory at Balangir to meet the demand of the local people. Besides this, there are a few such factories scattered in the district.

The Tile factories at Titilagarh, Silver works factories at Bairasar and the Graphite factory at Titilagarh made good progress during the Durbar regime. All these factories except the Patna State Graphite and Mining Company have been closed.

## **82. Medium and Small Scale Industries**

There were few medium scale industries during the period immediately preceding merger. In ex-Patna State the total number of industries was 18 out of which 15 were registered. A list of 12 such industries is given in Appendix II.

Small-scale industries were mainly in the nature of small textile establishments of which in 1951, 28,683 persons were employed while the number of persons engaged in non-textile establishments was 7,797. These establishments are too small to come within the purview of Factories Act and Mines Act. They are considered as cottage and home industries or small workshops where articles are produced, repaired or otherwise treated for sale, use or for disposal<sup>1</sup>.

1. District Census Handbook, Bolangir, 1951.



An economic survey of the State was undertaken in 1954-55 which worked on a sample of 1,047 rural families with different industrial occupations. The survey in respect of this district considered a sample of 77 such families. They have been divided occupationwise as below 1—

Industrial Occupation	No. of families
Weaving	29
Pottery	12
Bamboo and cane-work	8
Blacksmithy	6
Oil ghunny	6
Carpentry	5
Goldsmithy	3
Confectionary	2
Tailoring	2
Bell-metal	1
Line-making	1
Drum-making	1
Horn-making	1
<b>Total</b>	<b>77</b>

The survey reveals that about 38 per cent of the industrial population of rural families depend on weaving as their main occupation. The survey report states the importance of weaving industry in the following words<sup>2</sup>.

While more than 37 per cent of the industrial population in the inland districts take to weaving as their main occupation, the proportion is only 15 per cent in the coastal districts. In the tribal areas, local weaving supplies the entire requirements of the local population. That is one of the important reasons why in these districts a large proportion of industrial families takes to weaving. In fact, some of the agricultural families also take to weaving as subsidiary occupation.

A comprehensive list of 206 industries in this district arranged categorywise is given below:—

Group of Industries	Number
1. Rice Mills and Rice Hullers	51
2. Oil Mills	20
3. Furniture works	16
4. Textile and dyeing factories	15
5. Flour Mills	13
6. Saw Mills	12

1. Economic Survey of Orissa, P. 378.

2. Economic Survey of Orissa, P.380.

Group of Industries	Number
7. Iron and Steel industries	12
8. Leather industries	8
9. Brass and Bell-metal	11
10. Brick and Tile factories	6
11. Printing Press	6
12. Ayurvedic and Chemical industries	5
13. Repairing works	5
14. Tailoring units	5
15. Bakeries	4
16. Graphite and crushibles	3
17. Aerated water factories	2
18. Filigree works	2
19. Bidi works	2
20. Bamboo works	2
21. Dry Paddy Mill (Chuda factory)	2
22. Dal Mill	1
23. Condiment Powder	1
24. Barpali water seal latrine industry	1
25. Gur and Khandsari	1

Of these industries, 44 are run by Co-operative Societies and financed by the Khadi and Village Industries Board, Handicrafts Board and Panchayat Samitis from the Rural Arts and Crafts Fund. Loans have also been sanctioned under the State-Aid to Industries Act to 40 industries which amount to Rs. 3,44,844. The industries listed above employed a total number 2,820 workers and invested a total sum of Rs. 34,36,429. A list of existing industries with the amount of capital invested in them, their producing capacity and the number of people engaged in them is given in Appendix III.

Many of the industries of the premerger period have adopted meanwhile improved methods of production and technique and some have done away with the old and antiquated method and have replaced it by power-driven machineries. Short narrative account on some of the important industries existing in the district is given below:—

(i) **Government Tannery, Titilagarh**

The industry was established in 1943 by the ex-State administration, the objects being collection of raw hides and production of tanned leather. The Annual Administration Report for 1941-42 mentions the existence of the hide factory at Titilagarh in the year 1941-42, when 26,063 pieces of hide were received in the factory and 8,340 pieces exported. The industry was then in the making. Later, the Department of Leather Industries came into existence from the 1st April 1942 and from the 31st. March 1943 the hide contrac

was ended and the work was taken over by the Department. It was decided to run the industry departmentally in order to make proper use of hides and bones of the dead cattle in an organised and scientific manner. The activities of the organisation then comprised tanning, bone-meal manufacture, glue-making, leather works, horn work and flesh manure. Normal tanning work started at the tannery from the 29th March 1944. To meet the local demand for sole and lining leather, tanning was carried out on a small scale at the Balangir Sub-tannery. A shoe-making section was also added.

After merger, this tannery is functioning as a Governmental commercial unit from the 1st June 1948. It functioned as hide collection and tanning centre obtaining monopoly of collection of raw-hides in the districts of Balangir, Kalahandi, Baudh-Khondmals and in Angul subdivision of Dhenkanal district. Hide collection was being made departmentally, and tannery functioned on a partnership basis from 1953-54 to 1955-56. But at present the tannery is being run departmentally and is engaged in collection of hides, horns, skins, bones and manufacture of crust leather, sole leather and bone-meal. One Leather Experiment centre is attached to it. One Leather Technologist is in charge of the Tannery and one Research Assistant with one Laboratory Assistant is in charge of the Leather Experiment centre. The hide collection work is managed by posting Hide Collectors to important market places and railheads. There are 13 Hide Collectors and 6 Hide Supervisors to look to collection work. From 1948-49 to 1965-66, 528,080 pieces of hide valued at Rs. 14,63,325 were collected. The tanning work is managed by drawing labourers mainly from the Ganda community. The Tannery engages daily on an average 53 persons for soaking, liming, fleshing, deliming, bark pit tanning, myrabolaning, oiling, drying, setting and trimming operations. Further 60 persons are engaged in hide collection and 20 persons in supervision and clerical work. 80 persons have been engaged as hide curers and about 500 persons are engaged in flaying and transporting hide to the collection centres and are paid fixed rates per hide collected. All these operations are done by hand. For mechanical handling of all these operations machinery worth Rs. 1,35,000 has been purchased and installed, so manufacture of chrome leather and compressed sole will start shortly. The Tannery takes forest leases for collection of Sunaji bark, myrabolan, etc. It produces mostly crust leather whose price per kilogram comes to Rs. 4.50 in Madras market against the cost of production of Rs. 4.40. The Tannery has taken up bark tanning. Chrome tanning is being started.

During the period from 1953-54 to 1964-65, 288,356 pieces of hide had been Tanned in this Tannery from which 1,713,466 lbs. of

leather have been produced. No tanning was done before 1953-54. The amount of capital invested in this Tannery from 1948-49 to 1965-66 is Rs.43,58,825 and the profit made during this period is Rs. 1,79,304.

It has a good market both in and outside the district. Products are exported to Raipur, Nagpur, Bhatpara, Mahasamund, Bhilai, Rajnandgaon, Durg, Kumakhan, Dhamtari, Champa of Madhya Pradesh, Bobbili, Vizianagram, Sitanagarm, Hyderabad, Kakinanda, Rajmundry, etc., of Andhra Pradesh, Maharashtra, Gujrat, Bombay, Calcutta, Madras and Kanpur.

The top quality of leather is being sold at Madras through a Commission Agent. Sale depots at Cuttack, Calcutta, Puri, Berhampur, Rourkela and Papadahandi have been started. Leathers required for making boots and shoes for the Police and the Army and for civil population is being supplied to the Government and semi-Government shoe factories and other private merchants. Leather for industrial and other purposes is being supplied to Rourkela Steel Plant and Government Press, Cuttack.

Sale-proceeds of the Tannery of different year are mentioned below (in rupees):—

	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64
Outside State	1,22,665	1,64,400	41,201	} 2,94,439	2,56,468	3,74,337
Sale at Titilagarh	1,64,020	72,282	1,92,006			

The Survey Committee set up by the Director of Industries in 1956 visited this institution. According to them daily 150 pieces of leather were processed and tanned here to be exported outside being branded as 'East India Keep Leather'. There is considerable demand for this in the Madras market from where these are exported to United Kingdom. The Committee understood that with 70 labourers employed in the Tannery, the factory was running at profit. About 1,500 cat skins and 600 goats skins were available monthly at Titilagarh and the neighbouring places. The chemical required for tanning and processing are imported from outside and the remaining components are available at near about places<sup>1</sup>.

From 1962 Hide Control Order having ceased to operate, the Tannery is experiencing competition from private hide collectors. In many cases the Tannery has been able to procure the hide collection licences from local Grama Panchayats, Municipalities and Notified Area Committees. It is proposed to collect hides from Koraput district

1. Report on the Investigation Of Small and Cottage Industries, Cuttack, Puri Ganjam and Bolangir.

at collection centres in addition to the present method of collecting through Leather Co-operative Societies.

(ii) Patna Graphite Mining and Co., Titilagarh

This concern was established in January, 1937 with monopoly for purchasing graphite. The Annual Administration Report<sup>2</sup> describes it in the following words :

“The factory for curing, concentrating and preparing various marketable forms of graphite was constructed at the railhead at Titilagarh by the Patna State Graphite Mining Company, the monopolist for purchasing graphite of the State. This factory consists of (i) an oil engine (ii) Pulverisers for powdering graphite from 20 to 400 mesh, (iii) Air separator for separating graphite from the gauge, (iv) Polishing machine for giving a lustre to powdered graphite and (v) washing tank for curing and concentrating graphite. This factory now only needs a Froth Flootation Plant for purifying flaky graphite.

“It is expected that with the addition of this plant, this factory would be unique and self-sufficient one to deal with the graphite trade in India.”

A preliminary survey was undertaken at the initiative of the Director of Industries in 1956. After visit to the Patna State Graphite Mining Industries Committee recommended detailed investigation regarding the analysis of the fire-clay used in the factory. According to the report, the powder graphite of Sambalpur district is a better variety and a comparative analysis of the Sambalpur and Titilagarh varieties as mentioned by them is given below:—

Graphite	Sambalpur Powder	Titilagarh Powder
Carbon	79.72	74.85
Hydrogenous materials	2.50	2.10
SiO <sup>2</sup>	12.24	10.53
Al <sup>2</sup> O <sup>3</sup>	5.18	6.27
Fe <sup>2</sup> O <sup>3</sup>	0.12	1.53
Ca <sub>o</sub>	0.33	3.70
Soda	A little	1.86

2. Annual Administration Report of Patna State, 1939-40, P.84, (14 B of R --28)

With the expansion of steel industries in the country there would always be a demand for graphite crucibles. The Survey Committee further recommended for starting a pencil factory. The Manager of the factory informed the committee that at three places near Titilagarh china-clay was available. This along with the information available regarding the availability of china-clay at other places of the State led the Committee to recommend for establishment of a unit of analysis of this mineral and its proper utilisation.

It has a capital investment of Rs.5,00,000 of which Rs.1,00,000 is in the form of State loan. This concern manufactures graphite of the undermentioned grades.

R. No.999, R. No.555, R. No.501, R. No.101, R. No.333, M. B.F.F., S. P. L., Lustrite, paint graphite, pencil graphite, crucible graphite, dry battery graphite and graphite flakes.

The concern owns mines at Dhorakham, Matupali, Loharhandi and Jamujhari in Balangir district and at Boitara, Denu Sargi, Singhjharan, and Khetapara of Kalahandi district. During 1937—40 the company mined about 800—900 tons of graphite. The ore is reported to be fine enough for the pencil industry. It has also good smearing properties. July to November is the closed season. About 20—25 labourers work in the factory besides 10—12 technical persons. The items of production include pencil manufacturing, foundry graphite and flake graphite for lubricants.

Recently as a part of the expansion of the factory, a crucible factory has been set up at a cost of Rs.17 lakhs to produce graphite crucibles used for smelting and alloys. Production here is to start soon and it will be one ton per day initially, five tons per day being the target of production.

**(iii) Bharat Metal Industries, Bolangir**

The factory was established in 1962 at Balangir. It manufactures bell-metal and brass utensils, which are sold in the local market. The daily wage varies from Rs. 1.25 P. and Rs. 2.00. It has purchased 6 machines to be used for the manufacture of utensils from brass sheets and stainless steel. The Finance Corporation has advanced Rs.71,000 as loan. The workers are provided with rent-free houses.

**(iv) M/s. Tribhovandas Raghavji and Co.**

The company runs a Bidi factory named 'Dhiru Bidi Factory', which was established in 1947. It is located at Thikadarpada, Balangir. The total financial outlay is Rs. 1,00,000. It is a private concern without any Government share. The raw materials comprise the Bidi leaves

locally available and the tobacco imported from Madars and Gujarat. The factory does not consume power. The workers get wage at the rate of Rs. 1.50 P. for rolling one thousand Bidis. About 50 workers are employed in the factory. It feeds the local market.

(v) **The Mahabir Saw and Oil Mills**

The concern is situated at Balangir on the Balangir-Sambalpur Road. The mill is driven by a 15 Horse power diesel engine. It has employed 10 skilled and 15 unskilled workers. The monthly payment of wage amounts to about Rs.75,000. It is a privately owned concern. It gets the raw materials from the local forests. Besides sawing of timber, it manufactures furniture.

### 83. Panchayat Industries

Several industrial units have developed under the management of Panchayat Samitis.

Some of these units being mechanised, are able to produce bulk of the requirement at competitive rate. The following Panchayat Industries have been taken up :

Place	Name of the Industries	Annuual production capacity	Cost	Production started	Value of goods produced
1	2	3	4	5	6
			Rs.		
Titilagarh	1. Tile factory	500,000 tiles	1,10,000	March 1964	Rs. 21,700 in 1964-65.
	2. Carpentry Unit.		31,900	August 1964	Rs. 9,500 in 1964-65.
Patnagarh	1. Carpentry Unit.		61,000	June 1963	Rs. 25,885 in 1963-64. Rs. 22,464 in 1964-65.
	2. Rice Huller-cum-Oil Mill	..	1,03,913	1966	
Rampur	1. Rice Mill	120,000 Maunds	99,080	April 1965	..
Agalpur	1. Oil Mill	7,000 Litres of oil	47,200	1966	..

The working capital is raised from the State Finance Corporation and State Bank of India against mortgage of machinery and through Government guarantee. The Panchayat Industries are managed by Industrial Co-operatives formed for them having as members artisan workers, Panchayat Industries Officer and representatives of Panchayat Samiti and Grama Panchayats of the area.

#### 84. Leather Unit, Sonepur

This unit at Sonepur started as a training-*cum*-production centre and the Industries Department took over the concern in December 1963. Mainly footwear is produced here and a sum of Rs. 2,500 has been allotted as working capital. The production capacity of this unit is 400 pairs of footwear per month.

#### 85. Potentialities

The National Council of Applied Economic Research undertook a techno-economic survey of Orissa in the year 1959 and after considering the overall profitability, demand, availability of raw materials, skills, transport and power, recommended 92 typical small-scale factory units to be set up in the State during the period 1961-71. Of these 4 industrial units are allotted to this district out of which 2 are forest-based industries, one mineral-based and one agriculture-based industry. The saw mill proposed to be set up at Kantabanji is one of the five important saw mills to be started in Orissa. Another important industry proposed is the tomato-canning factory to be located at Titilagarh.

#### 86. General Condition of Industrial Labour

The working class of the district can be divided into two main categories, that is workers in the industrial establishments and workers engaged in agriculture.

Among the factories, Rice Mills are seasonal in operation. They run generally from November to May when there is availability of paddy and remain closed for the rest of the year. Both male and female labourers work in fields. A male labourer gets Rs. 1.75 P. per day and a female labourer Rs. 1.50 P. per day. Labourers working in commercial establishments like shops, hotels, etc., are low-paid and often change from one establishment to another. The male labourers working under contractors' establishments get Rs. 1.50 P. and female workers Rs. 1.25 P. per day.

In 1961, various small-scale industrial units of the district employed 870 industrial labourers both skilled and unskilled. This number has increased to 2,820 by the end of 1964-65 due to opening of new industrial units under Panchayat Industries Programme and expansion of Titilagarh Tannery. Out of these, 1,277 are engaged in textile and dyeing industries, 119 in iron and steel works, 616 in rice mills and rice hullers and other food processing units, 146 in oil mills, 119 in brass and bell metal works, 105 in saw mills, 70 in brick and tile making, 87 in furniture works and 142 in leather works.



Ten two-roomed industrial tenements have been constructed at Titilagarh for occupation of industrial workers. A Reading room *cum*-recreation centre has been opened there providing facilities for reading of daily newspapers, books, indoor and outdoor games and her recreational activities. Under the rental housing scheme following number of quarters have been constructed at Titilagarh Sonepur and Bolangir.

Name of the place	No. fo 2-RB quarters	No. of 2-RA quarters	No. of 3-R quarters
Titilagarh ..	5	10	..
Sonepur ..	5	10	..
Bolangir ..	10	20	5

## APPENDIX I

## Working mines in the district of Balangir

Sl. No.	Name of the Lessee	Name of the mine	Area	Mineral
1	2	3	4	5
			Acres	
1	Shri J. M. Mediratta	Chandtura Malisira Harabhanga ..	79	Graphite
2	Ditto	Simila	57.17	Do.
3	Ditto	Bahabal Kutasinga Sargimunda Tara ..	465.34	Do.
4	Ditto	Charmunda Dudang Lakhanpur Charbhatta Uchhabpali Jamjuri Matpali .. Lahakhan Phapsi Ardendungri Dhaurakhaman No. 1 Dhaurakhaman No. 2	120.89	Do.
5	Ditto	Malikmunda	28.20	Do.
6	Shri R. K. Kejurwal	Dhoramahul ..	49.29	Manganese ore
7	Shri B. P. Kedia ..	Kapsila ..	12.02	Graphite
8	M/s. S. Lal & Co. (P.) Ltd.	Rengali ..	817.00	Manganese ore
9	Ditto	Dandapani ..	390.65	Ditto
10	Shri R. S. Lath ..	Bhalegaon ..	19.18	Graphite
11	Shri L. N. Agarwal	Barjhulla ..	76.46	Manganese ore
12	Ditto	Champasar ..	17.97	Ditto
13	Ditto	Brahmani ..	137.22	Graphite
14	Ditto	Beheramunda and Bhar- uamunda.	13.70	Do.
15	Ditto	Tentulikhunti ..	64.00	Do.
16	Ditto	Mahanilaha and Ramud	95.12	Do.
17	Shri P. C. Agarwal	Dameipali ..	19.35	Do.

## APPENDIX II

**List of industries (medium and small-scale) existing during pre-merger period**

- 
1. **Koshal Transport and Trading Co., Ltd., Balangir**
  2. **Koshal Industrial Development Co., Ltd., Balangir**
  3. **Balangir Trading Co., Ltd., Titilagarh**
  4. **Patna Village Industries Association, Ltd., Lathor**
  5. **Rajendra Tile Works, Ltd., Titilagarh**
  6. **Koshal Industries Development Syndicate, Balangir**
  7. **Patna State Graphite Mining Co., Titilagarh**
  8. **Patna State Weaving Factory, Balangir**
  9. **Mahavir Jain Weaving Factory, Belgan**
  10. **Weaving Factory, Manihira (Loisinga P.S.)**
  11. **Central Jail Weaving Factory, Balangir**
  12. **Hand-made Paper Factory, Balangir**

## APPENDIX III

## Industries List

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual capacity	Employment	Year of Establishment
1	2	3	4	5	6	7
I. IRON AND STEEL INDUSTRIES						
Rs.						
1	M/S. Kalinga Engineering Works, Kantabanji,	Agricultural Implements.	25,000	5 Tonnes	7	1961
2	M/S. Agricultural Implements and Manu- facture, Kantabanji.	Agricultural Implements.	5,000	1 Tonne	3	1960
3	M/S. Orissa Iron Works, Kantabanji	Window bar etc.	20,000	4 Tonnes	15	..
4	M/S. Sharma Metal Factory, Kantabanji	Agricultural Implements.	5,000	1 Tonne	3	1960
5	M/S. Agarwal Iron and Steel Industry, Kantabanji.	Household and Agriculture materials.	7,000	3 Tonnes	..	..
6	M/S. Chandeswari Steel Trunk Factory, Santalala.	Trunk, suitcase etc.	20,000	40 Tonnes	7	1961
7	M/S. Thread Ball Factory, Kantabanji	Thread Ball	7,000	350 Gross	1	1964

8	M/S. Ghannawal Iron Works, Titilagarh	Window and roof Bar.	20,000	50,000	15	..
9	M/S. Vishanji and Brothers, Titilagarh	Brush and Broom stick.	15,000	50,000	40	1958
10	M/S. Durga Metal Industries, Balangir	Bucket	20,000	50,000	9	1963
11	Tin Industries.	Tin Containers	10,000	50,000	10	1964
12	Iron Works.	Iron and Steel Processing.	11,000	11,000	3	1960
	Total		1,69,000		119	
<b>RICE MILLS AND RICE HULLERS</b>						
1	Ghanshyam Mills, Kantabanji	Rice	10,000	75,000 bags	50	1959
2	M/S. Sitaram Rice Mill, Kantabanji	Rice	5,000	20,000 bags	35	1958
3	M/S. Satyabir Rice Mill, Kantabanji	Rice	40,000	19,000 qtls.	10	1960
4	M/S. Mahadev Rice Mill, Kantabanji	Rice	22,000	60,000 mds.	12	1958
5	M/S. Rampuria Rice Mill, Kantabanji	Rice	10,000	44,400 qtls.	12	1958
6	M/S. Kamala Grain Mill, Kantabanji	Rice	10,000	..	20	1957
7	M/S. R. N. B. Das Rice Mill, Kantabanji	Rice	10,000	12,000 bags	15	1963
8	M/s. Hanuman Oil, Flour and Rice Mill, Kantabanji.	Rice	50,000	15,000 bags	4	1959

(14 B. of R.—29)

## APPENDIX III—continued

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual Capacity	Employment	Year of Establishment
1	2	3	4	5	6	7
			Rs.			
9	M/S. Roshan Lal Rice Mill, Kantabanji	Rice	20,000	9,000 qtls.	6	1960
10	Shrikrishna Rice Mill, Kantabanji	Rice	15,000	48,000 mds.	6	1961
11	M/S. Biswanath Saw and Rice Mill, Kantabanji.	Rice	50,000	8,000 qtls.	20	1950
12	M/S. Radheshyam Sharma Rice Mill, Kantabanji,	Rice	15,000	7,800 qtls.	6	1963
13	M/S. Mahabir Rice Mill, Titilagarh	Rice	15,000	100 tons.	12	1963
14	M/S. Ramesh Rice Mill, Titilagarh	Rice	30,000	2,500 tons.	60	1946
15	M/S. Ganesh Trading Co. Titilagarh.	Rice	20,000	180 tons.	20	1947
16	Patnagarh Panchayat Industry, Patnagarh	Rice	50,225	..	..	1963
17	M/s. Rice Huller, Batharla, Patnagarh.	Rice	4,000	5,000 qtls.	2	1961

18	Rice Huller, Gangasagar, Patnagarh.	Rice	6,000	5,000	qtls.	2	1961
19	Rice Huller, Prop. Satyanarayan Pansari, Patnagarh.	Rice	10,000	4,000	qtls.	3	1958
20	Rice Huller Unit at Rampur, Patnagarh.	at, Rice	5,000			2	1963
21	Rice Huller, Bhainsa, Patnagarh	Rice	5,000	5,000	qtls.	2	1961
22	Rice Huller, Belpara.	Rice	10,000	..	..	3	..
23	Rice Huller, At/P. O. Khaprakhol, Patnagarh.	Rice	10,320	..	..	..	..
24	Mahalaxmi Rice Mill, Tarbha	Rice	20,000	3,000	mds.	6	1963
25	M/S. Siva Shankar Flour Rice Mill, Tarbha	Rice	20,000	15,000	mds.	6	1963
26	M/S. Gupta Rice Mill, Tarbha	Rice	20,000	15,000	mds.	5	1964
27	Nuapara Rice Mill, Tarbha	Rice	20,000	15,000	mds.	5	1963
28	Padma Chhatra, Jarasingha, Deogaon.	Deo- Rice	15,000	2,550	qtls.	2	1963
29	Daharar Gartia, Hatisara, Deogan	Rice	15,000	3,000	qtls.	3	1962

APPENDIX III—continued

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual Capacity	Employment	Year of Establishment
2		3	4	5	6	7
			Rs.			
30	Srimati Laxminati Devi	Rice	15,000	3,000 qtls.	5	1960
31	Shriram Cottage Industry, Loisinga	Rice	24,411	15,000 mds.	9	1960
32	Rice Huller, Sagarda, Balangir.	Rice	2,000	2,000 mds.	3	1964
33	Jogisarda H. P. C. S., Jogisarda ..	Rice	9,000	..	10	1963
34	Rice Huller, R. M. C. S., Dunggripali ..	Rice	4,000	3,000 mds.	5	1962
35	Sankar Rice Mills, Prop. Bajinath, Balangir.	Rice	..	8,000 bags	40	1962
36	Laxmi Rice Mill	..	..	..	..	..
37	Sharma Mill Huller, Balangir	..	7,000	25,000 bags	3	1960
38	Madan Sahoo, Rice Huller, Bolangir ..	Rice	5,000	20,000 bags	3	1960



39	Jogeswar Mill, Balangir.	..	Rice	5,000	20,000 Mds.	3	1960
40	Balangir H. P. C. S., Balangir	..	Rice	3,592	1,000 bags		1963
41	Rinbachan H. P. C. S.	..	Rice	5,085	2,000 bags	28	1957
42	Sauntpur H. P. C. S.	..	Rice	4,196	1,500 bags	29	1957
43	Loharamunda H. P. C. S.	..	Rice	..	..	..	..
44	Menda H. P. C. S.	..	Rice	2,573	500 bags	17	1963
45	Jogisurda H. P. C. S.	..	Rice	7,532	2,000 bags	28	1963
46	Bharati H. P. C. S.	..	Rice	2,419	1,000 bags	15	1963
47	Jain Rice Mill, Belgan	..	Rice	43,000	2,000 bags	15	1966
48	Annapurna H. P. C. S.	..	Rice	..	..	21	1963
49	M/S. Jain Rice Mill, Belgan	..	Rice	50,000	1,00,000 bags	20	1960
50	Tarachand Jugal Kishore Belgan.	Rice Huller,	Rice	8,000	worth of Rs.14,000	5	1969
51	Rampur Industrial C. S. Rampur.	Rice Huller,	Rice	..	..	..	..

## APPENDIX III—continued

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual Capacity	Employment	Year of Establishment
1	2	3	4	5	6	7
Rs.						
FLOUR MILL						
1	Huller, Patnagarh ..	Wheat	5,000	4,500 qtls.	2	1962
2	Radheshyam Flour Mill, Titilagarh ..	Wheat	5,000	3,000 mds.	1	1960
3	M/S. Durga Flour Mill, Titilagarh ..	Wheat	5,000	3,000 mds.	1	1962
4	M/S. Bajranglal Flour Mill, Titilagarh ..	Wheat & Besan	3,000	3,000 mds.	1	1960
5	M/S. Zaduram Flour Mill, Titilagarh ..	Ditto	3,000	3,000 mds.	1	1958
6	M/S. Sitaram Burma Flour Mill, Kantabanji.	Wheat	5,000	15,000 mds.	1	1960
7	M/S. Govinda Flour Mill, Kantabanji ..	Wheat	40,000	7,000 mds.	4	1958
8	M/s. Satyabir Flour Mill, Kantabanji ..	Wheat	40,000	6,000 mds.	10	1960

9	M/s. Jaganath Flour Mill, Kantabanji ..	Wheat	4,000	240 mds.	2	1961
10	M/s. Durga Flour Mill, Kantabanji ..	Wheat	..	6,000 mds.	3	1963
11	M/s. Sharma Mill, Balangir ..	Wheat	5,000	3,000 mds.	2	1956
12	M/s. Panalal Mulchand, Balangir ..	Wheat	10,000	30,000 bags.	3	1961
13	Flour Mill, Balangir, ..	Wheat	5,000	3,500 mds.	3	1960
DRY PADDY MILL						
1	M/s. Chuda Factory, Kantabanji. ..	..	5,000	18,000 bags	3	1962
OIL MILL						
1	M/s. Hanuman Mill, Kantabanji ..	Oil	50,000	4,500 tins	4	1959
2	M/s. Ghanashyam Oil Mill, Kantabanji ..	Oil	50,000	20,000 tins	50	1959
3	M/s. Govinda Oil Mill, Kantabanji ..	Oil	30,000	4,500 tins	4	1959
4	M/s. Satyabir Oil Mill, Kantabanji ..	Oil	40,000	4,500 tins	10	1960
5	M/s. Durga Oil Mill, Kantabanji ..	Oil	40,000	4,500 tins	3	1963
6	M/s. Biswambarlal Oil Mill, Titilagarh ..	Oil	10,000	7,000 tins	6	1957
7	M/s. Tilak Chand Jain Mill, Titilagarh ..	Oil	7,000	,000 tins	2	1962
8	Patnagarh Panchayat Industries, Patnagarh.	Oil	50,225	..	..	..

## APPENDIX III—continued

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual Capacity	Employment	Year of Establishment
1	2	3	4	5	6	7
			Rs.			
9	Loinsinga O. M. C. S., Balangir	Oil	12,337	..	10	1963
10	Oil Men C. S., Agalpur	Oil	6,937	..	10	1963
11	Jogeswar Oil Mill, Balangir.	Oil	10,000	5,690 mds.	3	1960
12	Balangir O. M. C. S., Balangir	Oil	8,877	450 mds.	38	1963
13	Kodasingha O. M. C. S., Kodasingha, Balangir.	Oil	10,048	1,620 mds.	34	1956
14	Kachharpali O. M. C. S., Kachharpali	Oil	37,000	1,540 mds.	21	1958
15	Sauntpur O. M. C. S.	Oil	..	..	13	1962.
16	Menda O. M. C. S.	Oil	12,000	1,700 mds.	13	1963
17	Jharsamra O. M. C. S.	Oil	5,500	800 mds.	10	1955
18	Brahamanpali O. M. C. S.	Oil	9,405	1,700 mds.	16	1955
19	Tusrabaha O. M. C. S.	Oil	5,627	800 mds.	12	1955
20	Kuturapali O. M. C. S.	Oil	395	100 mds.	17	1964

DAL MILL					
1	M/s. Tilak Chand Jain Dal Mill, Titilagarh Dal	7,000	7,000 mds.	2	1962
BAKERIE					
1	Biscuit Factory, Titilagarh. .. Biscuit, Cake and Bread.	2,000	..	..	1964
2	M/s. Jyoti Biscuit Factory, Balangir. .. Biscuit & Bread	20,000	60,000 mds.	16	1964
3	Balangir Bakery .. Biscuit & Bread	2,400	11,000 mds.	5	1963
4	Shri P. C. Barai .. Ditto	2,000	15,000 mds.	5	1962
CONDIMENT POWDER					
1	M/s. Jain Condiment Powder Factory, Crushing of Titilagarh. .. Haldi, Chilly, Dhania and Garammasala.	20,000	10,000 mds.	5	1960
AYURVEDIC AND CHEMICAL FACTORIES					
1	M/s. Kailash Chemical Works, Kantabanji Ayurvedic	10,000	Worth of Rs.8,000	8	1954
2	Shri Bankabihari Mishra, Balangir .. Ayurvedic	2,000	Rs.4,000	2	1961
3	M/s. Choudhury Chemical Factory, Pharmaceutical Balangir.	10,000	..	12	1950
4	Jaya Bharat Pharmaceutical Industries, Dusting, Powder, Balangir. .. Ointment.		..	10	1950
5	Saredaswari Ayurvedic Chikistalaya, Government Balangir. .. Concern.	50,000			

APPENDIX III—(continued)

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual capacity	Employment	Year of establishment
1	2	3	4	5	6	7
TEXTILE AND DYEING FACTORY						
			Rs.			
1	M/s. Durgamal Dyeing Works, Kanta-banji.	Dyeing	20,000	300 bales	7	1959
2	M/s. Suresh Weaving Factory, Titilagarh	Handloom cloth	8,000	7,500 Piles	30	1960
3	M/s. Jain Weaving Factory, Titilagarh ..	Dyeing and Weaving.	4,000	Worth of Rs.10,000	15	1936
4	M/s. Kaundantal Weaving Factory, Titilagarh	Ditto	20,000	Worth of Rs.1,00,000	100	1948
5	M/s. Kedia Weaving Factory, Titilagarh	Ditto	15,000	Worth of Rs.50,000	17	1957
6	Government Weaving Factory, Sonepur	Ditto	1,10,844	Rs.85,000	75	1961
7	Lachhipur Weavers' Co-operative Society ..	Ditto	5,531	Rs. 3,711	66	1957

8	Sagarpalli Weavers' Co-operative Society	Ditto	9,087	Rs. 6,466	330	1949
9	Subalaya Weavers' Co-operative Society ..	Ditto	382	Rs. 2,740	86	1957
10	Menda Weavers' Co-operative Society ..	Dyeing and Weaving.	2,712	Worth of Rs. 740	119	1957
11	Binka Gopalji Weavers' Co-operative Society.	Handloom	1,628	Rs. 3,320	163	1951
12	Sonepur Ramji Weavers' Co-operative Society.	Do.	Managed by Sambalpur Bastralaya.	..	163	1951
13	Kamalpur Weavers' Co-operative Society	Do.	3,975	..	103	1951
14	M/s. Jain Weaving Factory, Belgan.	Do	45,000	Rs. 77,946	86	1936
15	Shree Veer Weaving Factory, Belgan ..	Do.	20,000	Rs. 30,000	40	1943
BRASS AND BELL-METAL FACTORY						
1	Padma Metal Industries, Tarbha	.. Bell-metal utensils.	15,000	10 tons.	11	1961
2	Laxminarayan Brass & Bell-metal C. S., Tarbha.	Ditto	15,000	19,200 Kg.	54	1963
3	Kanhu Charan Prusti, Patnagarh ..	Ditto	..	..	..	1964

## APPENDIX III—(continued)

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual capacity	Employment	Year of establishment
1	2	3	4	5	6	7
			Rs.			
4	Binka Brass & Bell-metal C. S.	Bell-metal Utensils	7,500			
5	M/s. Bell-metal Industries, Titilagarh ..	Ditto				
6	M/s. Raghur Prasad Sarma, Kantabanji	Ditto				
7	Balangir Brass & Bell-metal Co-operative Society, Balangir.	Ditto				
8	Choudhury Metal Industries, Utensil, Balangir.	Ditto				
9	Dinbandhu Sahoo Sadhuram Metal Store, Balangir.	Ditto				
10	Mahabir Metal Works, Balangir ..	Ditto				
11	Bharat Metal Industries, Balangir ..	Ditto				



## FURNITURE WORKS

1	M/s. Krishna Furniture Works, Kantabanji	Furniture	12,000	700 cft.	7	1958
2	M/s. Ashok Furniture Works, Kantabanji	Do.	200	360cft.	10	1961
3	M/s. Sonasingha Thakur Carpentry Unit	Do.	200	200 cft.	4	1962
4	M/s. Gungunsi ngh Carpentry Works ..	Do.	200	120 cft.	3	1964
5	M/s. Nandakishor Carpentry Unit, Kantabanji.	Do.	200	120 cft.	3	1959
6	M/s. Gujarat Furniture, Titilagarh ..	Do.	200	400 cft.	3	1957
7	M/s. Kalinga Wood Products Co-operative Society, Titilagarh.	Do.	..	..	3	1957
8	M/s. Bhoi Carpentry Shop, Titilagarh ..	Do.	1,500	500 cft.	2	1962
9	M/s. Sharma Furniture Works, Titilagarh	Do.	500	300 cft.	2	1962
10	Carpentry Works, Patnagarh ..	Do.	750	Worth Rs. 1,500	2	1958
11	Patnagarh Panchayat Industry Carpentry Society.	Do.	12,200	Rs. 35,000	24	1963
12	Furniture Works, Prop: Chetram Agarwal	Do.	..	..	5	..
13	Carpentry Works, Prop: Harihar Malu ..	Do.	3,000	Rs. 36,000	5	1963
14	Carpentry works, Abhimanyu Maharana, Balangir.	Do.	2,000	Rs. 12,000	3	1964
15	Laxmi Furniture Works, Tarva ..	Do.	8,000	..	8	..
16	Tankadhar Maharana ..	Do.	2,000	Rs. 12,000	3	1962

APPENDIX III—(continued)

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual Capacity	Employment	Year of Establishment
1	2	3	4	5	6	7
Saw MILL						
			Rs.			
1	Saw Mill, Prop. Biharilal Tejwal	Sawing of wood	..	..	..	..
2	Rotka Saw Mill, Harishankar, Patnagarh	Ditto	..	..	..	..
3	M/s. New Titilagarh Saw Mill, Titilagarh	Ditto	32,000	30,000 cft.	12	1962
4	M/s. Mahalaxmi Saw Mill, Titilagarh ..	Ditto	20,000	25,000 cft.	6	1964
5	M/s. Ambika Saw Mill, Titilagarh ..	Ditto	10,000	15,000 cft.	16	1961
6	M/s. Dodka Saw Mill, Titilagarh ..	Ditto	30,000	15,000 cft.	10	1949
7	M/s. Mahabir Saw Mill, Kantabanji ..	Ditto	20,000	60,000 cft.	10	1961
8	M/s. Ramchandra Saw Mill, Kantabanji	Ditto	20,000	..	6	1949
9	M/s. Laxminarayan Saw Mill, Kantabanji	Ditto	30,000	15,000 cft.	10	1961

10	M/s. Biswanath Saw Mill, Kantabanji	Ditto	50,000	20,000 cft.	20	1950
11	M/s. Mahabir Saw Mill	Ditto	65,000	..	23	1956
12	Shri Samaleswari Saw Mill	Ditto	30,000	1,00,000 cft.	10	1961

## BRICK AND TILE FACTORY

1	Bhainsa Pottery & Tile C. S., Bhainsa, Patnagarh.	Brick and Tile	29,868	..	14	1963
2	Patnagarh Brick and Tile Making C. S., Patnagarh.	Ditto	29,840	..	19	1963
3	Titlagarh Tile Making Co-operative Society, Titlagarh.	Tile	1,58,000	..	4	..
4	Balangir Brick Bhutta C. S., Balangir	Brick	18,630	..	15	1963
5	Laxminarayan Brick and Tile C. S., Sainatala.	Do.	..	..	21	1963
6	Narendra Kumar Gartia	Tile	1,000	..	1	1962

## APPENDIX III—continued

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual capacity	Employment	Year of establishment
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Rs.			
		AERATED WATER FACTORY				
1	M/S. Abdul Azia, Kantabanji	Soda Water ..	1,500	18,000 bottles	1	1963
2	Soda Factory, Balangir	Ditto	2,500	30,000 bottles	3	1962
			4,000			
		REPAIRING WORKS				
1	M/S. Pradhan Brothers, Leather Work, Titilagarh.	Repairing ..	15,000	..	4	1958
2	M/S Patna Carriage, Prop. Balangir	Electric welding, motor repair.	5,000	..	3	1963
3	Hindustan Motor and Electric Works, Balangir.	Ditto	3,000	..	3	1962
4	Mehboob Workshop, Balangir	Armature binding and fan repairing.	6,000	..	2	1942
5	B. D. Workshop, Balangir	Gas, welding and Motor repairing.	4,000	..	4	1960



## APPENDIX III—continued

Sl. No.	Name and address of the industry	Line of Manufacture	Capital investment	Annual Capacity	Employment	Year of Establishment
(1)	(2)	(3)	(4)	(5)	(6)	(7)
FILIGREE WORKS						
			Rs.			
1	Bijaya Karyalaya, Tarbha	.. Filigree	..	Worth of Rs. 50,000	8	1961
2	Shri Hazaru Naik, Tarbha	.. Do.	S. Aid Rs. 2,000			..
TAILORING UNIT						
1	Tailoring Works, Patnagarh	.. Dress	.. 2,500	Worth of Rs. 2,000	3	1963
2	Narayani Tailoring C. S., Binka	.. Dress	..	..	..	..
3	Capital Tailoring Unit, Balangir	.. Dress	..	..	..	1963
4	Jarat Mohammed, Sonepur	.. Dress	.. 2,000	Rs. 2,500	..	..
5	Shri Satchidananda Nag, Balangir	.. Dress	.. 1,300	Rs. 1,600	3	1962

## BIDI WORKS

1 Bidi Works, Patnagarh .. .. . 4 1963

2 T. R. & Co., Balangir .. .. . 1962

## GRAPHITE AND CRUSHIBLE

1 Purification Plant, Patnagarh .. Upgrading of 2,00,000 1,000 tons of Graphite. 7 1962

2 M/S Patna State Graphite and Mining & Co., Titilagarh. Graphite .. 2,00,000 .. .. .

3 Shri Pranabandhu Das .. Crushible .. 2,000 .. .. .

## BARPALI WATER SEAL LATRINE

1 Tankadhar Industrial Works, Barpali Latrine 2,500 170 latrines 3 1954  
Batharia,

## GUR AND KHANDASARI

1 Bhanpur Gur and Khandasari C. S., Bhanpur. .. .. .

## BAMBOO WORKS

1 Bamboo Works C.S., Ltd., Khatrakhol Bamboo Works .. .. .

2 Betra Co-operative Society, Balangir .. Ditto 227 24 1957