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LABOUR INVESTIGATION COMMITTEE
GOVERNMENT OF INDIA

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REPORT
ON
AN ENQUIRY INTO CONDITIONS
OF LABOUR IN THE MANGANESE
MINING INDUSTRY IN INDIA

BY

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CONTENTS.

	PAGES.
PAGE	i
ACKNOWLEDGMENTS	iv
CHAPTER I.—INTRODUCTION	1
CHAPTER II.—CENTRAL PROVINCES	3
CHAPTER III.—BOMBAY	14
CHAPTER IV.—SANDUR STATE	20
CHAPTER V.—SUMMARY AND CONCLUSIONS	23



PREFACE.

The Tripartite Labour Conference at its meeting in September 1943 recommended the setting up of a machinery to investigate questions of wages and earnings, employment and housing, and social conditions generally, with a view to provide adequate materials on which to plan a policy of social security for labour. In pursuance of that resolution, the Labour Investigation Committee was appointed by the Government of India by Resolution No. L 4012, dated the 12th February 1944 to carry out the investigations. The Committee was instructed to extend its investigations generally to all industrial and semi-industrial labour covered by the Royal Commission on Labour in their Report, with the addition of certain other categories. The Committee was asked by the Government of India to decide in each case the most suitable manner of conducting the enquiry. The Government, however, considered that the method of enquiry should not merely consist of sending out questionnaires to Government agencies and Employers' and Workers' Associations, but should also comprise specific enquiries in individual concerns based on representative sampling.

2. In India, in spite of the quite comprehensive enquiries made by the Royal Commission on Labour and a few Committees appointed by the Provincial Governments, there have remained large lacunae in regard to information on labour conditions in several industries. In particular, broadly speaking, the method of direct enquiry on the spot has not been adopted on a sufficiently wide scale so as to cover the entire industrial structure. Moreover, certain industries, like cotton textiles and coal mining, have received greater attention than others, and even as regards these industries, comprehensive information on an all-India basis has not been available. With a view to making up this deficiency as well as to bringing the available information up to date, the Committee decided that *ad hoc* surveys should be carried out in various industries so as to secure a complete picture of labour conditions prevailing in each. The following industries were selected for the purpose :—

A. *Mining.* (1) Coal. (2) Manganese. (3) Gold. (4) Mica. (5) Iron Ore. (6) Salt.

B. *Plantations.* (7) Tea. (8) Coffee. (9) Rubber.

C. *Factory industry.* (10) Cotton. (11) Jute. (12) Silk. (13) Woollen. (14) Mineral Oil. (15) Dockyard. (16) Engineering. (17) Cement. (18) Matches. (19) Paper. (20) Carpet weaving. (21) Coir matting. (22) Tanneries and Leather Goods Manufacture. (23) Potteries. (24) Printing Presses. (25) Glass. (26) Chemical and Pharmaceutical works. (27) Shellac. (28) Bidi-making Cigar and Cigarette. (29) Mica Splitting. (30) Sugar. (31) Cotton Ginning and Baling. (32) Rice Mills.

D. *Transport.* (33) Transport Services (Tramways and Buses). (34) Non-gazetted Railway Staff.

E. *Other types of labour.* (35) Port Labour. (36) Municipal Labour. (37) Central P. W. D. (38) Rickshaw Pullers.

3. The main conception on which the *ad hoc* surveys have been based is that information should be collected on the spot by direct enquiry conducted with the help of the Committee's own staff and that this information should, as far as possible, conform to the sampling methods widely adopted in such work. Owing to great variations in the character of the different industries, however, there could not be a complete uniformity in regard to the methods which had to be adopted to suit the peculiarities of particular industries and centres. For instance, while there are only a few centres and units in certain industries such as potteries, mineral oil, gold, etc., in other industries, such as

textiles, engineering, transport services, plantations, tanneries, bidi-making, etc., a very large number of centres and units in different Provinces (and even States) had to be covered. Moreover, some of the industries are modern industries of the large-scale type, wherein factory legislation applies more or less entirely, while others are indigenous handicrafts or small-scale industries, where factory legislation is either inapplicable or partially applicable. Thus, information has not been uniformly available in advance as regards the size, location and ownership of industrial units, such as is necessary before decisions for sampling are taken. Consequently, the technique of representative sampling had to be modified and supplemented so as to obtain whatever information of a reliable character was available. As far as possible, however, in all industries important centres were covered. In each of these centres units were chosen on a sample basis, but it was possible in a few centres to cover all units. The final lists of centres of survey and individual establishments were made out in the light of the impressions gathered during the course of the preliminary tour and in consultation with local authorities. The guiding principle in the selection of centres of survey was to make the survey regionally representative so as to discover differences in the conditions of labour in the same industry in different parts of the country. The selection of individual concerns was generally based on considerations, in order of importance of (a) size, (b) ownership (private or limited) and (c) whether subject to statutory regulation or not. In this connection, it may be stated that the Committee were greatly handicapped in sampling the units owing to the lack of complete information regarding location and number of units in the selected industries. Unfortunately there are no all-India employers' organisations in some of the organised industries, nor are the statistics maintained by the Central and Provincial Governments at all complete. Moreover, in certain unorganised industries, such as shellac, carpet-weaving, bidi-making, etc., owing to their very nature no such information could have been readily available in advance. In certain cases, therefore, owing to these difficulties as well as transport difficulties and other exigencies, the sampling could not be fully adhered to. Nevertheless, the Committee have been anxious to gather in the maximum possible information in the limited time at their disposal and with a view to this, they have cast their net as wide as possible. The main instruments of the *ad hoc* survey were the Questionnaires. These were of two kinds :—(a) the main *ad hoc* survey questionnaire on points likely to be common to all the industries surveyed and (b) supplementary and special questionnaires in respect of certain industries such as plantations, mines, railways, rickshaw pullers, port labour, municipal labour, glass, shellac, mica, etc. The main questionnaire was accompanied by a tabular form for entering wage data and this was used wherever possible. In the case of certain surveys, however, such as salt, paper, cotton woollen and jute textiles, dockyards, silk, cement and gold mining, it was possible to conduct a wage survey on a sample basis. The chief method of collection of data was by personal investigation of industrial establishments, examination of their records and contact with labour in factories and homes. The information thus collected was supplemented and checked with replies to the Questionnaires received.

4. For the purpose of conducting enquiries, a sufficiently large field staff, consisting of 16 Supervisors and 45 Investigators, was appointed. Before the commencement of field work, all the Supervisors (with the exception of those working in Bengal) were called to the Committee's headquarters at Simla and given detailed instructions on the technique and some of the enquiries to be conducted by them, the manner in which they were to submit their data, and the centres and units which they were to investigate. In addition, both Supervisors and Investigators were provided with written instructions regarding the

use of questionnaires, sampling of concerns (where this could not be done in advance), filling of the wage forms, etc. In particular, they were asked not only to collect information on the spot but also to draw upon every other possible source of information. In doing so, they were required to distribute copies of the questionnaires in the centres assigned to them not only amongst the sampled units but also amongst employers' and workers' associations in the industry and such other associations and individuals as were likely to be interested in the subject. They were also asked to get into touch with officials of Central and Provincial Governments connected with labour and obtain such facilities as might be necessary in doing their work.

5. As far as the field work in Bengal was concerned, it was done by the staff of the Committee under the guidance and supervision of the Labour Commissioner, Bengal, and his subordinate officers. Members, however, paid visits to selected centres and units in Bengal to obtain first-hand knowledge of local labour conditions.

6. The Committee's survey covered all Provinces with the exception of the North West Frontier Province where none of the industries selected for survey was sufficiently important. It extended to many of the Indian States also, such as Kashmir, Patiala, Gwalior, Baroda, Mysore, Sandur, Travancore, Cochin, Bundi, Indore and some of the States of the Eastern States Agency. No survey was undertaken in the Hyderabad State as that State preferred to appoint its own Labour Investigation Committee, with terms of reference identical to those of this Committee, for enquiry into local labour conditions.

7. In dealing with the *ad hoc* survey work, several courses were open to the Committee—(i) the Committee, as a whole, to study each industry, (ii) the surveys to be distributed region-wise and each Member put into charge of a region, and (iii) each Member to be entrusted with a few surveys throughout India. With a view to speedy and efficient work, the third course was actually adopted. This departure from the usual procedure of the Committee as a whole dealing with the work was necessary in view of the immensity of the task and the necessity of maintaining an all-India perspective. Moreover, it was felt that this procedure would enable Members to make a specialised study of labour conditions in individual industries in different parts of the country. It was also felt that the peculiar problems of industrial labour had more an industry-wise than a region-wise dispersion and that the procedure would be helpful to future legislation which has to take into consideration the diversified conditions of each industry. It will be seen, however, that in the Reports the factual material has been presented both on an all-India and on a regional basis.

8. Thanks and acknowledgments are due to Provincial Governments, State Authorities, Labour Commissioners (and particularly the Labour Commissioner, Bengal), Directors of Industries, Chief Inspectors of Factories, Port authorities, local bodies, employers' and workers' associations, managements of the units surveyed and all others who rendered help in the collection of the data presented in these Reports.

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NOTE.

The views embodied in this report are those of the Labour Investigation Committee and the Government of India accept no responsibility for The opinions expressed therein.

CHAPTER I.—INTRODUCTION.

Manganese mining is one of the major mineral industries of India. "India is particularly fortunate in possessing extensive reserves of manganese minerals. This country is, perhaps, the most important producer of certain qualities of hard high-graded metallurgical ore¹". Manganese is one of the key metals, its chief use being as deoxidiser and desulphurizer in the manufacture of steel. About 95 per cent. of world production of manganese is used for metallurgical purposes and the remainder is consumed in a wide range of chemical uses, especially in dry batteries. The ore is found in the Central Provinces, Bombay, Bihar, Orissa and Madras in British India and in Sandur, Mysore, Keonjhar, Bonai and Patna States. Of these areas, the Central Provinces is by far the most important. The ore is obtained from a few large units and many small mines, nearly all of which are open workings or quarries.

The beginning of the manganese industry in India dates back to the closing years of the last century and mining was first undertaken in the Vizagapatam district of the Madras Presidency in 1892. The ore deposits in the Central Provinces next attracted attention and mining operations were started in the Nagpur district in 1899. About the same time fresh discoveries of ore were made in the Bombay Presidency, Mysore and Central India. The industry made considerable progress in the beginning and in 1907 the production of manganese ore went up to 902,291 tons. The peak figure was reached in 1927 with a production of 1,129,353 tons. From 1928, however, both the output and value of ore began to decline and 1932-1933 was the worst period that the industry had to face. "The full magnitude of this catastrophe to the Indian manganese industry is perhaps best realised from the fact that whilst the quantity of the production in 1933 was a little over one-fifth of that of the peak year 1927, the value was less than one twenty-second part of the value of 1927, production."² Many manganese mines in the Central Provinces and elsewhere were closed during this slump period. In fact, in none of the major Indian mineral industries had the effects of the slump been so seriously felt as in the manganese industry. There has been, however, a steady increase in production since 1934, and the following table which is prepared from the statistics furnished for British India by the Chief Inspector of Mines and for the Indian States by the Director of Geological Survey of India shows the production in tons and its value for the years 1939 to 1943 :—

TABLE 1.

Production in tons of Manganese Ore in India and its value, 1939—1943.

	1939	1940	1941	1942	1943
C. P.	5,46,028	6,52,755	6,39,348	6,43,773	4,61,676
Bombay	52,549	49,098	..	28,714	35,230
Bihar	35,803	32,452	53,308	21,156	15,316
Madras	34,640	29,536	14,665	3,083	7,740
Orissa .. .. .	..	..	..	..	400
Total, British India	6,69,020	7,63,841	7,07,321	6,96,756	5,20,362
Value	Rs. 98,06,630	106,60,971	99,80,877	1,28,48,327	91,28,270

¹ J. A. Dunn, Manganese Ore, p. 4.

² Handbook of commercial information for India, Third Edition, p. 290.

	1939	1940	1941	1942	1943
Sa'ndur	1,22,596	46,862	11,470	6,933	3,171
Bonai	17,796	28,197	24,935	9,761	39,957
Mysore	1,677	816	672	630	300
Konjhar	33,560	28,760	45,245	42,789	31,210
Patna .. .. .	..	1,200	1,500	400	300
Total, Indian States	1,75,629	1,05,735	83,822	60,513	74,938
Value	Rs. 4,86,476	4,65,735	4,56,409	(not available for all the mines)	
Grand Total, production	8,44,649	8,69,576	7,91,143	7,57,269	5,95,300
Do. Value	Rs. 10,293,106	11,126,706	10,437,286		

It will appear that the Central Provinces alone is responsible for 76 per cent of the total production in India during the last five years.

Since 1929, the U.S.S.R. has been the greatest producer in manganese and is followed for a second place by India, formerly the leading producer. With the exception of a very small quantity of ore consumed in the manufacture of ferromanganese, almost all the ore produced in India is exported. Deposits of Indian manganese ore worked at the present day are mainly of the first grade ore, varying usually between 48 and 52 per cent. metal and form the world's principal source of supply of hard lump ore of this quality. The Central Provinces has a virtual monopoly of first grade ore in this country.

The following tables which are based on the statistics furnished by the authorities mentioned above show the total number of persons employed in the manganese mines in India from 1939 to 1943 :—

TABLE 2.

Average No. of persons employed in Manganese Mines in British India, 1939—1943.

Year.	No. of Mines	Under-ground		Open Workings			Surface			Grand Total
		Males	Females	Males	Females	Total	Males	Females	Total	
1939	113	1,013	11,864	9,858	21,722	2,584	2,133	4,717	27,452	
1940	154	1,013	15,319	13,063	28,382	3,105	2,659	5,764	35,159	
1941	125	1,138	12,679	11,503	24,182	2,692	2,338	5,030	30,350	
1942	108	1,214	13,523	12,753	26,276	2,440	2,284	4,724	32,214	
1943	90	1,172	9,405	9,335	18,740	2,397	1,962	4,359	24,271	

TABLE 3.

Average No. of persons employed in Manganese Mines in Indian States, 1939—1943.

Year	Underground			Above ground			Total
	Men	Women	Children	Men	Women	Children	
1939	Nil	Nil	Nil	2,309	1,126	119	3,554
1940 .. .. .	..	..	..	1,650	980	28	2,658
1941 .. .. .	..	..	..	1,388	921	2	2,311
1942 .. .. .	..	..	..	1,374	843	..	2,217
1943	7	4	..	1,043	755	..	1,809

The total employment in India in 1943 was, therefore, 26,080 out of whom 14,024 were men and 12,056 were women. No women were employed underground except 4 in the Koira Teharai mine of the Bonai State. Persons working underground in 1943 formed 4.5 per cent. of the total employed.

The highest employment figure since 1929 was in 1940 when 37,817 persons were employed in this industry in India. At present the employment has gone down because several mines have slowed down production on account of scarcity of labour and shipping difficulties. The employment in this industry will go up if more use can be made of the metal in this country. "There seems, at present, no reason why the Indian manganese industry should not rise to new peaks of production. Perhaps the greatest possibilities lie in a large increase in production of ferromanganese, which India should strive as much as possible to export in lieu of ore. With low manganese-ore production costs and low fuel charges, India should be well able to compete in the ferromanganese trade. On the past average rate of production, the minimum reserves of the best deposits, in the Central Provinces, will last over 20 years. Geophysical methods of prospecting will bring to light new deposits in the future, and, with deep mining, the manganese industry in India is assured of many years of life."¹ Though India's resources in low phosphorus manganese ore and coal which are necessary for making ferromanganese are limited, the difficulty can be solved, as observed by Dr. Dunn, by electrical smelting.

With the disappearance of war-time difficulties and development of production of ferromanganese, the figure of employment in post-war period in this industry may be put at about 40,000.

The present survey of labour conditions is confined to the Central Provinces, Panchmahals district of the Bombay Presidency and Sandur State. Though the production of Sandur State has of late gone down, it always produced over one lakh of tons during the 11 years from 1929 to 1939, except in the slump year of 1932 when it produced 79,203 tons which was, however, the largest production for any area in that year in the whole of India.

CHAPTER II.—CENTRAL PROVINCES.

Judged either by the number of workers employed or value of the annual production, the manganese industry is the most important mineral industry of the Province, which contains some of the finest ore deposits in the world. Mining operations in this Province were first started in 1899 in the Nagpur district by the C. P. Manganese Ore Company Limited which is the biggest manganese producing concern in India and they were extended to the Balaghat and Bhandara districts in 1901 and 1903 respectively. These three districts have been responsible for practically the whole output of manganese ore in this Province.

Almost all the important manganese ore area in this Province is covered by the C. P. Manganese Ore Company which came first in the field. Indians came in later and have mostly boulder mines. Indian-owned mines are very small and engage, on an average, about 40 labourers except one mine which has a labour force of about 200. Most of them depend on local labour and do not work regularly. Underground work is done only in 3 mines belonging to the Company, *viz.*, Kandri and Mansar in the Nagpur district and Bharwell in the Balaghat district, as the deposits on the surface at these places are nearly exhausted. There were 77 mines under the scope of the Indian Mines Act in 1943 in this Province. The term 'mine' as defined in the Indian Mines Act includes quarries, and all the manganese mines in this Province except the three mentioned above are open workings.

¹ J. A. Dunn, Manganese Ore, p. 46.

For the purposes of this survey, mines were classified on the basis of employment into three categories :—(1) employing more than 1,000, (2) employing between 500 and 1,000, and (3) employing below 500. All the three mines in the first category, 5 from the second and 13 from the third, were selected at random for investigation. Out of these 21 mines 14 belonged to the Company and the remaining were Indian-owned.

Employment.

The following table shows the number of persons employed in this industry in 1939 to 1943 :—

TABLE 4.
Employment in C. P. Manganese Mines, 1939—1943.

Year	Under-ground		Above Ground		Total
	Males	Females	Males	Females	
1939	808		11,228	10,391	22,427
1940	863		14,757	13,602	29,202
1941	1,134		13,690	13,102	27,926
1942	1,057		14,236	14,105	29,398
1943	1,014		10,372	10,511	21,897

It will appear that the number of female workers in this industry is nearly equal to that of men. Women do not work underground. No children are employed. The total number of workers employed in the sampled units was 10,207. About 50 per cent. of the labour force employed in the mines are aboriginals. The nature of work in the mines requires very little skill and suits the temperament of the aboriginals who do not like strict discipline and regular hours of work.

Recruitment.—Recruitment of labour in the case of the Company is entirely done by raising contractors, the chief of whom is the C. P. Syndicate Limited. This Syndicate is the contractor at 6 of the Company's principal mines. Many of these contractors have got their own boulder mines, where they themselves recruit local labour. The contractors send their *mukadams* to the recruiting areas, viz., Chattisgarh, Chhindwara, Jabalpur, Sambalpur and Rewa State. In some mines *mukadams* are paid a commission of about 4 annas per head by the contractors. Travelling expenses are usually paid to imported labourers which are afterwards recovered. The contractors had little difficulty in recruiting the required number of labourers before the recent heavy demand for labour from coal mines and various military works.

About 20 per cent. of the labour in the Company is local and is drawn from the neighbouring villages. It is generally recruited by contractors by announcing their requirements on the bazar day. The local labourers usually work only in the non-agricultural season and come to the mines after the crops have been harvested. The Whitley Commission found in the Central Provinces traces of the defunct Workmen's Breach of Contract Act in the terms of engagement¹ but it is no longer the case now. The Company has no direct responsibility for the labour employed on its mines, though it accepts a sort of moral responsibility towards them by providing housing, medical facilities, schools, etc. A share of the expense in these welfare activities is borne by the contractors. The following extract from the Whitley Commission Report about the employment of raising contractors in coal mines applies almost with equal force to manganese mines also. "The law also holds the manager responsible for compliance with its provisions in respect of hours of work, holidays, the employment of women, etc. As a rule he

¹ Report of the Royal Commission on Labour in India, p. 107.

has also responsibility for housing and other matters (e.g., water supply) affecting the welfare of the workers outside the mine. Yet he has ordinarily no responsibility for the selection of the workers, the distribution of their work, the payment of their wages or even the numbers employed. We believe that, whatever the merits of the system in primitive times, it is now desirable, if the management is to discharge completely the complex responsibilities laid upon it by the law and by equity, that the manager should have full control over the selection, hours of work and payment of the workers. On all grounds, we recommend the gradual supersession of the raising contractor as such, and the substitution of what is known as *sarkari* working."¹

The advantages of employing raising contractors are essentially that they relieve the management of recruiting and payment of wages, while the disadvantages are, besides increase in the cost of production, absence of direct contact between management and labour and the probability of unscrupulous contractors cheating their labour. On the whole, it is desirable that the system of raising contractors should be done away with as soon as possible. It is realised by the Company that if labour legislation is increased to a degree necessitating the control of the labour by it in many aspects, the employment of raising contractors would become impracticable.

No service cards or other statistical information is kept for these labourers by the Company. There are no Standing Orders and no Labour Officers.

Classification of Workers.—None of the workers except the supervisory staff is considered permanent. They can leave the work at any time and their service also can be terminated at any time. In actual practice, however, there are very few cases of dismissal or discharge.

There is no graded or time-scale promotion even in the case of monthly-rated staff and there is no system of apprenticeship.

Labour Turnover.—In the absence of reliable data, no accurate figures of labour turnover are possible. Probably 40 per cent. of the labour employed on the Company's mines can be considered stable, though they may and often do move from mine to mine. Another 40 per cent. can be considered migratory and 20 per cent. form the local labour force in normal times. Most of the local labour and above 50 per cent. of the imported labour return to their villages during the agricultural season. Again, the contractors working for two or three adjacent mines change their labour from one mine to another according to need.

Absenteeism.—Figures of attendance in 9 mines of the Company for which reliable data were available in the contractors' books were worked out for four weeks of August 1944 for piece-rated workers who form about 85 per cent. of the total labour force and the results are given in the table below :—

TABLE 5.
Attendance in selected Mines in August 1944.

Wage period	No. of workers		Days worked		Average No. of days Worked	
	Male	Females	Male	Female	Male	Female
First week	2,622	2,224	14,284	12,763	5.4	5.7
Second week	1,746	1,371	9,204	7,014	5.3	5.1
Third week	1,598	1,255	7,345	5,509	4.6	4.4
Fourth week	1,787	1,465	9,621	7,966	5.4	5.4
Weighted average for the month	..	..	..	..	5.2	5.3

It would be seen from the above table that during these 4 weeks (24 working days) both men and women had worked, on an average, for 20.8

¹ Report of the Royal Commission on Labour in India, p. 119-20.

days and that the percentage of absenteeism was 13.3. Absenteeism is general the day after the bazar day. The percentage is much larger in the case of Indian mines which employ local labour. In August 1944 it varied from 19 per cent. to 43 per cent. in 5 mines which could furnish the necessary data.

Wages and Earnings.

Wage rates for the same kind of work differ from mine to mine, and even in the different parts of the same mine on account of considerations of lead, lift, transport facilities, etc. Contractors are generally paid $2\frac{1}{2}$ per cent. extra over their bills to cover the increased cost of tools, etc. Explosives are supplied to them at pre-war rate by the Company, while tools are supplied at cost price. Tools are supplied by contractors to the workers and are replaced when necessary. The calculation of wages in the case of ore is by tons or tubs and in the case of spoils (cutting barren rock or soil) it is either by tubs or by volume of excavation. The Company's ore and spoil tubs are usually of 16 to 17 cubic feet and 25 to 27 cubic feet capacity respectively, but the variation in the size of the tubs, it is alleged by the Company, does not affect the miners who get credit for a ton for a $16\frac{1}{2}$ cubic feet fully loaded tub in the case of ore, but it is doubtful if this is so. Contractors are, however, paid on weight in the case of ore and volume in the case of spoils. It was also noticed in some mines that the contractor took 20 cubic feet of production for a ton from the workers. Miners do not normally experience any difficulty in securing sufficient and regular supply of tubs but since the war, with the heavy wear and tear of tubs and difficulty in supplying replacements, the position is less than satisfactory.

The ascertainment of wages of piece-rated workers who form about 83 per cent. of the workers employed in this industry is beset with difficulties in view of the prevalent practice of paying wages to the gangmen and not separately to each member of the gang. Most of the gangs are small and usually consist of persons related to one another. We were informed that the gangmen distribute wages earned equally among the male and female members of their gangs, irrespective of each member's production, but we could not be sure on this point. Where the gang consists of husband and wife or members of one family, as is often the case, there is no actual need of distribution of wages, but it would not be correct to assume on the basis of a few statements of gangmen that the distribution of wages is equal among the male and female members of the gangs. The Company states that the way the money is distributed among members of the family depends on caste custom. The General Manager of the Company told us that he tried to find out the daily average wages of men and women at Kandri mine with the help of a firm of auditors, but could not go far. In making its wage returns to the Chief Inspector of Mines, the Company has since long followed the practice of treating a woman's share of joint wages as equal to $\frac{2}{3}$ of a man's. The ratio accords almost exactly with that obtaining in other manganese centres. Again, contractors' books are not always kept in a systematic and intelligible manner and sometimes accounts are kept on rough sheets.

The following table shows the average daily and weekly basic wages of contract labour for 4 weeks of August 1944 in different occupations in certain mines of the Company where reliable data could be obtained from the contractors' books. The figures of wages have been worked out on the basis adopted by the Company for its wage returns. Short of verifying actual payments in a fairly large number of gangs in various mines, it appears to be the only way of obtaining fairly reliable figures of wages earned by male and female members of a gang. Out of the 3,058 workers whose wages have

been tabulated, 1,710 were men and 1,348 women. 85 per cent. were piece-rated and 15 per cent. time-rated. The latter have been marked with a 'T'.

TABLE 6.

Cash Wages of workers in certain Mines in August, 1944.

Occupation	Wage period (week)	Total No. of workers		Average weekly wages per head		Average daily wages per head		
		Men	Women	Men	Women	Men	Women	
Bed ore Mining and dead work	I	834	685	Rs. 2 8 0	Rs. 1 10 7	Rs. 0 7 3	Rs. 0 4 10	
	.. II	825	721	2 9 0	1 11 2	0 7 11	0 5 3	
	III	741	652	1 13 2	1 3 5	0 7 7	0 5 0	
	IV	892	844	2 9 6	1 11 9	0 7 11	0 5 3	
Underground mining Boulder Mining	I	137	..	3 13 7	..	0 10 10	..	
	.. II	65	126	1 14 5	1 4 2	0 6 9	0 4 6	
	III	73	154	1 12 10	1 3 3	0 6 9	0 4 6	
	IV	48	94	1 15 9	1 5 2	0 6 9	0 4 6	
Development	.. I	96	149	1 12 4	1 2 10	0 6 3	0 4 2	
	II	313	254	3 3 3	2 1 11	0 8 8	0 5 10	
	III	303	242	2 15 5	1 15 7	0 8 2	0 5 6	
	IV	317	256	2 13 6	1 14 5	0 8 6	0 5 8	
Transport ..	.. I	318	248	3 3 11	2 2 7	0 8 10	0 5 11
	II	319	6	1 15 5	1 4 10	0 6 3	0 4 2	
	III	255 (T)	324	5	2 3 9	1 7 9	0 7 1	0 4 8
	IV	255 (T)	301	5	2 3 8	1 7 9	0 6 9	0 4 6
	..	243 (T)	304	5	1 13 6	1 8 7	0 5 8	0 3 9
Railing & Loading	.. I	343 (T)	12	40	2 9 10	1 11 11	0 6 11	0 4 8
	II	10	37	3 0 10	2 0 6	0 8 0	0 5 4	
	III	9	28	3 13 6	2 9 0	0 10 5	0 6 11	
	IV	8	32	3 0 10	2 0 6	0 8 2	0 5 6	
Jigging	.. I	137(T)	93(T)	1 10 11	1 1 11	0 6 5	0 4 4	
	II	141(T)	84(T)	1 10 3	1 1 6	0 5 6	0 3 9	
	III	110(T)	72(T)	1 10 7	1 1 10	0 5 8	0 3 9	
	IV	108(T)	67(T)	1 15 1	1 4 8	0 5 10	0 3 11	
Ore Cleaning and Washing	I	1	82	2 8 10	1 11 3	0 6 9	0 4 6	
	II	1	78	2 1 9	1 13 2	0 7 3	0 4 10	
	III	1	97	2 9 6	1 11 9	0 6 11	0 4 8	
	IV	1	97	2 8 8	1 11 1	0 6 9	0 4 6	
Miscellaneous	.. I	54	33	2 11 11	1 13 4	0 7 11	0 5 4	
	II	59	35	2 14 1	1 14 9	0 8 2	0 5 6	
	III	58	35	2 5 3	1 8 10	0 6 11	0 4 7	
	IV	57	38	2 12 2	1 13 6	0 7 9	0 5 2	
Weighted average for all weeks and for all occupations				..	2 7 0	1 9 11	0 7 7	0 5 0

The average cost of concession in grain and cloth supplied to labour was annas 3.39 and anna 0.40 per head per day in June, 1944. If this is added to the cash wage, the total average earnings per day per man and per woman would be Re. 0-11-4 and Re. 0-8-9 respectively.

In Indian-owned mines which mostly do boulder picking the calculation of wages is by frames which vary from 1½ cubic feet to 10 cubic feet in different mines. It was not possible to have the wage data for 4 weeks in August in all the sampled Indian mines, owing to non-working of some of the mines in that month due to shortage of labour, etc. Wage periods in these mines were, therefore, taken from June 1944 to September, 1944. The average wages per day per worker varied from Re. 0-3-0 to Re. 0-6-1, the average of all the mines being Re. 0-4-8.

The following table gives an idea of changes in piece-rates in certain mines of the Company :—

TABLE 7.

Rates paid by the Company to contractors and by them to the labourers in selected mines in 1939 and 1944.

<i>Bed Ore and Transport</i>						
Rates paid to Contractors			Percentage Increase	Rates paid by Contractors		Percentage Increase
August 1939	August 1944			August 1939	August 1944	
Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.		
1 11 0	2 0 0		18.5	0 11 0	1 0 0	33.3
				to	to	to
1 14 8	2 0 0		4.9	0 15 0	1 4 0	45.5
2 2 0	3 0 0		41.2	0 11 0	0 11 0	Nil
				0 10 0	0 15 0	50
				to	to	to
1 14 0	2 2 0		13.3	0 12 0	1 4 0	66.7
1 14 0	2 2 0		13.3	1 11 0	2 0 0	18.5
o	to		to	0 13 9	1 0 0	16.4
2 0 0	2 6 0		18.8		to	to
					1 10 0	89.1
<i>Development</i>						
10 0 0	10 0 0		Nil	5 0 0	7 8 0	50
to	to		to	to	to	to
40 0 0	45 0 0		62.5	30 0 0	50 0 0	66.7
10 0 0	25 0 0		40	9 0 0	15 0 0	66.7
				to	to	to
25 0 0	35 0 0		150	15 0 0	25 0 0	
20 0 0	30 0 0		20	12 0 0	12 8 0	4.2
				to	to	to
25 0 0			50	14 0 0	23 0 0	64.3
6 8 0	0 12 0		50	0 7 0	0 12 0	71.4
25 0 0	25 0 0		Nil	12 8 0	12 8 0	Nil
				to	to	to
26 0 0	26 0 0			16 4 0	16 4 0	
<i>Loading</i>						
0 1 6	0 1 6		Nil	0 1 0	0 1 3	25
0 1 6	0 1 6		Nil	0 1 3	0 1 3	Nil
					to	to
	0 3 0		100		0 2 9	120
0 2 0	0 2 0		Nil	0 1 2	0 1 8	42.9
0 2 0	0 2 0		Nil	0 1 6	0 2 0	33.3

It will be seen from the table that there has been a general rise in the rates paid by the Company though the percentage of increase varies from mine to mine and occupation to occupation. In consequence of the rise in the Company's rates, the contractors also have increased their workers' rates, in some cases more than in proportion to the increase in their own rates. Scarcity of labour is apparently responsible for this phenomenon. The basis of wage calculation is one ton in the case of bed ore and loading and 1,000 cubic feet in the case of development. In considering the relationship between the rate paid to contractor and the rate paid to the miner, it is necessary to allow for the contractor's recruiting expenses, overhead charges, issue of free tools and explosives to the miners and losses out of the money loaned to the workers.

All the workers employed directly by the Company are time-rated, generally on monthly wages. The principal categories of workers so employed are foremen and mates. The wages of these categories vary widely from mine to mine, according to the size of the mines and the nature of work in them. Foremen usually get from Rs. 30 to Rs. 125 and mates from Rs. 11 to Rs. 20 per month.

Dearness Allowance.—No dearness allowance of any kind is paid to labour. Monthly-rated staff of the Company which is less than 3 per cent. of the total labour force employed on the mines get a dearness allowance on a sliding scale based on their salaries as follows :—

From Rs. 1 to Rs. 20	25% dearness allowance
From Rs. 21 to Rs. 50	20% " "
From Rs. 51 to Rs. 100	15% " "
From Rs. 101 to Rs. 200	10% " "

No bonus is paid to labour though the supervisory staff get an annual bonus of two months' wages. Three Indian-owned mines give dearness allowance to their permanent staff ; one pays 25 per cent. of wages, another 10 per cent. and the third 25 per cent. to those getting below Rs. 50 p.m. and 10 per cent. to those getting above that sum.

Fines.—Since the Payment of Wages Act does not apply to the mines, fine registers are not maintained. A few cases of fines were found in the Company. Fines are, however, seldom imposed.

Wage Period.—The wage period is a week. Payment is made in the afternoon of the day preceding the bazar day which is a holiday. Payment generally starts at 4 p.m. and continues right up to 11 p.m. and even to the small hours of the next morning, if workers are numerous. Departmental staff is paid monthly, usually on the 3rd of the month following, and in any case before the 7th.

Closed days and holidays.—The weekly bazar day is observed as a closed day in the mines and no work is done on the preceding half day also which is utilised for payment of wages, as stated above. No holidays with pay are granted to labour. The Company gives two weeks' holidays with pay to its staff.

Working Conditions.

In the case of opencast working (quarrying) bed ore is extracted at different levels. These levels go on changing according to the extraction of ore and spoils and the development direction. In one big mine there were five levels. Where only boulder mining is carried on there is only one level. Rest shelters are usually not provided on the ground that workers can go to the quarters which are generally close to the mines. Where they are provided, they are made of brick walls with thatch roof, the usual dimensions being 30 ft. × 15 ft. No seating arrangement is made inside the sheds. No rest shelters are provided at all by Indian concerns except one. Latrines and urinals are not provided in most of the mines. Cold water is supplied in the Company's mines during the hot weather and special persons are employed to carry water to each working level. Though there is a large proportion of women workers no creches are provided ; but where there is a rest shelter, it is generally utilised as a creche and an old woman is put in charge.

The underground work is carried on only in three mines belonging to the Company and the depth is generally 350 feet. Petromax and carbide lamps as well as wax candles are used. The supply of candles to workers is not adequate. It was noticed in one mine that six workers were working in the light of one candle. Lighting arrangement, on the whole, is not satisfactory. There is also no proper arrangement for ventilation and gases emanating from the artificial lights cannot but affect the health of the workers. Straight walking in the underground mines is difficult, if not impossible, owing to projecting stones and very low roof. No arrangement is made for latrines or urinals in the case of the big Kandri mine. No rest shelters are provided except in Mansar mine and workers are supposed to take rest either at their places of work or in some hollow place caused by the removal of ore. There

is no arrangement for refreshments or drinking water underground and workers have to come up and walk a long distance before they can get anything to eat. A few workers bring their eatables with them.

Everybody going underground is given a disc with a number. A duplicate is kept by the man in charge who remains at the mouth of the tunnel. This device secures a full knowledge of the workers who have gone underground.

Shifts and Hours of Work.—Hours of work vary with the season in surface mining. Generally in winter, work starts at 8 a.m. and ends at 6 p.m. with an hour's interval for rest and in summer the working hours are from 6 a.m. to 6 p.m. with three hours' interval in the middle of the day. Working hours in the underground are 8, except in one mine where they are 9.

Single shifts are normally worked on surface mines, although when there was a heavy demand for ore, night shifts were employed for development work. In underground mines, there are two shifts, one from 8 a.m. to 4 p.m. and the other from 4 p.m. to midnight, with no rest interval. In the Bharweli mine there are three shifts for pumping water and they work from 8 a.m. to 4 p.m. and 4 p.m. to midnight and midnight to 8 a.m. with no rest. The hours of work in Indian mines are generally 9 and the spreadover does not exceed 10 hours. Workers are not punctual in their attendance and some workers, especially women who bring mid-day meal, were noticed coming two hours late. Non-punctuality is specially noticeable in the local labour.

Gang System.—As stated before, in manganese mines, weekly payment of wages is made to the gangmen and not to each individual member by the raising contractors. In Balaghat district it was, however, noticed that wives of underground workers working on the surface are paid individually by contractors. The gang system is prevalent since long and is deep-rooted. Most of the gangs consist of two members, viz., husband and wife or widow and her son, but some gangs consist of more members and, in fact, one gang came to our notice which consisted of 17 members. The gangman does not charge any commission from the members of his gang. The gang system is not usually prevalent in boulder mining and transport work. In bed ore mining, a pair is necessary; the man breaks the ore and his wife sorts it. They bore holes for blasting and load the accumulated ore in the last two days of the wage period. In development work, there is generally a gang of four. Two are engaged on excavation and the other two remove the spoils in the tubs. In some mines it was noticed that the gangmen engage some outside labour at various rates fixed by them which amounts to a sort of sub-contract.

The gangmen keep no record of the work done by them. Formerly in some mines workers were given tokens, i.e., slips of paper of different colours for different rates which were printed on them, but the system has been given up due to shortage of paper except in one mine. It was, however, noticed that the gangmen have a rough idea of the wages due to them. The Company's mate records the work done by the gangs in daily books (one for bed ore and one for development) and forwards them to the office in the evening. A similar account is kept by the contractors' supervisory staff also.

Housing.

About 90 per cent. of its imported labour is housed by the Company and the remaining 10 per cent. as well as the local labour live in the neighbouring villages.

The site where quarters are built is known as camp. Different types of quarters are provided in different mines as each manager has designed quarters in the light of experience gained and material available. Even in one mine, barracks of 4, 10, 15 and even 20 rooms are built according to the availability

of land. The standard size of a room is usually 10 feet \times 10 feet with a verandah of 10 feet \times 6 feet. The verandah is generally enclosed and is used for cooking. On some mines a plinth of 9 inches to 1 foot is provided while there is no plinth in other mines. The floors are of rammed *murrum* and the walls are generally made of bricks. Windows are usually 2½ ft. \times 2½ ft. Mangalore and country tiles and in a few quarters asbestos sheets are provided as roofing. Half of the rooms in a barrack face one side and the other half face the other side to prevent collection of garbage near the quarters. No lighting is provided.

There is an improved type of quarters built in 1943 in Kandri mine. These quarters have two rooms, one living room 11 ft. \times 11 ft. and a kitchen 11 ft. \times 8 ft. with no chimney. They have no verandah but a passage is built between the two rooms. The floor is of cement. There are 15 such quarters built in one barrack. In the case of mines which have old housing, there is a large number of quarters which is built back to back. For example, in Mansar mine, there are 17 blocks with 68 such quarters. They have no windows and ventilation is secured by square holes in the wall. There is no verandah also and corrugated iron sheets are used for roofing. In this mine, even the 108 converted quarters (in 27 blocks) which have a high roof, one big window and a verandah, are still back to back, though it was stated that the idea was later to have a door in the wall and to give two rooms to each family. The recently built houses are not back to back but have no kitchen. There are 297 temporary quarters for seasonal labour in the same mine. They are also back to back and have no verandah. These were built in war time to take the place of grass huts which were burnt down. Some of them have no windows which was admitted to be an oversight.

The Company is in favour of giving to each family an independent house with two rooms, one living room and one kitchen, but states that there is not enough land available near the mines to do so. It should not be difficult to acquire land for the purpose.

Latrines and urinals are not provided in the camps for labour. Defecation areas are marked off and labour is forced as far as possible to use these areas. In some mines trenching of night soil is practised and in others large herds of swine are kept. Adequate gangs of sweepers are maintained to keep the camps in a sanitary condition.

Supply of drinking water is adequate and is from *pucca* wells. The wells are properly protected and regularly disinfected. There are no bath rooms in the quarters for labour. Generally one family is given one quarter and rent is not charged. Allotment of quarters is made by the contractor under the supervision of the manager. As far as possible, similar tribes and castes are accommodated in one area in a camp. Overcrowding was noticed in several cases as the accommodation provided is insufficient for a large family and two quarters are very rarely given to such families. Workers do not enjoy the ordinary rights of tenancy in these houses.

Housing is provided by three Indian concerns but it is very poor. Houses are *kutcha* and the walls are made of grass or bomboo matting. Ventilation and sanitary arrangements are almost absent. *Kutcha* wells or *nalas* provide water supply. Except in one mine, these houses were not even occupied which shows that the workers do not like to stay in them. Indian concerns, however, generally employ very little imported labour.

Indebtedness.

The extent of indebtedness among mine labour is small and the average amount of debt is usually below Rs. 10. Money is borrowed chiefly from contractors and occasionally from the local money-lenders and co-workers. The rate of interest varies. Contractors do not charge any interest but

in other cases the maximum rate of interest is one anna per rupee per month (75 per cent.). Contractors recover the loan in small sums such as four annas per week. Persons who have worked for many years get fairly substantial loans. Small loans are given by contractors when, for any reason such as bad weather, a worker has not earned sufficient wage in any week.

Some of the labourers are addicted to drink and *bhong* smoking. Mining is a strenuous occupation and a certain amount of drinking will always occur and is perhaps necessary.

Welfare Activities.

Medical Aid.—The Company maintains a dispensary at most of its mines. The doctor in charge is generally an L.M.P. who visits workers in mines which have no dispensary. Workers and their families get free treatment. A qualified midwife is employed in all the large mines to attend maternity cases and for post-natal treatment. Maternity wards were found in two mines and were fully utilised. Anti-malarial staff under a malarologist trained at the Labac Hospital in Assam is maintained at the large mines in the Bhandara and Balaghat districts where malaria is rampant. Anti-malarial work consists of canalising streams, filling borrow pits and spraying static pools with malarial and is done under the direction of Dr. Ramsay of the Ross Institute. Workers quarters are not sprayed. The Company's total medical expenditure in 1943 amounted to Rs. 76,000-9-9. Indian concerns have done very little to provide medical facilities for their workers except maintaining a first aid box, as required by law. One concern has arranged with the Company to borrow the services of its doctor whenever required. The prevalent diseases in the mines are malaria, respiratory diseases, dysentery and muscular rheumatism. Workers are not medically examined either at the time of recruitment or periodically afterwards. Sickness allowance is not given by the Company but an advance is given in a few cases by some contractors. It is generally Re. 1 or Rs. 1-8-0 per week according to the size of the family of the ailing worker. In some cases, on the recommendation of the doctor, rice, milk, etc., are given to the workers free of charge during their illness by some contractors.

First Aid courses are conducted by the mine doctors as and when necessary. The duration of the course is usually 3 to 4 months. Refresher courses are held but it is not a regular practice. First Aid equipment is generally adequate.

Occupational Diseases.—The Company states in its reply that no occupational diseases have been noticed. A large number of muscular rheumatism cases, however, occur in the mining areas. The question whether this ailment can be considered as an occupational disease of the mines needs to be explored.

Canteens.—Canteen is not provided anywhere except in Kandri mine where workers may buy tea and other refreshments, but it is not patronised as well as it might be.

Education.—Almost all the mines of the Company have primary schools for the children of its employees. It is estimated that nearly one-third of the children of school-going age regularly attend the classes. A few children take an interest in carpentry but opportunities on the mines for vocational training other than in various mining operations are few. There is no provision for secondary schools or schools for workers. Books and slates are generally given free either by the Company or by the contractors but no benches are provided for sitting in most of the schools. Buildings are generally provided by the Company and the expenditure over teachers is often shared by the Company with the contractors. Most of the large mines have a club with a radio and library but advantage is taken mostly by the supervisory and clerical staff.

Grain Shop.—Imported workers are supplied with rice at a concession price. Sometimes jawari and, on special occasions, small quantities of wheat, if available, are also supplied. In some mines local workers are given the concession if they are regular workers; in others they are given an increase of Rs. 8 per tub in lieu of it. The quantity given, viz., 5½ *pailis* (nearly 7 seers) is for 5 days attendance in a week and is liable to proportionate reduction in case of absence. Non-working children, only of imported workers, are also given grain ration, the quantity being generally half of that given to the workers. The Company has its own cloth factory at one of its mines and cloth consisting of saris, dhoties and shirting is supplied to labour at a concession price. Two saris and four dhoties are given per year. The system of giving cheap grain was started in October 1940, and cheap cloth was first supplied to workers in March 1943. In June, 1944, the average cost of the concession in grain and cloth supplied per person per day was Rs. 3.33 and Rs. 0.40 respectively.

Indian-owned mines, with the exception of two, do not provide any cheap grain facilities for their labour.

There is neither a Provident Fund nor any system of gratuity or bonus for labour.

Trade Unions and Strikes.

Workers are completely un-organised and there is no trade union in the mining areas. There have been no strikes also for the last several years. Inconvenient workers are bribed by contractors as one of them admitted to us.

Working of the Labour Acts.

The Indian Mines Act.—It appears from the inspection notes of the Mines Inspectors that they mainly look to the adoption of safety measures and not to other provisions of the Act relating to health, hours of work, etc. Section 17 of the Act which refers to the provisions and maintenance at every mine of latrine and urinal accommodation is not observed. It is understood that the Provincial Government have not yet prescribed for manganese mines the kind and scale of latrines and urinals to be installed. The Payment of Wages Act does not apply to mines.

Workmen's Compensation Act.—The following table shows the number of accidents on all the Company's mines from 1939 to 1944 and the amount of compensation paid :—

TABLE 8.

Accidents and Compensation paid in the C.P.M.O. Co.'s Mines, 1939—1944.

Year	Fatal	Serious (Permanent partial disablement).	Minor Injuries (Temporary disablement)	Compensation Paid.		
				Rs.	A.	P.
1939	3	5	49	1,866	3	9
1940	2	13	41	2,417	4	9
1941	4	9	46	3,253	14	0
1942	10	3	34	6,100	3	0
1943	5	6	28	3,874	15	6
1944	1	3	27	1,251	15	6

The Company pays compensation to workers employed by contractors also. Generally the workers do not report immediately when they are injured while on work. The Company makes a part payment of the compensation when necessary. Fatal and serious accidents are reported to the District Magistrate and the Chief Inspector of Mines. Fatal accidents are also reported to the Commissioner for Workmen's Compensation and compensation is paid through him. Minor injuries which are not classed as serious under the

Mines Act are reported to the Mines Hospital where a record is kept. In the case of temporary and partial disablement, compensation is paid direct to the injured person by the Mines Manager. Workers' chief complaint is about the delay in getting compensation, but the fault seems to lie with the procedure rather than with the Company. The Company does not insure itself against accidents.

There was no accident in the sampled Indian-owned mines in 1943.

Mines Maternity Benefit Act.—Maternity benefit is paid according to the provisions of the Act. Payment is made direct to the woman concerned by the manager or to her husband if she is unable to come and receive the payment. In several cases, maternity benefit before delivery is lost as the women work right up to delivery time. The following table shows the number of cases in which maternity benefit was paid by the Company in all its mines and the amount paid from 1940 to 1944 :—

TABLE 9.
Maternity Benefit paid in the C.P.M.O. Co.'s Mines, 1940—1944.

Year			No. of cases.		Amount paid	
					Rs.	A. P.
1940	475	2,802 3 0
1941	593	3,676 8 9
1942	828	5,271 14 0
1943	950	19,402 12 0
1944	711	15,411 1 0

Prior to the introduction of the Mines Maternity Benefit Act, 1941, the Company had its own scheme of maternity benefit which was based on the woman's average earnings. The remarkable increase in the benefit from 1943 is due to the fact that the Rules under the Act were framed only in the beginning of that year. In three of the Indian-owned mines which worked throughout that year Rs. 276 were paid in 17 cases, the average amount per case being Rs. 16-3-9.

CHAPTER III.—BOMBAY.

The Shivrajpur Syndicate Limited owns three manganese mines in the Panch Mahals district of the Bombay Presidency, out of which only one mine, *viz.* Shivrajpur mine is working at present. The Managing Agents are Messrs. Killick Nixon and Company, Bombay. The mine was started in 1905 with a very small complement of workers. With the outbreak of the first World War, all the three mines were working full strength and the average number of workers employed in the Shivrajpur mine alone was 4,000. All the mines had, however, to be closed for about four years since 1932 on account of the slump. The mine was again closed for a year in 1941 due to war with Japan which was its chief buyer till then. The mine was re-started in 1942 owing to demand for its ore from the U.S.A. The mine is not, however, working full strength due to acute shortage of labour and the average production to-day does not go beyond 2,000 tons a month. The ore is of a low grade and has high phosphoric contents. Underground work was started in this mine regularly since 1935.

The mines are in good order and there is every opportunity for increased production immediately labour becomes available. The management thinks that the Shivrajpur mine can be worked for the next 30 years by employing 2,000 workers as a normal complement.

Employment.

The following table shows the employment and classification of workers into piece-rated and time rated :—

TABLE 10.
Employment in Shivrajpur Mine.

Month	No. of piece-rated workers	No. of time-rated workers	Total
August 1939	1,097	1,459	2,556
January 1944	494	389	883
April 1945	264	255	519

The following table shows the proportion of men and women in the labour force for the same periods :—

TABLE 11.
Number of men and women in Shivrajpur Mine.

Month	Men	Women	Total
August 1939	2,088	468	2,556
January 1944	571	312	883
April 1945	303	216	519

The women are employed only in opencast working. No children are employed. All the workers are employed and paid directly and there is no contract labour.

Though the demand for the Company's ore from the U.S.A. continues unabated the employment has gone down due to acute shortage of labour. The demand for labour set up by the "Grow More Food" campaign and numerous defence measures has depleted the number of local labourers and has drained the widespread recruiting areas from which the Company use to procure a large part of its labour force. As a last resort, the Company has recently engaged a contractor to procure as much labour as possible. About 50 per cent. of the labour engaged at present is local. Local labourers are mainly agriculturists and look upon mining as a secondary occupation.

Recruitment.—Recruitment is generally done through *tyndels* who are at present nine in number. Their duties are to recruit labourers from districts in which they are usually well known, convey them to the mines, assist the management in their welfare, see that they attend work and to bring complaints to the notice of the management. The *tyndels* are paid a commission on the earnings of their labour. Some *tyndels* take definite interest in their labour but the average *tyndel* pays little attention to the welfare of his labourers and is content to draw his commission on their earnings. The experiment of raising contracts was tried by the Company some years ago but was discontinued as it was found that the contractors did not pay their labourers properly.

The main areas of recruitment are Jodhpur, Jaipur, Ajmer, Katni and Raichur. Travelling expenses of the workers and their families are paid by the Company which also gives annas 8 per adult and annas 4 per child for food expenses during the journey. These amounts are not recovered. Local workers come to the mine for employment of their own accord and no recruitment for them is necessary.

The Company maintains service record cards for its employees and it is noticed that as many as 50 per cent. of the workers have less than one year's service and the remaining 50 per cent. have between one and five years' service. This shows that there is no settled labour force in this mine.

Classification of Workers.—There is no classification of workers as permanent and temporary and all workers are treated as temporary. Imported workers get their railway fare when they first come to mines as well as when they go on leave after one year's service

There is no system of graded or time-scale promotion. Time-rated work-
ers are promoted according to their seniority in service and efficiency. There
is no system of apprenticeship also.

Labour Turnover.—The following table shows the labour turnover in
1944 :—

TABLE 12.

Average daily No. of workers employed	Total Separations			Percent of total
	Retirement	Dismissal	Voluntary	
780	18		205	28.5

Absenteeism.—According to the management, very few miners work six
days in a week and the average number of days worked per week is 4 to 5 in
the case of imported labour and 3 to 4 in the case of locals. This is support-
ed by the percentage of absenteeism worked out for a single wage period in
April 1945 and it was found that there was 39 per cent. of absenteeism
amongst the local workers and 28 per cent. amongst the outsiders. There
is more absenteeism amongst local workers during harvesting season and on
the day following the pay day. Idleness also is one of the main causes.

It is necessary to note here two measures which the Company has adopted
to check absenteeism amongst workers. The *mukadam* of a gang, i.e., the
head gangman, gets one anna more per day in case total man-days of the gang
exceed 70 during the wage periods, viz., a fortnight. Another measure adopted
is that a bonus of $\frac{1}{2}$ anna per day is given to workers, if they attend at least
11 out of 13 working days during a wage period.

There are no Standing Orders nor a Labour Officer. The grievances of
the workers are looked into by the departmental heads.

Wages and Earnings.

Two kinds of work are carried on in this mine.

(a) Opencast or quarrying and (b) Underground. The piece-rates in
opencast working for a tub of approximately 25 to 27 cubic feet for the years
1939 and 1944 are given below :—

	1939			1944		
	Rs.	A.	P.	Rs.	A.	P.
Ore rate	1	8	0	1	12	0
Blasting hard <i>multis</i>	0	6	0	0	8	0
Blasting soft <i>multis</i>	0	5	0	0	7	0
Blasting loose <i>multis</i>	0	4	0	0	6	0

In addition to this, there is a scale of lead and lift rates according to the
distance and depth respectively and these rates are added to the basic piece-
rates mentioned above. These rates have not changed since 1939.

As regards underground work ore rate is Rs. 1-8-0 per tub. If the tubs
are more than three per gang per day, the rate is increased to Rs. 2 per tub

With a view to ensure that every worker gets a living wage, the Company
has a system of standard (*amani*) rates for piece-rated as well as daily rated
people. The rates are as follows :—

							Rs.	A.	P.	
Mukadams	0	8	0
Men	0	7	0
Women	0	5	0

These rates have not changed since 1939. If the daily wages based on
production of the piece-rated workers fall short of the standard rate, the
difference is made good by the Company. The main categories of daily-rated
people are loaders and transporters who get the minimum wage quoted above.

There are only 44 monthly-rated employees and the highest paid man is the underground foreman who gets Rs. 150 p.m., while the lowest paid man is the Checker who gets Rs. 22 p.m.

The following table shows the daily average basic wages and earnings of miners for the first fortnight of April 1945 :—

TABLE 13.

Wages and Earnings of Miners.

Occupation	No. of workers	Man-days	Basic wages		Average per day per worker		Average per day per worker	
			Rs.	A. P.	Rs.	A. P.	Rs.	A. P.
Surface mining ..	173	1,814½	935	6 0	0 8 10	1,435	0 0	0 12 8
Underground Mining	74	830½	581	12 0	0 11 0	726	10 0	0 14 0

The average increase in the basic wage rates of piece-rated workers since 1939 is about 25 per cent. If the dearness allowance and bonus is taken into consideration, the average cash earnings of piece-rated workers may be said to have increased roughly by about 90 per cent. since 1939. In the case of daily-rated people, the increase in earnings comes to about 60 per cent. only as the basic wage rate of these people has remained unchanged.

Dearness Allowance.—Daily-rated workers like transporters and loaders and piece-rated workers like miners get two annas dearness allowance per day worked. This allowance was started in May 1942 and was one anna per day worked. It was increased to 2 annas in July 1942. In the case of the supervisory staff, the allowance is as follows :—

Up to Rs. 34 p.m.	..	Rs. 5 p.m.
Rs. 35 to Rs. 100 p.m.	..	Rs. 8 p.m.
Rs. 101 to Rs. 149 p.m.	..	Rs. 7 p.m.
Rs. 150 to Rs. 300 p.m.	..	Rs. 6 p.m.

Bonus.—At the end of every wage period, 20 per cent. of the earnings is given to piece-rated and daily-rated workers as bonus. Besides this, presents of Re. 1, As. 12 and As. 8 are given annually to *mukadams*, men and women respectively. The monthly-paid workers get two months' salary as bonus every year if they have put in more than 10 years' service, and one month's salary in other cases. Besides this, an attendance bonus is given as stated above to piece-rated workers at ½ anna per day if they have not been absent for more than two days in a fortnight. The payment of bonuses was started in 1943 and depends on the financial position of the Company.

Overtime.—Overtime is sometimes worked in workshop ; the workers are paid the usual rate and nothing extra.

Fines.—Fines are sometimes imposed when the workers damage the Company's properties or when they create trouble. The incidence, however, is small. The balance in the fine fund is Rs. 11 only and the amount is utilised for the welfare of the workers.

Period of Wage Payment.—Monthly-rated employees get their salary on the last day of the month. Other workers have wage period of a fortnight and they are paid within 9 days of the expiry of the wage period. Wages are given in a closed envelope to individual workers separately and the details of his earnings are shown on it. There is no possibility of the workers being deceived. Though the workers work in a gang of 5 to 8 persons, each member's production is calculated and paid for separately.

Working Conditions.

Except the Power House department, all other departments work one shift. Workers are promoted according to their seniority in service and efficiency. There is no water in the underground area. Formerly two shifts were sometimes worked in underground. The following table shows the shift hours and the total spreadover :—

TABLE 14.
Shift Hours and Spreadover in 1945.

Department	Shift Hours	Recess	Total Spreadover
Workshop	8-30 a.m. to 6 p.m.	1-30 p.m. to 3 p.m.	9½ hours.
Opencast	8-30 a.m. to 6-30 p.m.	12 noon to 1 p.m. and 4 p.m. to 5 p.m.	10 hours
Underground	9 a.m. to 5 p.m.	No recess	8 hours
Power-House	8 a.m. to 4 p.m. 4 p.m. to midnight	No recess No recess	8 hours 8 hours

From the above table it will be seen that there is no recess for underground and power-house workers. Opencast workers enjoy two hours' recess at different intervals with the result that there is longer spreadover. Working hours do not exceed 8 in any case.

For surface workers there is no arrangement for protection against heat, though there are trees nearby which give sufficient shade. Camp workers go to their quarters which are nearby. There are two wells in the mining area and a workman is engaged to supply water to workers. No latrines or urinals are provided for surface workers. Latrines are, however, provided on the surface for underground workers. In addition, pans are provided underground for use in emergency and are cleaned by sweepers. Bath rooms fitted with water taps are also provided for them on the surface. The depth of the underground working is 300 feet. There are rises or wings for ventilation purposes. For lighting, miner's or carbide lamps, wax candles and kerosene lamps are used.

The workshop has cement flooring and sufficient windows fitted with glass panes. Electric lights are also provided and there is no congestion.

Holidays and Leave.—Workers get a weekly day of rest ; besides, two holidays each are given for Holi, Diwali and Christmas. Only the monthly-rated staff gets them with pay. All the monthly-paid workers get privilege leave of one month and sick leave of 20 days on full pay in a year. Medical certificate is necessary for sick leave. Other workers get one month's leave without pay in a year.

Housing.

There are two types of houses. The artisan type has 81 quarters in 9 blocks. Such quarter consists of four rooms, the sizes being 12 ft. × 12 ft., 12 ft. × 9 ft., 12 ft. × 6 ft. and 7 ft. × 6 ft. Most of these quarters are given to workers in the workshop. They have no electric lights.

The other type of quarters is meant for imported labourers. There are 210 such quarters in 14 blocks. These are single room tenements measuring 10 ft. × 8½ ft. Temporary sheds are erected in front of every occupied quarter. As there is shortage of labour, many of the quarters have remained unoccupied and some workers have been given two quarters instead of one. These quarters were condemned as unfit for human habitation by the Assistant Director of Public Health in 1943 and the Company has already dismantled many of them.

All these quarters are rent free and are built in stone masonry and have corrugated iron roofs. Drainage system is bad as there are open gutters and

soak pits. The Assistant Director of Public Health in his note had suggested that every block should be provided with a cess pool and that the waste water from each living room should be drained into a common *pucca* drain which should ultimately dispose of the effluents in the cess pools. It seems no action has been taken on this suggestion. The Company has already started building a new type of houses to accommodate 50 workers. They will be in 5 blocks. Each quarter will be 12 ft. \times 12 ft. and will have a kitchen of 8 ft. \times 6 ft. There will be two verandahs, one in front and the other at back, with dimensions of 12 ft. \times 6 ft. and 4 ft. \times 6 ft. respectively. The construction is so done that in case a family is large, it should be possible for it to occupy two quarters with an entrance from the back verandah. The plinth is two feet. The height of quarters has also been increased and bigger windows and doors have been provided to improve ventilation.

Water Supply.—There are seven wells fitted with electric lift pumps and water is distributed by means of pipes and taps. The supply is plenty and wholesome.

Latrines.—There are 12 sets of *pucca* latrines out of which 3 sets have 15 seats each and the remaining 9 have 8 seats each. The management, however, states that the latrines are not generally used by labourers. No urinals are provided and the labourers use open space for the purpose.

Conservancy.—There are 40 sweepers and one *mukadam* to look after the sanitation of the camp. Night soil and refuse are collected in baskets and taken in headloads by sweepers about two furlongs from the camp where they are burned. The Assistant Director of Public Health stated in his note that the practice of carrying refuse in headloads should be stopped and that the Company should maintain at least one refuse bullock cart.

Welfare Activities.

Medical Aid.—There is a hospital for workers and their families which is properly equipped and has four beds. There is a maternity ward also but the Company has not yet been able to secure a midwife. The doctor in charge is an L.M.P. The Company has spent Rs. 3,556 and Rs. 3,159 during 1943 and 1944 respectively on medicines alone. Prevalent diseases are malaria, pharyngitis, sore-throat, influenza and pneumonia. Workers are medically examined at the time of recruitment and afterwards every three months.

From the health point of view, this mine had for many years borne an unsavoury reputation which largely accounted for the considerable difficulty in obtaining labour. Prior to 1936, no serious anti-malarial measures were undertaken but during that year the management approached Dr. Ramsay, Principal of the Ross Institute, India Branch, for advice. He visited the mines in March 1936 and advised certain anti-malarial measures which were adopted. As a result, incidence of malaria which was 41.87 per cent. in 1936 dropped to 11.15 per cent. in the following year. Statistics show a further reduction for subsequent years until 1940 when the figure was 4.66 per cent. The situation, however, has considerably deteriorated since then for want of quinine and larvicides, though a malarial surveyor trained in the Ross Institute is still maintained. The incidence was 23.23 per cent. in 1944.

Instructions in first aid are given to selected workers by the Medical Officer for about three months and a refresher course is taken yearly. Equipment for first aid is sufficient.

Food grains worth 3 annas are given as sickness allowance per day on production of a medical certificate. If a relative is required to attend the patient, he gets his standard wage.

No occupational diseases are reported.

Grain shop, etc.—The Company maintains a grain shop in which food grains and other articles such as sugar, jaggery, til oil, soap, etc., are sold at

rates lower than the market rates. No canteen is provided by the Company but there is a small hotel run by the contractor just near the camp. No supervision is exercised over this hotel. A creche is maintained in the camp itself but it is not in good order. Attendance is less than five. An old woman is in charge of the creche. There are, however, other benefits in this concern. Tea is served to underground workers after they finish their work. Woollen pull-overs are also given to them. Firewood is allowed to be cut from Company's jungles.

Provident Fund.—The Company maintains a Provident Fund which is open to the monthly-rated staff in receipt of Rs. 25 or above who have been in the service of the Company for at least six calendar months. People getting between Rs. 20 and Rs. 25 a month may be admitted to the membership of the Fund at the Company's discretion. The member contributes $8\frac{1}{3}$ per cent. of his salary and the Company contributes an equal amount. Hardly 8.5 per cent. of the workers are members of the Fund.

Bonus and Gratuity.—There is no system of bonus and gratuity. On the recommendation of the management, a small remuneration in the form of bonus or gratuity is paid to the workers on their merits at the time of retirement.

Trade Unions and Strikes.

Workers are completely unorganised. There is no trade union and there has been no strike since the Company started its work. There is also no Works Committee.

Working of the Labour Acts.

It appears from the Inspection notes of the Inspectors of Mines that the workings were in good order. No complaints were received about the working of the Workmen's Compensation Act. The following table shows the number of accidents in 1943 and 1944 and the compensation paid :—

TABLE 15.
Accidents and Compensation paid, 1943-44.

Year	Nature of accidents			Compensation paid		
	Minor	Serious	Fatal	Rs.	A.	P.
1943	18	7	Nil	69	13	6
1944	13	5	Nil	536	8	6

Out of the five serious accidents in 1944, there was one case of permanent disablement for which Rs. 462 were paid as compensation. The workers are given instructions to report the accidents to the management immediately. The Company does not seem to shirk its responsibility under the Act.

As regards the Mines Maternity Benefit Act, many of the female workers are local with the result that sometimes they cannot claim the benefit as they leave before working regularly for six months which is the qualifying period. The imported female workers get the usual benefits and also medical facilities during confinement.

CHAPTER IV.—SANDUR STATE.

Sandur State which is in the Bellary district of the Madras Presidency is rich in manganese ore. In view of the high grade iron and manganese ores and the possibility of cheap electric power from the Tungabhadra project, which is within a score of miles from the State, conditions are most favourable for the development of a steel or ferromanganese industry, especially as the manganese ores contain comparatively low phosphorus content.

A lease was given as early as in 1912 to a European Company, viz., the General Sandur Mining Company Limited, to work the mineral deposits of the State. Only opencast working (quarrying) is done in three places by the Company. The following table shows the output in tons and the average number of workers employed in 1939 to 1944 :—

TABLE 16.
Production and Employment in Sandur State Mines, 1939-1944.

Year	Output (tons)	Average No. of persons employed daily			Total.
		Men	Women	Children	
1939	1,22,596	783	266	108	1,157
1940	46,862	381	133	28	542
1941	11,470	89	30	..	119
1942	6,933	88	43	..	131
1943	3,170	53	30	..	83
1944	652	19	9	..	28

Mining work had actually come to a standstill at the time of our investigation (May 1945) on account of war conditions and acute shortage of labour, though the Company hopes to re-commence its work in the very near future. Practically the whole of the Company's ore went to the Continent before the present war and drastic reduction of staff and labour had, therefore, to be made in 1939. A further reduction was made in 1941 and now only a skeleton staff and labour force are retained. The following account of labour conditions relates to times when the mines were working.

Employment.

Labour is recruited and employed by raising contractors. 50 per cent. of the labourers are recruited from outside the State and live in camps provided by the Company. Most of the imported workers come from Cuddapah, Kurnool and Raichur. The contractors are given advances by the Company sometimes up to Rs. 1,000. They in turn give advances ranging from Rs. 5 to Rs. 20 to their gangmen. Local workers come from neighbouring villages and return to their homes after the day's work is over. Some come from a distance of 10 miles even. The imported labourers are considered as permanent while the local ones are considered as temporary. Apart from the provision of quarters for permanent workers, there is no difference between these two classes of workers.

No statistics are available regarding the length of service of operatives. Similarly no figures are available for labour turnover and absenteeism.

Wages and Earnings.

The miners are paid on piece basis and payment is made to the gangmen. A gang usually consists of the gangman's whole family and some relatives. The transporters and other surface workers are paid on daily basis. Overseers, mistries and other such employees are on a monthly basis.

The rate paid to contractors for quarrying ore up to 1940 was from Rs. 1-4-0 to Rs. 2 per ton, varying according to lead and lift. In 1940 the rate was reduced to As. 12 per ton. But the difference between the contract rate and the wages paid by the contractors calculated at 6 to 7 annas for men and 4 to 5 annas for women was made good by the company to the contractors. The manager, however, did not see that the contractors' workers were actually paid the above wages, though he used to read out to the workers what should be paid to them.

In December 1944 and the following month, the Company quarried about 5,000 tons of ore by employing workers directly on wages of 10 annas per day and a dearness allowance of Rs. 3-8-0 a month. The total cost worked out

to Rs. 4-8-0 per ton as against the maximum rate of Rs. 2 paid to the contractors.

The Company has drawn up a new revised scale of wages and dearness allowance to apply with effect from 1st March 1945 as follows :—

Wages :—	Headmen	8 as. per day		
	Men	7 ..		
	Women	5 ..		

Dearness Allowance per day worked :—	Minimum No. of days worked per month	Men	Women
		Rs. A. P.	Rs. A. P.
	25	0 3 0	0 2 6
	20	0 2 6	0 2 0
	15	0 1 6	0 1 0

The dearness allowance paid by the Company from 1941 to February 1944 was Rs. 2-10-0 per month for men and Rs. 2-4-0 for women for at least 25 days' work. In February 1944 the dearness allowance was raised to Rs. 3-12-0 and Rs. 3-4-0.

A holiday bonus of two days' wages a month without dearness allowance is given to all workers who work for 25 days and more in a month.

Wages are settled every month within four days of the expiry of the wage period.

Fines.—Fines are levied occasionally for late coming and for mixing up good and bad ore. The incidence of fine is 4 annas to Re. 1 per head, though in a few cases a fine of Rs. 2 was also imposed. The amount is used for the benefit of the employees. The amount of fines levied in 1942 to 1944 was Rs. 26 and out of it Rs. 5 were paid for a burial.

Holidays.—One peculiar feature is that there is no weekly holiday. The workers work continuously all the days of the week until the pay day. When they receive the pay they go to Sandur or Bellary to make purchases or to enjoy a holiday and return after two or three days. A holiday bonus of two days' pay, referred to before, is given for this purpose.

Working Conditions.

Only single shift is worked. Work is supposed to commence at 8 a.m. and close at 6 p.m. with an hour's interval. The contractors are not, however, bound by the working hours and the operatives are made to work from 6 a.m. to 7 p.m. with one hour's interval. Sometimes on moonlit nights work continues up to 10 or 11 p.m. On one occasion the labourers were made to work with the aid of gas lights.

No rest sheds are provided, but workers take rest under trees. Latrines and urinals are also not provided.

Housing.

The imported workers, *i.e.*, 50 per cent. of the total labour force are provided with living quarters for which no rent is charged. Two out of three mines were visited. Quarters in one mine are of two types. One is a semi-cylindrical hut 10 ft. × 8 ft. with no windows and the height of the roof is 6 feet. The entrance is by a small door 4½ ft. × 3 ft. and the floor is of mud. The other type is a hut consisting of two rooms, one 8 ft. × 10 ft. to serve as a living room and the other 8 ft. × 6 ft. to serve as a kitchen. There is no plinth. Side walls are 4½ ft. high and the roof at the highest point is 8 ft. from the ground. The walls and roof in both the types are of flattened kerosene tins. The extent of overcrowding can be realised from the fact that, on an average, four workers and their dependents live in each hut.

In another mine the quarters consist of back-to-back lines with 7 to 9 rooms on each side. The walls are of mud and the roof is of corrugated iron sheet. The rooms are 10 feet square. No windows are provided and the

entrance to each room is by a narrow door leading from a verandah 3 feet wide. The plinth is 6 inches. Floor is earthen. A few blocks in single file but otherwise conforming to the above description are also seen.

Water in both the places is pumped from a spring to a reservoir and led to the camps through pipes and taps.

Welfare Activities.

Medical Aid.—In 1938, the Company had a medical staff of three doctors and three dispensaries, one in each mine. At present, there is one well equipped dispensary, but no qualified doctor, and the manager dispenses medicines. A sickness allowance of four annas for men and three annas for women per day is paid on the production of a medical certificate.

Other amenities.—There are no other amenities such as canteens or creches. Before the war there was a school with one teacher in each of the mining areas. At present there is no school. Before the war, there was a weekly bazar (*shandy*) in the three areas. At present rice and other provisions are issued at cost price through an overseer who goes to the camps on fixed days in a week.

Trade Unions.—There is no organisation among the workers and there was no strike.

Labour Legislation.—Workmen's Compensation Act* in force in the Sandur State is the same as the one applicable in British India.

Accidents are, however, very few. For the last two years, the records of accidents show only slight cuts on fingers, toes, etc. Accidents are reported to the Police Department of the Sandur State.

CHAPTER V.—SUMMARY AND CONCLUSIONS.

The origin of manganese mining in India dates back to 1892 when manganese quarrying was started in Vizagapatam. Up to 1929 India was the leading producer of manganese in the world and since then it has been second only to the U.S.S.R. in respect of production. Manganese is one of the major mineral industries in India and the total production in 1943 was nearly 6 lakhs of tons. Manganese ore is found in the Central Provinces, Bombay, Madras, Bihar and Orissa in British India and in Sandur, Mysore, Bonai, Keonjhar and Patna States.

The Central Provinces is the most important manganese producing province in India. It has a virtual monopoly of high grade ore and accounted for about 83 per cent. of the production in British India and about 76 per cent. of the production in the country during 1939-1943. This Province as well as Bombay and Sandur have been covered by the present survey. The C. P. Manganese Ore Company in the Central Provinces, the Shivrajpur Syndicate in the Bombay Presidency and the General Sandur Mining Company in the Sandur State are the important mining Companies raising manganese ore in India. Of these only the first Company is raising manganese to any considerable extent at present. Most of the manganese mines in India are opencast workings or quarries. In fact only three mines in the Central Provinces and one in Bombay work underground. Persons working underground form only 4.5 per cent. of the total employed. All mines have slackened the pace of production due chiefly to export difficulties and acute shortage of labour while some have suspended production altogether.

Employment.—In the Central Provinces, 21,897 persons consisting of 11,386 men and 10,511 women were employed in 1943. In the Shivrajpur

* Reference Labour Department u/o No. L.4012/1998, dated the 15th November 1946.

mine, 519 workers consisting of 303 men and 216 women were employed in April 1945. In Sandur only 28 workers, 19 men and 9 women, were employed in May 1945. The total employment in the manganese industry at present may be estimated at about 25,000. Nearly 50 per cent. of the workers are women but they do not work underground. No children are employed. With the disappearance of war-time difficulties and development of ferromanganese production, employment in post-war period may be put at about 40,000.

Recruitment in the Central Provinces and the Sandur State is done through raising contractors but in Shivrajpur mine labour is recruited through *tyndels* who are employees of the Company and get a commission on the wages of the workers recruited by them. In the Central Provinces and Shivrajpur workers except the supervisory staff are temporary. In Sandur, however, nearly 50 per cent. of the workers are classified as permanent but they enjoy no special privilege other than housing. About 20 per cent. of the workers in the Central Provinces and 50 per cent. in Shivrajpur and Sandur are local people who come from the adjacent villages. There is no settled labour force and the local labour which is primarily agricultural is largely responsible for turnover and absenteeism.

Wages and Earnings.

Most of the workers in the Central Provinces and Sandur and about 50 per cent. of the workers in Shivrajpur are piece-rated. The rates vary from mine to mine and even in the same mine the rate varies on account of considerations of lead and lift and transport facilities. Only the supervisory staff and those working on transport are paid on time rates. The basis of calculation of wages is a ton or a tub of ore or spoils raised. Workers work in gangs which generally consist of members of the same family and wages are paid to the head of each gang who distributes them among the members except in Shivrajpur mine where payment is made to the individual members of the gang. The weighted daily average wages amount to 7 annas and 7 pies for men and 5 annas for women in the C. P. Manganese Ore Company's mines. In Indian-owned mines only boulder picking is done and the average cash wage amounts to 4 annas 8 pies a day. In Shivrajpur, the daily average basic wages of surface and underground miners are 8 annas 10 pies and 11 annas, respectively. With a view to ensure that every worker gets a living wage, the Shivrajpur Syndicate has a system of standard (*amani*) rates for piece-rated as well as daily-rated people. The rates are 8 annas for *mukadams*, 7 annas for men and 5 annas for women. The general Sandur Mining Company has drawn up a scale of wages and dearness allowance to apply with effect from 1st March 1945. The basic rates are 7 annas for men and 5 annas for women.

The C. P. Manganese Ore Company provides cheap grain and cloth to labour and the cost of these concessions in June 1944 was 3.39 annas and 0.40 anna respectively per head per day. Only two of the Indian mines were giving any concessions in kind. In Shivrajpur a dearness allowance of 2 annas a day for every day worked for daily-rated and piece-rated workers and Rs. 5 to Rs. 8 p.m. according to pay for the supervisory staff is given. Besides, a bonus of 20 per cent. of the total earnings is given to daily-rated workers. The monthly-paid staff gets a bonus of two months' pay in a year. The revised scale of dearness allowance in Sandur varies from 1 anna 6 pies to 3 annas for men and 1 anna to 2 annas 6 pies for women for every day worked according to total attendance in the month. A holiday bonus of two days' wages is also given to all workers who put in at least 25 days' work. The wage period is generally a week in the Central Provinces, a fortnight in

Shivrajpur and a month in Sandur. Wages are paid on the eve of the weekly bazar day in the Central Provinces, within 9 days of the expiry of the wage period in Shivrajpur and within 4 days in Sandur.

Working Conditions.

Surface mines generally work a single shift while underground mines work a double shift. Hours in surface mines are generally from 8 a.m. to 6 p.m. with one hour's interval and in underground from 8 a.m. to 4 p.m. and 4 p.m. to 12 midnight for the two shifts without any interval. Arrangements for light and ventilation underground are poor in the Central Provinces but are much better in the Shivrajpur mine. Some mines do not provide latrines or urinals underground; some have not built rest shelters nor made arrangements for refreshment or drinking water. Shivrajpur mine alone has provided on the surface bath rooms fitted with water taps for underground workers. Even in surface mines no arrangements have been generally made for providing latrines or urinals or rest shelters. Drinking water is usually supplied to workmen at their places of work.

Workers get a weekly day of rest in the Central Provinces and Shivrajpur but not in Sandur. The monthly paid staff get two weeks' holidays with pay in the Central Provinces while in Shivrajpur they get one month's privilege leave and 20 days' sick leave on full pay. In addition, all workers are given 6 days as religious holidays in a year in Shivrajpur; but they are with pay for monthly-rated workers only.

Housing.

In the Central Provinces, 90 per cent. of the imported labour of the C. P. Manganese Ore Company are given quarters. The quarters consist of rooms 10 feet square built in barracks of 4, 10 and even 20 rooms. Many are built back to back. Only three Indian concerns have provided quarters and they are very poor. In Shivrajpur separate types of quarters are provided for artisans and labourers. The quarters for artisans consist of four rooms while the workers' quarters are single room tenements built in blocks of 15 rooms each. The quarters are built in stone masonry and have corrugated iron roofs. In Sandur all imported workers are provided with quarters. They are semi-cylindrical huts measuring 10 ft. \times 9 ft. with walls and roof of flattened kerosene tins, or consist of small rooms with walls and roof of the same material. The roof in both the types is not more than 8 feet high. A few quarters are built in mud and brick with corrugated iron roofs. They are back to back and consist of 7 to 9 rooms on either side. Housing, where provided, is free in all the mining areas.

Latrines are provided only in Shivrajpur. In the Central Provinces in the mines belonging to the Company, water supply is from *pucca* wells while in the Indian mines water is drawn from *kutch*a wells or even from *nalas*. In Shivrajpur and Sandur piped water is supplied to the camps from protected wells.

Welfare Activities.

The C. P. Manganese Ore Company maintains a dispensary at most of its mines and has maternity wards in two of its big mines. It also maintains an anti-malarial staff under the control of a trained malarialogist. Indian concerns have done very little to provide medical aid for their workers except, maintaining a first aid box as required by law. The Shivrajpur Syndicate maintains a properly equipped hospital for the workers and their families as well as a maternity ward. There is, however, no midwife attached to the hospital. Anti-malarial measures under a trained malarialogist are also undertaken. Food grains worth 3 annas are given as sickness allowance per day on production of a medical certificate. In Sandur there is no doctor at present but there is a well-equipped dispensary and the manager dispenses medicines! A sickness allowance of 4 annas for men and

3 annas for women per day is paid on production of a medical certificate. Prevalent diseases are malaria, respiratory diseases, dysentery and muscular rheumatism in the Central Provinces and malaria, pharyngitis, influenza and pneumonia in Shivrajpur.

In spite of the fact that nearly 50 per cent. of the workers in manganese mines are women, no creches are provided in any of the mines except one in Shivrajpur. In the Central Provinces wherever rest shelters are provided they are used as creches. Almost all the mines of the C. P. Manganese Ore Company run primary schools, the expenses of which are shared by the contractors and the management. In Sandur there were three primary schools but the mines were working but at present there is none.

The C. P. Manganese Ore Company supplies its imported workers with rice and other cereals at a concession rate. The Indian-owned mines with exception of two, do not provide any cheap grain to their labour. The grain shop at Shivrajpur sells articles to the workers at prices slightly favourable compared to market rates. In Sandur although there is no grain shop, and provisions are supplied to the workers at cost price by the Company.

Only the Shivrajpur Syndicate has a Provident Fund, but it is open only to the monthly-rated staff in receipt of Rs. 25/- or more.

Trade Unions.

Workers in the manganese mines are completely unorganised and there have been no strikes.

Working of the Labour Acts.

It appears that the Inspectors of Mines mainly look to the safety measures under the Indian Mines Act while they neglect the provisions relating to health, hours of work and sanitation. The Payment of Wages Act does not apply to mines. Compensation is paid to contract labour in the Central Provinces and Shivrajpur and no complaints were received about the working of the Workmen's Compensation Act. In Shivrajpur many of the women workers are local with the result that sometimes they cannot claim benefit under the Mines Maternity Benefit Act as they leave before working regularly for six months, which is the qualifying period. The Workmen's Compensation Act* in force in the Sandur State is the same as the one applicable in British India.

Conclusions.

To conclude, wages in this industry are low. The C. P. Manganese Ore Company has paid a dividend of 22½ per cent. per annum for the last 6 years and the Shivrajpur Syndicate declared a dividend of 20 per cent. in 1944. In view of the large profits made by these Companies, it is clear that there is a considerable scope for increasing the wage rates in this industry. Concession in kind given in the Central Provinces or dearness allowance and bonus given in other centres are not commensurate with the increase in the cost of living. Working conditions leave much to be desired. Housing and sanitary arrangements are not at all satisfactory. If the system of raising contractors is abolished, the cost of production will go down and labour will not only get better wages but, on the whole, a better deal from the employer. Workers in this industry are not at all organised and it will take a long time for them to be able to stand on their own legs.

Employment in the manganese industry fluctuates considerably at present but it may be hoped that with the progress of industrialisation in the country, manganese ore will be utilised in India to a much larger extent than at present, thereby ensuring regular and increased employment to the workers.

SIMLA,
The 30th June, 1945.

D. V. REGE.