REPORT

OF

THE STUDY GROUP

ON

COAL PRICES

FOR

BENGAL - BIHAR

COAL FIELDS

1966

eland: Rs. 3-45 Paise

8 sh. 1 d. or 1 \$ 25 cents.

CHAPTER I-PRELIMINARY

Appointment, terms of reference and scope of the committee

The Government of India set up a Study Group to review the price of coal and coke *vide* their Office Memorandum No. C5-12(6)/66, dated the 26th March, 1966.

- 2. The composition of the Study Group was as follows:—
 - (1) Shri A. B. Ganguli, 'Chairman, Calcutta State Transport Corporation

Chairman.

(2) Shri K. S. Bhandari,
Joint Secretary,
Ministry of Finance,
(Department of Expenditure)

Member.

(3) Shri A. C. Bose, Coal Controller

Member.

(4) Shri A. B. Guha, Adviser, Planning Commission

Member.

(5) Shri K. Sivaraj, Dy. Secretary,

Ministry of Mines & Metals

Member-Secretary

Shri K. K. Dhar, Dy. Secretary in the Ministry of Mines and Metals was appointed w.e.f. 4th June, 1966, as the Member-Secretary of the Study Group, vice Shri K. Sivaraj, vide the Government of India's Office Memorandum No. C5-12(6)/66, dated the 4th June, 1966.

- 3. The terms of reference of the Study Group were laid down as follows:—
 - (a) to review the recommendations of the Coal Price Revision Committee (1958) in the light of the present-day conditions by comparing the cost data and norms worked out by the Coal Price Revision Committee with the present-day conditions and estimate the increase that may have taken place in the cost of raising of coal;
 - (b) to examine how far the rise in costs has been neutralised by the increases in prices which have been allowed from time to time; and
 - (c) to recommend if any further increase in price of coal and coke is called for.
- 4. Subsequently, Government referred the four following matters to the Committee:—
 - (1) to consider whether the stowing and hard cases assistance granted by the Coal Board is adequate;

- (2) to examine whether the method of pre-wetting of high moisture coals before analysis in the laboratory was affecting adversely the grading of such coals, and if so, to make suitable recommendations for solving this problem;
- (3) Bonus Act, 1965—to recommend whether any price increase in coal and coke was justified to amortise the arrear payments due under the Act;
- (4) to consider whether the Industry should be given any price increase for meeting the cost of footwear to be supplied as a result of Merchant Committee's recommendations.

CHAPTER II

Brief history and circumstances leading to the setting up of Study Group

5. In the year 1957, the Government of India appointed the Coal Price Revision Committee with a view to formulating a price policy which would enable the achievement of the coal production targets in the Second Five Year Plan, taking into account, inter alia, wage awards and other relevant factors that have a bearing on the coal production programme. This Committee, selected a representative cross section of collieries in the various regions for study. A team of Cost Accounts Officers was deputed to examine the cost of production in these collieries. The collieries cost accounted for about 27 per cent. of the total production of coal from all the collieries in the various coalfields that were covered. Examination of the data presented by the Cost Accounts Officers revealed wide variations in the same element of costs even among collieries in the same coalfields, for which no reasonable explanation could be found in many cases. The Committee, therefore, undertook a technical appraisal of the collieries in which the variations in the cost elements were most pronounced. After considering all aspects, the Committee came to the conclusion that rather than basing its judgement on average cost figures as emerged from cost examination, it would be more appropriate to attempt an assessment of what might be regarded as "normal" for each main item of cost. In other words, they felt that a mere examination of the costs actually incurred by various collieries would not be sufficient and the objective should rather be to determine the cost of production, as it should be, in a colliery managed with reasonable efficiency and economy and facing no problems of special difficulty, leaving out the specially difficult mines to be covered by a suitable scheme of financial assistance, operating outside the price structure. In the light of these considerations, the Committee evolved the following cost structure for collieries in the Bengal-Bihar coalfields, related to an output per manshift (O.M.S.) of 0.40 ton:—

	Element in the cost of production	Cost per ton of coal
		Rs. p.
(1)	Wages	9.55
(2)	Provision of amenities to workers and implementation of the Coal Mines Regulations	1.10
(3)	Expenses on salaries and administration	1.70
(4)	Stores	1.75
(5)	Cost of power, royalty, cesses, collieries' own consumption of coal and other miscellaneous items	ī·85
(6)	Depreciation and provision for development	1.70
(7)	Brokerage and Commission (Sales expenses)	0.25
		17.90

- 6. On the above average cost of Rs. 17.90 per ton, the Committee recommended the provision of a profit margin of Rs. 1.75 per ton which amounted to 11 per cent. of the average capital employed per ton of annual production of coal (Rs. 16.00) and 10 per cent. of the cost of production of a ton of coal. It recommended an increase of Re. 0.50 per ton in the existing prices of coal to bring the profit to the above level. The Committee also recommended that, in addition to the introduction of the price structure recommended by them,
 - (a) the grant of financial assistance by the Coal Board to collieries undertaking stowing operations, should be at 100 per cent. of the actual cost, subject to suitable ceiling figures, instead of at 75 per cent.—85 per cent. of the cost which were the rates then in force; and
 - (b) as the price structure recommended by them would yield an average profit of Rs. 1.75 per ton only in the case of collieries working under normal conditions, a scheme of financial subsidy should be introduced in respect of collieries exhibiting a significant departure from such normal conditions, such as presence of gas in mines, excessive pumping cost, relatively greater depth of coal mining shafts, excessive thinness of coal seams etc.
- 7. The aforesaid recommendations were accepted by Government, and have been implemented.

The Coal Price Revision Committee suggested that, although major variations requiring radical changes in the price structure recommended by them were unlikely to occur during a period of at least 5 years, following the introduction of that price structure, provision should be made for appropriate changes in the prices to the extent increases in the cost of production were caused by changes in the level of wages, and that for purposes of making such changes in prices, the Committee's assessment of the wage element in the cost of production would provide the necessary basis. This principle has also been accepted by Government, and, where working costs increase through implementation of any wage award or provision of officially prescribed amenities to workers, Government are already giving a compensatory price increase.

8. Soon after the close of the first year of the Third Plan, it was noticed that there was a certain amount of stagnation in the Industry. Production in the calendar year 1961 was only 56 million tons as against about 53 million tons in the year 1960. The Industry made a strong representation that the various elements of cost had exceeded the norms prescribed by the Coal Price Revision Committee. While this was under examination, there was an apprehension, towards the end of 1961, that the production of superior grades of coking coal required by the steel industry would continue to fall unless an incentive was given to the coking coal producers by way of a price increase. It was further felt that the increase should be of a comparatively larger magnitude in the case of the selected grades and somewhat less in the case of Grade II. By this means, the differential between superior and inferior grades of coking coal was sought to be widened. A new price structure for coking coal

was, therefore, evolved with effect from 20th February 1962. Prior to the introduction of this structure, there were only four grades of coking coal, viz., Sel. A, Sel. B, Gr. I and Gr. II. The new classification provided for 12 categories, from A to L, the range of ash percentage between one category and another being reduced to only one per cent. While fixing the prices for these new grades sizeable increases were allowed in case of the superior grades of coal. The main object of this new structure was to provide an incentive for the production and supply of better coal with low ash content and to discourage consumers, who can do with lower grades of coal, from going in for the higher grades which are gradually becoming scarce.

After the new price structure for coking coal was introduced, a marginal average increase of Re. 0.85 per ton was made in coal price in June, 1962. This increase, however, was not spread out uniformally over all grades of coal. The principle adopted again was a higher increase in the case of superior grades of coal in order to widen the differential between the inferior and superior grades. The increases then announced for non-coking coals were as follows:

									Rs.
Selected A	•							•	1.50
Selected B				•	•	•		•	1.00
Grade I .		•	•	•		•	•	•	0.75
Grade II.	•					•		•	0.38

In the case of coking coals, these increases were suitably applied to Grade A—HH.

- 9. The price increases of February and June, 1962, did have a wholesome effect. In 1962-63, total production reached the figure, approximately, of 64 million tonnes as against 55 million tonnes in 1961-62. Nevertheless, the Industry had been pressing that these increases were inadequate and the price was still uneconomic, particularly, because easily workable seams were getting exhausted, reserves were depleted and coal had to be won from greater depths than before. It was, therefore, decided that the Ministry of Mines and Fuel should set up a Study Group with a view to assessing the price increase or other incentives that might be warranted. Accordingly, a Study Group was set up by Government vide their Office Memorandum No. C5-12(7)/63, dated 27th May, 1963, under the chairmanship of Shri T. Swaminathan, Secretary, Department of Supplies and Technical Development with the following terms of reference:—
 - (a) To examine and report whether, taking into consideration the recent concessions and facilities granted to the Coal Industry, such as a higher development rebate, a reduction in import duty on specified items of machinery and equipment, simplification of procedures for grant of subsidies in adverse mining conditions, an increase in prices of coal and coke is necessary for attaining the following objectives:—
 - (i) progressive increase in coal production; and
 - (ii) adequate and timely development of mines to provide the base for further increased production,

- (b) To suggest in what manner the incentive of a price increase can be channelled directly towards (i) increased and more efficient production, including modernisation and mechanisation of mining methods, (ii) development of deep mines, (iii) improved productivity;
- (c) To recommend, as a corollary to the above, in what manner any price increase proposed can be specifically limited, in effect, to the encouragement of modernisation and mechanisation of mines and the development of deep mines, without affording encouragement to efficient mining methods or mining to shallow depth only.
- 10. After examining the Swaminathan Committee's recommendations, the Government notified a price increase with effect from 3rd March 1964 as follows:—

The increase in price in the case of coking coals was made subject to the condition that the grade of coal is determined by sampling and analysis at destination.

11. The following table gives the price increases given from time to time since 1st April 1958 to 16th April 1966, illustrating the reasons therefor on each occasion:—

Date	Reasons for increase	Price i	ncrease
1-4-58	To compensate the payment of enhanced D.A. to workers consequent on an increase of 10 points in the All India Average Consumer Price Index Number	Re. 0·50/	ton
1-4-60	Do	Re. 0.50	} .
	To compensate the cost of implementation of the provisions of Mines (Amendment) Act regarding payment of overtime wages to workers etc. To compensate the cost of implementation of the Award of the Arbitrator, Colliery Disputes, in such matters as medical and maternity benefits etc. (except item 26)	Re. 0·25	Re. 0·81/ton

Date	Reasons for increase	Price increase
2 4-8 - 60	To compensate the cost of implementation of the Award of Arbitrator, Colliery Disputes regarding incremental scales of pay (item 26).	
1-6 - 61	Do	Re. 0.06/ton
:29-12-61	To meet the incidence of the increased /royalty in respect of pre-1959 leases	Re. 0·25/ton
20-2-62	A revised grading-cum-price struc- ture was introduced for coking coals. As a result of this, there were some increases in the price of superior grades of coal.	This had the effect of increasing the average sales realisation by 18 paise approx.
1-6-62	To compensate the cost of implementation of the Award of Arbitrator, Colliery Disputes (item 26) Re. 0.06/ton
13-6-62	As an incentive for achieving the targets laid down under the Third Plan period, and to widen the price differential between superior and inferior grades:	
	Sel. A	Rs. 1.50/ton
	Sel. B	Rs. 1.00/ton
	Gr. I	Re. 0.75/ton
	Gr. II	Re. 0.38 /ton
-20-12-62	To meet the incidence of the increase in the employers' contribution of Provident Fund from 6½% to 8%	Re. o·10/ton
1-3-63	the interim recommendations of the	Re. o·8o/ton
[- 4-63	To compensate the payment of enhanced D. A. to workers consequent on increase of 10 points in the All India Average Consumers Price Index Number	Re. 0·50/ton
1-6-63	As on 1-6-62	Re. 0.06/ton
3-3-64	To provide incentives to produce superior grades of coal:	
	Non-coking	
	Sel. Grs	Rs. 1·25/tonne
	Coking*	
	Gr. A to E	Rs. 1·25/tonne
	Gr. F, G & H	Re. 0.75/tonne
	#In the case of colving code the in-	

^{*}In the case of coking coals, the increases were subject to the condition that the grade of coal is determined by sampling and analysis at destination.

Date	Reasons for increase	Price increase	
5-6-64	Same as for 1-6-63	Re. 0.06/ton	
1-10-64	As on 1-4-63	Re. 0.50/ton	
1-1-65	Wage Board—Second Interim Award .	Re. 0.40/tonne	
11-5-65	As on 1-4-63 (Amended on 28-8-65)	Re. o·o6/ton	
24-12-65	To enable the Industry to pay bonus. (read with corrigendum dated 29-1-66)	Re. o·40/tonne	
3-2-66	To neutralise effect of additional royalty payable	Re. 0.60/tonne (to Bengal Bihar only).	Į.
16-4-66	To compensate the payment of enhanced D.A. to workers consequent on an increase of 10 points in the All India Average Consumer Price Index Number	Re. 0.36/tonne.	

- 12. Lastly the Industry have been representing that the cost of production of coal has gone up substantially since C.P.R.C. studied the situation in 1957-58. It was Industry's contention that while some increases in price were granted from time to time in the wake of the C.P.R.C. report, there are several items of cost, apart from wages and royalty, for which no compensation has been given even though escalation in costs under these heads, *i.e.*, Stores, Power, Miscellaneous, etc., has been considerable.
- 13. Having regard to the facts that the Industry's plea in this behalf had some substance and, more than seven years had elapsed since the C.P.R.C. studied the cost structure, the Government decided in March, 1966, to set up the present Study Group under the Chairmanship of Shri A. B. Ganguli to review the recommendations of the Coal Price Revision Committee, 1958, in the light of the present-day conditions and to examine as to how far the rise in cost structure has been neutralised by the increases in prices which were allowed from time to time and to recommend if any further increase in the price of coal was called for.

CHAPTER III

Our broad lines of investigation

- 14. As the task of the present Study Group is virtually to bring the report of the last C.P.R.C. up-to-date, the scope of our enquiry is much more limited than that of the Coal Price Revision Committee, It was largely with this end in view that our line of investigation was chalked out.
- 15. Even in a study with such limited scope, costs must continue to hold the central place. One of the terms of reference of the Study Group was to estimate the increases that may have taken place in the cost of each factor which enters into the cost of coal raising since the Coal Price Revision Committee conducted its studies in the year 1957-58. Our first task was, therefore, to make a suitable selection of collieries in the various coalfields for gathering detailed data on all aspects of costs. It was the intention of the Study Group to select such collieries for cost examination as might be taken to represent broadly the overall position of the Industry in this regard. Initially, a group of 36 collieries in Bengal-Bihar and outlying fields, except Assam and Andhra Pradesh, was selected in consultation with the Coal Controller and the representatives of the Industry. In this list we included most of the collieries studied by the C.P.R.C. Subsequently, however, it was noticed that some of the collieries, which were costed by the C.P.R.C., have since become high-cost ones and thus lost their representative character. In our view, the study of too many high-cost or low-cost collieries would not provide a balanced picture. We, therefore, felt that some more collieries should be included in our cost study. With this object, two supplementary lists were prepared consisting of a group of 19 and 14 collieries respectively. The list was thus augmented to 69 though we had reason to believe that many of the smaller collieries would not be able to furnish reliable cost data. The list of collieries selected for costing and those actually costed is given in Appendix I. The Industry was requested to submit the replies to our detailed questionnaire by the end of April, 1966, with regard to 36 collieries originally selected and by the 1st week of July, 1966, in case of collieries in the second and third lists. The Industry, however, was not able to adhere to the target dates mentioned above, which naturally delayed the examination of the data by our Cost Accounts Officers. These Officers visited the collieries and the head offices also when necessary and scrutinised, on the spot, the cost data with reference to the books of account.
- 16. In order to compile the data on a uniform basis, a proforma and a questionnaire (as in Appendix II enclosed) were drawn up and sent to the selected collieries for completion. Clear instructions were given to the Cost Accounts Officers about the scope of the investigation. The period originally selected was the latest half-year

available. If for instance, a colliery had figures available upto December, 1965, it was to furnish the data for the half-year ending December, 1965, while a colliery which could produce figures upto February, 1966, was required to treat the period September, 1965 to February, 1966 as the costing period.

Subsequently, it was felt that unless a uniform period was fixed for all the collieries irrespective of their accounting year, the data collected would not be quite comparable. Accordingly, the collieries were requested to furnish data on a uniform basis for the period September, 1965 to February, 1966. Though many of the collieries gave figures for the costing period September, 1965 to February, 1966, some could not do so and submitted cost data for a somewhat different period on the ground that their accounts could not be recast in time. This deviation had, therefore, to be accepted in order to avoid further delay.

17. The number of collieries actually costed with their output during the costing period, the annual output of all the collieries in the Bengal-Bihar field for the year 1965 and the proportion of the output of the collieries costed compared to the total output of the Bengal-Bihar fields are as under:—

· · · · · · · · · · · · · · · · · · ·	(Tonnes in lakhs)								
	N lier	o. of col- ies selected	Production I during 1969 for the industry	Production for costing period (6 months) of selected collieries					
Bengal-Bihar private sector		27	509:90	36·36	18.28%				
Bengal-Bihar public sector .	• .	3		10.27					

18. The distribution of production of coal among the various grades in 27 private collieries of the Bengal-Bihar region is as under:—

	Grade			Tonnes	Percentage	e
I. Coking Coal.	. A			418,880	11.74	
	\mathbf{B}	•	•	39,906	1.12	
	C		•	146,221	4.10	
	D		•	117,169	3.29	
	E		•	320,059	8.97	
	F	•	•	215,287	6.04	
	G	•*		167,746	4.70	
	H		•	263,760	7.40	
	нн			60,196	1.69	49.05%

		Grade		Tonnes	Percentage	
II. Non-coking Coal		Sel. A.		562,899	15.78	
		Sel. B.]	• .	270,139	7.57	
		Gr. I .	•	890,192	24.96	
		Gr. II	•	94,186	2.64	50.95%
				35,66,640		100.00
Total I & II .				35,66,640		
		Gr. III-A		59,337		
		Gr. III-B		9,950		
		Ungraded	,•	279		
				36,36,206		

19. So far as the costing methods are concerned, we have followed the C.P.R.C. with the three exceptions noted below:—

I. Wages and Salaries

Though the data have been collected separately, as far as practicable, for wages, salaries, administration and labour amenities, we have preferred to club the expenditure under these heads and have treated it as one composite item of expenditure. This is on the ground that accounting procedures differ from colliery to colliery and the pattern of the organisation also varies. As regards the former, we have noticed that in some of the collieries, payments made to daily-rated workers are treated as wages whereas payments made to all monthly-rated staff has been considered as salary. Again, in some of the collieries, as per accounting practice followed by them, only payments made to junior and senior executive staff are shown as salaries. Any comparison of 'wages' and 'salary' figure separately for the individual collieries costed will, for these reasons, be difficult and misleading. In so far as the varying organisational pattern of the collieries is concerned, we find that some of the collieries are managed at the coalfield level and they do not have a separate head office administration. Many of them do not have separate cost figures even for the staff employed in coalfield office administration. In such cases, the payments made to their staff employed on office administration are booked under 'wage and salaries'. We have, therefore, considered it appropriate that all these elements should be put together in order to afford a cost comparison in a more rational manner.

II. Labour amenities and implementation of the Coal Mines Regulations.

It was found that various components of expenditure under this head are not shown separately but each item is booked in its appropriate place like wages, salaries, stores, power, etc. Hence any segregation of the expenditure is not possible. It may be worthwhile

mentioning that the C.P.R.C. also could not isolate the expenditure. At the time of their study, Coal Mines Regulations of 1957 had not been fully implemented. They, therefore, made a careful examination of the probable cost and recommended a figure of Rs. 1·10. By now, provisions with regard to Coal Mines Regulations, Labour Amenities etc. have more or less been fully implemented and all the expenditure on this account is merged in the overall accounts of the collieries. We do find, however, that a few collieries have booked some expenditure under this head separately too; but we are satisfied that the entire expenditure under this head is not being booked separately even by these collieries. We have included these figures when calculating the overall cost. It is under these circumstances that we have decided to deviate from the method adopted by the C.P.R.C. and not to show separately the full cost for this element of labour amenities and implementation of Mines Regulations, etc.

III. Royalty

Since 'royalty' is now being paid as a uniform percentage of the selling price, it is no longer necessary to take it into account in the cost structure on the debit side. We propose to add the royalty element to what we consider the fair selling prices for the different grades of coal.

CHAPTER IV

Analysis of cost data and our conclusions for the Bengal-Bihar coalfields

20. We agree with the C.P.R.C.'s statement that for a general appreciation of the cost structure the report for Bengal-Bihar fields should be treated as providing the basic data as these fields produce about 73 per cent. of the total output of coal in India. While several basic factors in the structure would equally apply to the outlying fields of Madhya Pradesh, Maharashtra and Orissa, these latter fields would require separate treatment. We have accordingly dealt with Madhya Pradesh, Maharashtra and Orissa, i.e., outlying fields, separately.

The collieries in Assam are, again, a class apart as also the ones in Andhra Pradesh. We accordingly propose to deal with these also separately.

- 21. We have carefully considered the reports submitted by the Cost Accounts Officers. A preliminary examination of these revealed wide variations in the same element of cost even among collieries in the same fields. This was also the observation of the C.P.R.C. in this respect. In many cases, no satisfactory explanation for these variations was available though ample opportunity was provided to the Industry for clarifying the position. It is no doubt, true that there are bound to be certain variations in any industry which are not clearly attributable to specific reasons. We came across certain cases where there were wide variations in spite of the fact that the working conditions were not very different and the collieries were situated in the same field. One of the reasons for the variations is no doubt the difference in the management efficiency. Another important factor is the difference in productivity which may arise as a result of the degree of mechanisation accomplished. We also find considerable variations in the output-per-manshift (O.M.S.) even among collieries having more or less similar conditions of working. The difference in O.M.S. could by and large be related to (i) the difference in mining methods, (ii) geological conditions, (iii) the degree of mechanisation, and (iv) efficiency of management.
- 22. Having regard to all the above factors and after a careful analysis of the cost data furnished by the Cost Accounts Officers, we feel that the proper way of arriving at the fair and reasonable cost of production under each head would be by adopting the weighted average method on an overall basis except in case of the expenditure grouped under the composite head "wages and salaries, etc."

We are of the view that the above will be a more realistic method of arriving at the true cost as compared to the assumed cost of an imaginary colliery managed with reasonable efficiency and

racing no special problem or special difficulty which, briefly, was the method adopted by C.P.R.C. As we have stated in foregoing paras, there is enough material before us which will enable us to arrive at a reasonably accurate cost figure under each head which goes into the overall cost of production of coal.

- 23. In the light of what has been set out above in the preceding paragraphs, we shall now proceed to work out the costs under the following heads based on the Cost Accounts Officers' report:—
 - (1) Wages/salaries/wages and salaries/element on account of labour amenities/coalfield administration and head office administration.
 - (2) Cost of stores.
 - (3) Cost of power, cess, colliery consumption and miscellaneous expenditure, etc.
 - (4) Depreciation.
 - (5) Brokerage and Commission.
- 24. Wages/salaries/wages and salaries element on account of labour amenities/coalfield administration and head office administration.

The element of cost under this head constitutes one of the major items of cost in the raising of coal. Out of the 29 collieries costed on our behalf, the results of 27 have been taken into account for purposes of our report. Two collieries have been omitted on account of abnormal features observed in their cost results. The reason in one case was that the colliery was nearing exhaustion of its coal reserves and in the other case, the colliery worked much below its normal capacity. Hence, it was not considered desirable to include the results of these two collieries in arriving at our overall conclusions. The cost data furnished by the 27 collieries revealed an element of cost per tonne under this head ranging from Rs. 7:37 to Rs. 19:60. Among these collieries, O.M.S. ranged from 37 to 2:03 tonnes.

25. From the cost figures of these 27 collieries, it is not possible to have a reasonably accurate break-up of costs under the different heads—(1) wages, (2) salaries, (3) labour amenities, (4) coalfield administration, and (5) head office administration. As explained in para 19, the cost study conducted on our behalf revealed that the demarcation amongst the above heads was not very clearly maintained even by those collieries which had separate account heads for these items of expenditure. In several cases, these items are not booked under separate heads at all. For items (3), (4) and (5), the relevant salary/wages element is reflected under the overall head of wages and salaries. Similarly, the expenditure, apart from wage and salary element, i.e., on power, stores, miscellaneous, etc., under the heads of labour amenities, coalfield administration etc. is reflected under the respective normal heads instead of being shown separately.

The C.P.R.C. had estimated, on an ad hoc basis, the expenditure under the head "labour amenities" and the "Coal Mines Regulations" as these Regulations were only in the process of being implemented at the time and, therefore, the full impact of expenditure on this account, in terms of actuals, could not be determined. The position, however, is different today when the above provisions have since been implemented. Even though itemwise booking of the expenditure may not be there, it is all the same true that necessary expenditure is being incurred and the same is booked under other normal heads.

26. We have carefully considered the costing data of the 27 collieries and, having regard to the relevant factors as emerging from our cost analysis, we feel that neither the overall average nor the weighted average of all the 27 collieries taken up for costing will give us a fair idea of the costs which may be accepted as being representative of the Industry. We have accordingly eliminated both the high-cost and the low-cost collieries and based our judgment on the results of the "middle of the group" collieries. We have eliminated 10 collieries where the expenditure under this head is less than Rs. 14 and 7 collieries where the expenditure is more than Rs. 17. Our study is thus restricted to 10 "middle of the group" collieries out of a total of 27. We have eliminated a larger number of low-cost collieries as compared to the high-cost ones in order to arrive at a fair result. The aggregate expenditure under this head of the 10 collieries in the middle group comes to Rs. 15 62 per tonne. It may be mentioned incidentally that the overall average figure of all the 27 collieries works out to Rs. 15 67. We have also carried out an alternative exercise of selecting the "middle of the group" collieries, on the basis of wage factor alone. For this purpose, 19 collieries were selected by eliminating 4 high-cost and 4 low-cost ones. This gives an average cost of Rs. 15.62 per tonne under this head which is the same figure as worked out by us from 10 "middle of the group" collieries.

27. We have separately examined the wage cost as it emerges from the cost sheets. The wage element in the 10 "middle of the group" collieries selected by us by eliminating the very high and very low cost collieries, ranges between Rs. 10.80 to Rs. 14.79 per tonne. This is different from the overall range taken under the composite head which, as pointed out, in the preceding para, varies between Rs. 14 to Rs. 17. Applying the weighted average formula, the average figure for the wage factor alone of these 10 collieries works out to Rs. 12.80. The overall average wage cost for the 27 collieries is Rs. 12.75. The variation is explained by the fact that we have eliminated a large number of low-cost collieries as against the high-cost ones. We accept the figure of Rs. 12.80 as the average wage cost.

28. The wage cost of coal is directly linked with output-per-manshift. Other things remaining equal, any increase in O.M.S. should involve a corresponding decrease in cost per tonne. The O.M.S. in the coalfields of India has been gradually increasing. Against the O.M.S. ·40 ton adopted by the C.P.R.C., the O.M.S. during the year 1965, according to the latest published figures of Chief Inspector of Mines, was .55 tonne. The O.M.S. of all the 27 collieries and also

those in the middle group was found to be .52. We feel that since wages are by and large directly linked to productivity, it will be appropriate to adjust the wage factor in accordance with the overall O.M.S. of the Industry in the year 1965, i.e. .55 tonne. This is also in line with the procedure adopted by the C.P.R.C. Adjusting our wage figure of Rs. 12.80 per tonne to the overall O.M.S. of the Industry, i.e. .55, the revised wage figure for purposes of our cost study would work as under:—

$$\frac{12.80 \times .52}{55} = 12.10$$

29. We feel it will be appropriate to take into account the element of cost for profit sharing bonus and the variable D.A. 6th slab, which was allowed to the workers with effect from 1st April, 1966. The burden of these has already been neutralised by the price increases granted by the Government of India for these two factors. We accordingly feel that the rise in costs on this account has been offset by the price increase already given. We propose, therefore, to make a provision for this element in the cost structure at the same figure which the Government approved while granting the abovementioned price increases. Hence, an amount of 40 paise per tonne for profit sharing bonus and 36 paise per tonne for VDA 6th slab has to be added to the wage element worked out at Rs. 12·10 per tonne above. The corrected wage cost figure is thus Rs. 12·86 per tonne.

After taking into consideration the aforesaid adjustments on account of O.M.S., profit sharing bonus and V.D.A. 6th slab, the overall cost of Rs. 15.62 per tonne under this head will become Rs. 15.68 per tonne.

30. The C.P.R.C. had recommended Rs. 12 15 under all these heads. It will thus be seen that the expenditure under these heads has registered an increase of Rs. 3 53 per tonne which works out roughly to an increase of about 29%.

The C.P.R.C. had recommended this wage structure linked with the O.M.S. of .40 ton while our recommendation in this behalf is based on an overall O.M.S. of .55 tonne. This would go to show that the productivity having increased substantially (about 35%) the actual rise in wages related to productivity, as compared to the C.P. R.C. figure in fact works out to about 74%.

Considering the wage rise since the C.P.R.C. submitted its report, as reflected in our studies, and, having regard at the same time to the increases in productivity by about 35%, we feel that the figure of 15.68 is fair and reasonable.

31. Stores.—In the written memorandum submitted by the Industry as well as during the course of discussions with us, great stress was laid by the Industry's representatives on the increases that have taken place in the cost of plant, machinery, spares and other stores. There is, no doubt, considerable truth in the contention that the cost of machinery, spares and other stores has increased since 1958. Our cost study has also revealed that the expenditure on account of stores has moved up sharply. It varied from Rs. 0.71 per tonne to 6.30 per tonne for the 27 collieries costed by us (Annexure No. III).

The reason for this wide variations has been explained on account of (1) mining methods, (2) varying geological conditions, (3) degree of mechanisation achieved, etc. The overall weighted average of 27 collieries costed works out to Rs. 3.40 per tonne as against Rs. 1.72 per tonne allowed for stores expenditure by the C.P.R.C. This roughly represents a 100% increase over the C.P.R.C. figure. Having regard to the general increase in price level and also the fact that there has been increase in mechanisation which involves larger consumption of stores, we feel that the figure of Rs. 3.40 per tonne under this head should represent an adequate provision. Accordingly, we have adopted this figure in arriving at the fair selling price.

32. The Industry has made a representation that between our costing period and the writing of our Report, i.e. March to September 1966, there has been a considerable rise in the price of stores very largely due to devaluation. While we generally accept this argument we must point out that, it has not been possible for us to make any proper cost study of the increase in stores cost on account of devaluation or any general price increase that may have taken place after February, 1966. We, therefore, have not been able to take this probable price increase into consideration. We recommend this aspect should be considered by Government as soon as adequate cost data on the subject becomes available.

33. Cost of power, cess, royalty, colliery consumption and miscellaneous expenditure, etc.

From the cost studies conducted by the Cost Accounts Officers on our behalf for the different collieries, we find that there are wide variations. We think these variations are inherent in the situation. The cost on account of power, colliery's own consumption of coal and miscellaneous expenditure would depend among other things, largely on the colliery's output, the method of mining etc. The following table illustrates the range of variation under the various heads for the 27 collieries costed by us:—

										Range per tonne
(1)	Power	•		•		•			. • .	·39 to 3·06
(2)	Cess .		•,,	•		• ,	•			·04 to 0·35
(3)	Misc.	•	•	•.	.•	•		•		.06 to 1.39
(4)	Colliery	consur	nptio	ı .			•			·20 to 1·22

The C.P.R.C. provided Rs. 1.82 per tonne on account of the above items of cost, including royalty. Taking out the royalty expenditure out of the above amount, the balance left to cover expenditure for the remaining items would be about Rs. 1.55 per tonne. Based on our cost studies, we have arrived at a figure of Rs. 2.39 per tonne for these items. This represents an increase of roughly about 54% over the C.P.R.C. figure. We consider this as fair and representative of the Industry's present-day cost.

34. Royalty.—The C.P.R.C. had included expenditure under this head under the overall head "cost of power, colliery's own consumption of coal, royalty, cess and miscellaneous items." We have taken

royalty out of this overall head for the reason that the position has materially changed since C.P.R.C. examined this issue. Pre-1949 leases were not governed by the uniform rate of royalty prescribed under the Mineral Concession Rules, 1949 in 1958. Since then, uniformity in the royalty rate has been brought about by making the provisions of the Mineral Concession Rules, 1949, applicable to the pre-1949 coal leases also. Since royalty is now payable as a percentage of the selling price which, in turn, varies for different grades of coal, there will be practical difficulties, if royalty is taken as part of the general cost. We are accordingly of the view that an element of expenditure on account of royalty, should be worked out separately after the fair selling price of the Industry has been derived. The amount so determined on account of royalty should be added to the fair selling price, i.e., the fair selling price would go up by this extent.

- 35. Depreciation.—In their memorandum to us and during our discussions, the representatives of the Industry made a strong plea for an adequate element in the price of coal in order to provide for depreciation, rehabilitation of plant and machinery and development. Their main arguments are the following:—
 - (i) Investments in the coal industry were made at a time when prices, comparatively speaking, were lower than what they are today and the cost of replacing the assets would be much higher under the present-day conditions.
 - (ii) As a mine is worked and the coal face recedes, fresh capital expenditure is required for maintaining production.
 - (iii) A colliery is a wasting asset and most of the investment has to be written off when the coal is exhausted.
 - (iv) Substantial capital expenditure has to be incurred for development of a coal mine, if the Industry is to arrange for sizeable increase in production.

We feel that there is considerable force in these arguments.

The C.P.R.C. had observed as follows while dealing with depreciation in their report:—

"In our opinion the price structure should be such as would enable the Industry not only to keep the plant and equipment in efficient functioning, but also to permit of further development. In this context, the amount that is admissible for income-tax purposes—which is based generally on the written down value of the plant and other fixed assets from time to time—is not really relevant. We think that the factors which do have a bearing on this question are the capital employed in the Industry, the requirements for maintaining existing assets in efficient condition and the likely cost of further development.

On this basis, the C.P.R.C. arrived at the average capital employed per ton of coal at about Rs. 16/-. In order to make an adequate provision for development the C.P.R.C. provided an additional 25% on the average capital employed, i.e., Rs. 16/- per ton. They further took the useful life of the assets in coal mines as 12

years. By this process, they arrived at the provision for depreciation and development allowance at Rs. 1.70 per ton (Rs. 1.67 per tonne).

36. We generally agree that the Coal Industry should have somewhat liberal depreciation allowance and that the method followed by C.P.R.C. is on the whole reasonable. At the time of the C.P.R.C.'s cost study, the development rebate available as per I. T. rules, on the basis of which the C. P. R. C. proceeded, was 25%. At present, the development rebate available to Coal Industry as per the I.T. rules, is 35%. We are of the opinion that on the principle adopted by the C.P.R.C. in this regard, the development rebate should be taken at 35% on the capital employed. At the same time, we have not taken into account the provision for expansion, as was done by the C.P.R.C., when they raised the actual capital employed from Rs. 14/- to Rs. 16/- per ton. This aspect, we are dealing with separately in our report.

The capital employed in the Industry now stands at Rs. 18:34 per tonne, according to our cost study. After adding 35% on account of development, we get a figure of Rs. 24:76 per tonne. Assuming the useful life of assets as 12 years following the C.P.R.C., the allowable depreciation comes to Rs. 2:06 per tonne.

- 37. Brckerage and Commission.—Under the Colliery Control Order, a brckerage not exceeding 37 p. per ton can be paid by the colliery owner to the broker. While it is true that colliery owners do incur some expenditure on their sale organisations, our cost examination has revealed that barring a few exceptions hardly any colliery pays maximum broakerage commission. Of the 27 collieries costed, in 6 collieries the expenditure under this head exceeds 37 p. per tonne. The overall expenditure ranges from nil to 56 p. per tonne. We have also taken into consideration the fact that on direct sales, for instance to the Railways, which are substantial, no brokerage or commission is paid. Having considered all these aspects, we feel that for purposes of cost structure, an allowance of 25 p. as was also recommended by the C.P.R.C. would be adequate.
- 38. Recoveries.—In the cost examination undertaken by the Cost Accounts Officers, it was noticed that some of the collieries have miscellaneous receipts by way of sale of scrap, shale and house rent etc. There was no uniform pattern for these recoveries inasmuch as 15 collieries out of 27 costed did not have any recovery at all. In view of a similar situation, the C.P.R.C. considered it desirable to ignore the sundry receipts of this nature. The average receipts in this respect in the collieries costed by us works out to 8 p. per tonne. We are of the view that these receipts being of an uncertain nature and not shown uniformally by all the collieries, may be ignored for the purpose of arriving at the true cost of production.
- 39. As per the recommendation of the C.P.R.C., the collieries have become entitled to a subsidy on difficult mining conditions, *i.e.*, gassiness, depth of shaft, thinness of seam and pumping charges of water etc. At the time of the cost examination by the C.P.R.C., the question of any receipts on account of subsidy for difficult mining

conditions did not arise. It is observed from the returns furnished by the collieries that they are in receipt, on an average, of a subsidy to the tune of 61 paise per tonne from the Coal Board. Our cost examination has also revealed that the items of expenditure, in reimbursement of which the subsidy is given are not separately classified. Since the expenditure in this regard is being incurred by the collieries entitled to difficult mining conditions subsidy, it is obviously being booked under the various heads for normal mining expenditure, i.e., wages, salaries, stores, power, depreciation etc. The expenditure having been debited against the appropriate heads, the receipts on this account have also to be taken into consideration in order to arrive at the true state of affairs. We, therefore, propose to credit 61 p. per tonne on the receipt side.

- 40. Adjustment in the cost due to loss of Mandays—Abnormally.— The period of accounting selected for costing purposes, i.e., from September, 1965 to February, 1966, did not represent the normal period during the year, inasmuch as 5 of the 7 paid holidays in the whole year fell during this span. Besides, in this very period, there were two extra holidays on account of the demise of the late Prime Minister, Shri Lal Bahadur Shastri. It will thus be seen that as against the normal working days aggregating to about 153 during the half year, we had to take into account production for a total of 148 to 149 working days only. This had the effect of reducing production which, directly led to the enhancement of overall costs abnormally. We feel that under the circumstances of the case, there should be a 1% deduction in the overall costs.
- 41. Downgrading coal—Effect of thereof.—The Industry's representatives have urged before us that due to revision of grades by the Coal Board, there has been a large scale downgrading of coals. They further mentioned that as a result of adoption of the method of pre-wetting for analysis of coals, which is a comparatively recent innovation, and shows the moisture contents of the coals analysed to be somewhat higher than what they really are, many of the high moisture coals have been downgraded. This has caused considerable loss to the Industry on account of lesser sales realisations on the downgraded coals. We have examined this contention of the Industry and are of the view that this aspect, important though it is to individual collieries, does not affect the correcteness of our calculation of "fair return" to the Industry. We have taken the present-day gross sales realisation vis-a-vis their overall cost of production. All cases of lower sales prices for downgrading of individual collieries are reflected in the overall sales realisation of the Industry. However, we bring the problem raised by the Industry to the notice of Government. Extensive downgrading of coals is bound to cause serious financial loss to the Industry in the long run.
 - 42. Profit.—The C.P.R.C. considered a return of 11% on capital employed as appropriate (Rs. 16 per ton). This nearly worked out to 10% of the cost of production at the time. This they considered just adequate though not sufficiently attractive for new investments in the Industry.

- 43. In the light of present-day conditions, the chief among them being the high rate of interest on the borrowings, we feel that the 11% return on capital employed is no longer remunerative.
- 44. It has been brought to our notice that while recommending a fair price, the Tariff Commission has lately accepted 12% as a fair return on the capital employed. We are of the view, having regard to the general economic climate in the country, as also the pattern followed by the Tariff Commission, that we should reasonably allow to the coal Industry a return of atleast 12% on capital employed which now stands at Rs. 18:34 per ton. A return of 12% on this amount would work out at Rs. 2:20 per tonne as the profit margin.
- 45. This profit when related to the cost of production would imply a return of about 9% as against 10% in case of the C.P.R.C. in 1958. We feel that for the coal industry the return should not be related to cost of production but to the capital employed. We have thus arrived at a profit of Rs. 2·20 based on a 12% return on the capital employed.

46. To sum up, the cost structure on the basis of an O.M.S. of .55 would be as follows:—

(Rs. per tonne)

	Element of cost	As per CPRC's recom- As per our mendation (all costs recommendahave been shown here with ref. to tonnes as against ton, after conversion, and, hence, the difference in figures from those actually mentioned by the C.P. R.C. in its report)			
ı.	Wages, salaries, administration, labour amenities and coal mines regulations	. 12.15 15.68			
2.	Stores	1.72 3.40			
3.	Power, royalty, cess, colliery consumption				
٠.	and other misc. items	1.82 3.71			
4.	Depreciation · · · · · · · ·	1.67 2.06			
5.	Brokerage & Commission	0.25 0.25			
	Total	17.61 25.10	-		
	Less subsidy for difficult mining condi-	·			
	tions · · · · · · ·	·· 0.61			
		17.61 24.49	•		
	Less adjustment for lesser No. of working days in costing period @ 1%	0.23			
		17.61 24.26			
	Add fair profit	1.72 2.20			
	Fair selling price	19.33 26.46			

47. Revision of Prices.—The average sales realisation of the Industry per tonne should therefore be Rs. 26.46. This represents a normal cost of Rs. 24.26 plus a profit of Rs. 2.20. It is necessary to consider what the average sales realisation is at current price. For this purpose, we propose to follow the pattern of production of 1965-66 in the Bengal-Bihar area ignoring the production of Grade III Coal. In 1965-66, the production gradewise (excluding Gr. III) was as follows:—

Non-coking	٠								Percentage
Sel. A	•		•		•	•	•		14.81%
Sel. B			* •		•		•	•	9.92%
Grade I	•		•	•	•	•	•		59·27%
Grade II	•	•	•	•	•	•	•	•	16.00%
			Тот	TAL	•	•	•		100.00%
Coking									Percentage
Grade A			•						4:09%
Grade B	•	•	•		•			•	2.02%
Grade C	•	•	•	•	•	•			5.06%
Grade D	• .	•	•			•		•	5.97%
Grade E	.•	• .	•		•	•	•	•	22.31%
Grade F	•		•				•		13.84%
Grade G			•		•			•	16.53%
Grade H			•		•			. •	12.68%
Grade HH	•	٠	•	•	•	•	•		17.50%
			Total	•	•	:	• .		100.00%

^{48.} In Bengal-Bihar field, the total production of non-coking coal during 1965-66 was 28 48 million tonnes. During the same period, the coking coal accounted for 16 96 million tonnes. The proportion of non-coking coal to coking coal, therefore, works out to 63:37. These production figures are upto Grade II only. We do not propose to take into account Grade IIIA and IIIB coal on the same grounds as C.P.R.C.

^{49.} Each grade has again two different prices according to the size of coal. Run of mine and slack coal are in one group, while steam and rubble form another group. Between these two groups, the proportion is approximately 40% and 60% respectively. The average price for each grade on this basis works out as follows:—

Non-Coking											Price per tonn as revised upto April 1966
											Rs.
Sel. A.	•	•	•		•				.•		29.33
Sel. B.			•	•	•				•		27.85
Grade I				•	•		• .				25.51
Grade II	•	•				•	•,	٠.			24.03
Coking!											
A		•				.	•	•			31.17
в.	•		•				•				30.18.
С,		•	•	•		•	•	•	•	•	29.12
Ď.		•									27. 73
р. Е.		•		•		٠,			•		27.23
F .				•		•	. •	•	•		26.50
G .	•	•	•				•				26.01
Ĥ.											25.77
нн	•.	•	•."	•	٠	•	•				24.03

50. Taking the weighted average of raisings of various grades as quoted above, the gross sales realisation comes to approximately Rs. 26.24 per tonne. This shows a shortfall of 22 paise over the fair selling price worked out by us at Rs. 26.46 per tonne. Therefore, we recommend an upward revision of 20 paise per tonne. This proposed increase in price by 20 paise per tonne should apply only to coking coals above and including grade H and in case of noncoking coals to those in Grade I and above. For the rest, i.e. grade II non-coking and grade 'HH' in coking, the 20 paise price rise should be given by Government in its discretion having due regard to supply and demand factor and general market conditions. We should, however, make it clear that many of the units in the Industry are not actually getting the anticipated profit margin now because they are not receiving adequate re-imbursement of their stowing expenses. We shall deal with this important matter in the next chapter.

CAPTER V

Other References

51. Stowing.—The C.P.R.C. excluded the cost of stowing in their calculations for arriving at a fair selling price of Industry. They, however, observed that provision should be made for meeting this cost where it has to be incurred. The C.P.R.C. observed as follows in this regard:—

"Stowing is not practised in all collieries, nor it is necessary to do so. It is mainly required in thick seams, both for maximum extraction of the reserves and for avoiding dangers of collapses and consequent risks of fire. On both these considerations, the encouragement of stowing, where necessary, is regarded very important. The Coal Board, therefore, subsidises stowing to the extent of 75% or 85% of the stowing costs actually incurred, subject to certain maximum limits. It would not be difficult to calculate the balance of the cost which, collieries have to incur themselves. Even these, however, would vary. We have, therefore, thought that it would be inappropriate to include an element for stowing in the general price of coal. At the same time, it is not only necessary to provide for stowing cost to be met, but to do it in such a way that there will be no disinclination to adopt stowing. We, therefore, recommend that stowing costs should be met in full. Maximum limits should, of course, be prescribed to ensure economy of expenditure on stowing."

We have also excluded the stowing cost while arriving at the fair selling price. This aspect we are considering separately here as it deserves a special treatment.

Out of the 27 collieries costed in the private sector of the Bengal-Bihar region, 15 collieries were found to be resorting to stowing operations. We have noticed that while some of the well-organised companies do maintain the distinction in their accounts between stowing expenditure vis-a-vis the rest, others do not. In cases where expenses are allocated specifically to stowing we have accepted their figures and deducted the same from the total expenditure incurred by them in the normal raising of coal. The difficulty, however, arises in collieries where stowing expenses are not separately maintained. Here we had to proceed on an estimated basis, adopting for this purpose the figures put forth by the collieries concerned when claiming stowing subsidy. Accepting this as the proper expenditure under this head, we have deducted the same from the total cost structure which has been dealt with separately for arriving at the raising cost.

52. As against a total amount of Rs. 805.96 lakhs relating to the gross raising of 36.36 lakh tonnes of 27 collieries costed by us, the amount of expenditure apportionable to stowing has been found by us to be of the order of 91.51 lakhs. The losses incurred on stowing are illustrated by the following table:—

Total Coal Won from Stowing Operation: 11,86,099 tonnes

Particulars				Total Rs. in lakhs.	Cost per tonne of stowed coal
Expenses allocated to stowing .	•			91.51	7.71
Subsidy estimated there against .				58.07	4.89
Loss on stowing		•	•	33.44	2.82

We find that collieries are, on an overall basis, losing Rs. 2.82 per tonne of coal won as a result of stowing operations. Even after taking into account the coal won by stowing, the collieries which are resorting to stowing have practically no profit margin left on the stowed coal. The profit on normal coal raising is offset to a large extent in many cases by the losses incurred on stowing.

- 53. The C.P.R.C. recommended 100% reimbursement of the expenditure on stowing. They had at the same time considered that in order to ensure economy of expenditure on stowing, there should be certain maximum limits for reimbursement. We find that under the present-day conditions, there is quite a substantial gap between the actual expenditure and the allowable reimbursement. The Industry has mentioned to us that the ceilings fixed under many of the sub-heads need to be raised in accordance with the present-day costs so as to neutralise the losses on stowing. We think any revision of the rates must be based on a proper cost examination. It has not been possible for us, so far to collect the necessary data. Therefore, we propose to submit later a separate report on stowing subsidies.
- 54. We have not been able to examine whether it will be cheaper for stowing collieries to get their requirement of sand through the Coal Board ropeways and therefore unable to judge how the carriage of sand by the Coal Board ropeways affect the expenditure under the relevant sub-heads for stowing subsidies. This aspect, we feel, needs to be further looked into and while submitting a separate report on subsidies we shall take this factor into account as well.
- 55. Hard Cases Subsidy.—The Industry's representatives urged before us very strongly that they are also losing on the subsidy for hard cases i.e. (i) gassy nature of mines, (ii) depth of workings, (iii) geological conditions, (iv) higher pumping charges, (v) nature of seams, (vi) high transportation costs from the pit-head to the rail-head. We have not been able to examine this aspect in detail as the necessary data are not readily available. We note that the Coal Board set up a Committee under the chairmanship of Shri Jabbi,

C.I.M., for considering this matter. Though they recommended that the excise duty should be raised by 25 P. per tonne immediately and by another 25 P. per tonne later during the 4th Plan period to enable the Coal Board to allow adequate reimbursement of this cost, they did not work out what should be the proper rates. We are examining this matter and shall give our views in a subsequent report.

- 56. Pre-Wetting.—The Industry's contention is that the method of pre-wetting coal samples before analysis, which is being followed by Central Fuel Research Institute since 1962 is resulting in an artificial increase in the moisture content of the coals, the variations being of the order of 2 to 4 per cent depending on the nature of the coal. They maintained that the C.F.R.I. unilaterally resorted to this method of analysing coals. We have looked into this matter carefully. We find that the methods of proximate analysis for coal and coke were laid down by Indian Standards Institution (I,S. 1350—1959) in accordance with the recommendations of the Solid Mineral Fuel Sectional Committee CDC 14 of ISI. This Committee whose report was published in 1960 consisted of representatives of the following institutions and interests:—
 - (i) Council of Scientific & Industrial Research.
 - (ii) Indian Mining Association.
 - (iii) Directorate General of Supplies & Disposals.
 - (iv) Railway Board.
 - (v) Indian Coal Grading Board.
 - (vi) Tata Iron & Steel Co. Ltd.
 - (vii) Bird & Co.
 - (viii) The Coal Controller.
 - (ix) Indian Mining Federation.
 - (x) Geological Survey of India
 - (xi) Coal Consumer Association, Calcutta.
 - (xii) Mining, Geological & Metallurgical Institute of Calcutta.
 - (xiii) Indian Iron & Steel Co. Ltd.
 - (xiv) Indian Standards Institution.
- 57. The Central Fuel Research Institute has been following methods prescribed by the above Committee. It is, therefore, not correct on the part of the Industry to say that C.F.R.I. has devised its own methods or that the Coal Industry was not kept informed of the change in the method of analysis. The correspondence that have taken place on this subject amongst the coal Industry, Coal Controller and C.F.R.I. indicate that there is some force in the Industry's contention that as a result of pre-wetting some inaccuracies are creeping in at the time of proximate analysis of coal and some

tolerance formula should be worked out so that the Industry may not be adversely affected merely because of a change in the method of analysis. The report of the Solid Mineral Fuels Sections Committee contains the following observations:—

- "While the need is urgent for standard methods of test to be used not only in contracts between buyers and sellers but also in the various testing laboratories in the country and has to be met immediately, it is nevertheless considered prudent to keep this standard tentative for some time during which period further investigations will be conducted."
- 58. We feel that the controversy has to be resolved at the technical level and that the most appropriate authority for doing this work is the Solid Mineral Fuels Sectional Committee which is fully representative of all the interests concerned. We, therefore, recommend that the issue may be referred to the above Committee for early decision.
- 59. Amortisation of Arrears of Bonus.—We have already found from our price examination that the margin of profit available to the Industry is inadequate. Therefore, the Industry cannot reasonably be expected to have the resources to pay the arrear dues to workers under the Payment of Bonus Act, 1965, for the year 1964-65. The colloiery companies have mostly discharged their legal obligation in this regard by drawing upon other funds or even by borrowing.
- 60. A careful cost study has been made by one of our Cost Accounts Officers as to the fund requirements for arrear bonus payment, and this works out to a figure of 37 P. per tonne on current raisings. We, therefore, recommend that an extra price of 37 P. per tonne should be allowed for all grades of coal for a period of one year only. The neutralisation is required for the first year, since for subsequent years commensurate price increase has already been allowed by Government.
- 61. Supply of Footwear—Impact thereof on Prices.—At present, supply of footwear is not mandatory in the Coal Industry for all categories of workers i.e. surface and underground. Hence any evaluation of the impact of such a scheme on price at this stage is not possible. The Chatterjee Committee appointed by the Labour Ministry in 1963 carefully worked out the probable cost of supplying footwear to the workers in the coal Industry. As and when the supply of footwear at the cost of employers becomes mandatory, it should be easy to assess the financial liability in this regard in the light of the observations of the Chatterjee Committee.

CHAPTER VI

Development and Financing

- 62. During the 4th Plan period, the additional production of coking coal may have to go up by about 16 to 17 million tonnes according to the present indications. We do not know what will be the share of the private sector in this additional production. Assuming this to be 50 per cent., the existing private sector collieries may have to contribute about 8 million tonnes of additional coking coal. This additional production will have to be achieved through increased mechanisation of the existing mines and this will require an investment of Rs. 40 crores spread over 5 years at the rate of Rs. 50 per tonne of annual production. It is extremely unlikely that the Industry will be able to find this sum of Rs. 8 crores a year for the next 5 years through their own efforts. The Industry has urged that they will raise the output to the extent necessary if they get adequate funds through price increase. To generate a net fund of Rs. 8 crores per year after taxation, the Industry will have to be given about approximately Rs. 18 crores per year, which will mean a price increase of Rs. 2.60 per tonne on the basis of current raising of 70 million tonnes. Assuming for argument's sake that this price increase is granted, there is no certainty that all this amount will be utilised for increasing the output. In fact, the probability is that only a fraction of the amount so generated will be available for expansion and modernising. Hence, the idea of an incentive through adequate price increase has to be ruled out altogether.
- 63. According to competent mining experts, the cost of coal raising should not go up if the Industry's expansion schemes are worked out carefully taking full advantage of the latest mining methods. From this point of view also there is no justification for raising the coal prices to enable the Industry to increase the production to the extent envisaged. Therefore, the necessary funds should be made available to the Industry in the form of loans. We are putting forth three alternative suggestions for consideration of Government.

(i) Loan from Market

The Industry may borrow the amount required on long term or medium term basis from the market through issue of debentures or from Banks. This scheme, to be feasible, will probably require some support from the Government. This support may be in the form of a guarantee of repayment of a substantial portion of the loan as was done in the case of the loan obtained from I.B.R.D. for the Coal Industry during the Third Plan. As an alternative, Government may meet a part of the cost of interest during the first 5 years or so which is generally the period required for modernising a coal mine. The amount required for this purpose will have to be raised through a small cess.

(ii) Loan from Government sponsored financial institution.

Institutions like I.D.B.I., I.F.C., I.C.I.C.I. and L.I.C. may provide the amount required. But it is doubtful if the available funds from these institutions during the Fourth Plan period will be adequate for taking up this additional obligation.

(iii) Loan from a fund to be created by levying cess.

A cess at the rate of Re. 1 per tonne may be raised on all grades of coal yielding Rs. 7 crores a year, for the next 5 years in order to finance expansion schemes. This sum should suffice as the Industry will be able to meet a portion of the requirement from their own resources. The fund created from the levy of cess will be administered by the Coal Board who will grant loans on suitable terms, for approved expansion projects.

64. Whatever method of financing may ultimately be approved for raising the production of coking coals by 8 million tonnes per year approximately, the expansion schemes will have to be worked out carefully on proper expert advice. The schemes selected for assistance must be financially viable and a colliery so assisted should be able to repay the principal and interest charges as laid down under the scheme. The Coal Board should have sufficient technical assistance at its disposal for proper technical examination of the schemes. Some form of control should also be retained over the management of the borrowing collieries in order to ensure that the money granted as loans is properly utilised.

CHAPTER VII

Acknowledgements

65. In conclusion, we would like to place on record our thanks to the representatives of the Industry, labour and consumers for the help they have given us by furnishing data at our request and through discussions. We are grateful to Shri N. Krishnan, Chief Cost Accounts Officer and his team of Cost Accounts Officers for their thorough and yet expeditious cost examination work. In this connection, we would specially mention S/Shri V. R. Mehta and B. R. Ganapathy, Cost Accounts Officers of the Ministry of Finance. We would also convey our thanks to Shri M. P. Pai, Chairman, Tariff Commission, and the Cost Accounts staff deputed by him for their assistance

Dated 29th October, 1966

- (Sd.) A. B. Ganguli, I.C.S. Chairman.
- (Sd) K. S. Bhandari, Member
- (Sd.) A. C. Bose, *Member*.
- (Sd.) A. B. Guha, *Member*.
- (Sd.) K. K. Dhar, Member-Secretary

Appendix I

List of Collieries selected for Cost Study

Original List	Supplementary List	Further List
I. Bengal-Bihar Area		
I. Loyabad*	1. Sri Amritnagar Sel.	1. Ganhoodih
2. Saltore*	2. Kumardihi	Lower Kendra colliery
3. Tealgora Bararee*	3. Golden Jeenagora	3. Kuardi*
 South Bulliery/Kendwa- dih* 	5. Gournagdih	4. New Damagoria
 5. Chinakuri* 6. Victoria* 7. Victoria West* 8. Parbelia* 9. Chanch* 	5. Ghusick 7. Muslia 8. Radhamadhavpur* 9. New Ghusick 10. New Sathgram*	 5. East Baraboni 6. Selected Kajora Jambad. 7. Benedih 8. Victory 9. Rajnagar
10. Bhowra*	II. East Badjna I2. Khas Sulunga	10. Central Kuridih col- liery.
11. Bhalgora 12. Khas Dharmaband* 13. Malkhera	13. Selected Sendra	 Ramnagar East Bastacolla colliery
14. Sounda* 15. Kargali* 16. Ranipur* 17. Bejdih* 18. Bonjemehari* 19. Lodna* 20. Sripur* 21 Dhemomain* 22. North Brook* 23. Parascole* 24. Sendra* 25. Bastacolla 26. Ratibati 27. Parasea* 28. Godhur* 29. Pure Dalurband* 30. Samla Kendra* 31. Kunustoria*	14. East Searsole 15. Kalipahari* 16. Khas Shampur 17. Mondai's pure Shampur 18. Junekunda colliery 19. New Majri*	13. S. C. Rungta colliery 14. Sial Ghogri
II. M.P. & Outlying Areas		
32. Eklehara*		
33. North Chanda Meta*		
34. Jhagrakhand		
35. Talchar*		
36. Ballarpur*		

^{*}These collieries were costed.

Appendix · II

Questionnaire to be answered by the selected collieries for the purpose of assisting the Study Group in their inquiry into the cost and price of coal

[It will be appreciated if the replies to the Questionnaire and the Proformae are sent in 10 sets]

r. Please furnish the details regarding constitution of the Company workers employed production sales and costs as per forms I to XIII to the fullest extent possible.

In filling these forms figures relating to quantities may be giver to the nearest tonne and the expenditure to the nearest rupee. Cost per tonne wherever calculated may be given correct to two decimal places. The costing period should be the latest half-yearly figures available; this period should be specified clearly in each form where the costing period has been mentioned.

- 2. Please furnish copies of audited Balance Sheets and Profit and Loss accounts from 1960/1960-61 onwards to date.
- 3. Detail the grades of coal raised and coke sizewise and specification-wise and other by-products manufactured (if any).
- 4. In addition to raising coal do you manufacture coke and other by-products and/or any other product?
- 5. Do you maintain cost accounts in respect of coal produced in your colliery and other products like coke etc. manufactured in your works?
- 6. If cost accounts are being maintained, is a reconciliation between the cost and financial accounts carried out or is there a system of integrated cost and financial accounts?
- 7. Is any royalty and/or cess payable? If so, what is the basis on which such royalty/cess is calculated and to whom is it paid?
- 8. (a) What is the capital expenditure incurred on expansion/development of coal resources during each year beginning from 1960/1960-61 to date. The source from which such expenditure has been financed, e.g., from surplus profits, bank loans, overdraft, debentures etc. may please be indicated.
- (b) In particular, if foreign exchange assistance has been obtained under the World Bank scheme, indicate the following particulars:—
 - (i) Date or dates of obtaining plant and equipment and spares.
 - (ii) Year-wise figures of expenditure incurred on imported plant and equipment and spares indicating the foreign exchange component thereof separately; similarly give yearwise figures of expenditure incurred on indigenously obtained plant and equipment and spares linked with the imported items.
 - (iii) The value of such plant and machinery installed and remaining to be installed giving the foreign exchange and rupee components thereof separately and the cost of installation, if any.
 - (iv) The increase in production (specify the grades of coal/coke) on account of the installation of such plant and machinery, both the actual increase, periodwise and the rated capacity.
 - (v) The additional full production expected if the remaining such plant and machinery are also installed showing the planned phasing of such installation and the expected increased production likely, periodwise as against the rated capacity.

- 9. (a) What is the quantity of coal, if any, obtained by mechanised mining? Have you any plan of further mechanisation? If so, please furnish details. Please indicate what increases are expected in the output by such mechanisation.
- (b) What is the O.M.S. (Output per man-shift) of the colliery from 1960/1960-61; indicate the effect of mechanisation and/or of the World Bank assistance scheme on the O.M.S. if any, with reasons.
- 10. (a) What is the capital expenditure expected to be incurred during the next 3 years and on what account? A year by year estimate of expenditure against different items may please be furnished. The effect of the above expenditure on production of coal both in quantity and cost per tonne may please be indicated. Is any decrease in cost of production expected by such capital expenditure? If so, the extent of such decrease may be indicated.
- (b) Has there been any increase or decrease in your pithead stock beginning from the year 1960/1960-61 and indicate the same in terms of the number of days' raising. If so, please indicate what grades and sizes of coal account find a regular offtake; indicate this also in terms of the number of days' raising.
- 11. (i) Is any sand stowing done in your colliery? If so, the actual cost of sand stowing, the quantity of coal obtained from such mines and the amount of subsidy obtained therefor from 1960/1960-61 may please be given. Give a short note on any difficulty being experienced in this behalf.
- (ii) The capital expenditure incurred in regard to the stowing operations from 1960/1960-61 may be indicated; please also furnish the installation cost for sand stowing on the basis of per tonne of coal won by stowing.
- (iii) Is your colliery eligible for subsidy under the Hard case formula; if so, an account of what factor or factors and since when? Please indicate the capital expenditure incurred on account of these factors, separately for each factor if possible, the quantity of coal obtained from such mines and the amount of subsidy obtained each year from 1960/1960-61 to date.
- (iv) The capital expenditure incurred in regard to such items as water supply schemes, housing etc. each year from 1960/1960-61 to date may be indicated.
- 12. What are the principal items of stores used (kindly furnish figures as per Proforma IX-B). What are the prices paid during the period selected for costing? If the prices have increased or decreased since then, what are the present prices? Any definite trend (increase or decrease) of the prices for future periods may be mentioned together with an assessment of the degree of increase or decrease.

What has been the yearwise trend of prices (in percentages) of stores from 1960-61 to date (giving the actuals for the various years as in Proforma IX-B).

- 13. (a) Have you implemented the provisions of the Mines Rules, 1955 and the Coal Mines Regulations, 1957, in regard to labour amenities either in part or fully? If only part of the amenities have been provided, what are the items actually implemented and the cost separately under capital outlay and annual recurring revenue expenditure of items actually provided? Under what items of cost are these recurring expenses included?
- (b) What, in your opinion, would be the estimated cost of implementing in full the provisions in regard to amenities to labour prescribed under the Mines Rules, 1955 and Coal Mines Regulations, 1957, under:—
 - (i) Capital outlay.
 - (ii) Recurring Revenue Expenses.
- 14. (a) Furnish replies to the Questions in No. 13(a) & (b) in respect of safety measures under the Mines Rules, 1955, and the Coal Mines Regulations, 1957; the cost under both parts (a) & (b) of the Question should, however, be shown under the following heads:—
 - (i) Capital outlay.
 - (ii) Recurring revenue expenditure on
 - (a) Personnel;
 - (b) Stores;

- (c) Power and other miscellaneous items (specify the miscellaneous items); and
- (d) Depreciation.
- 15. What are your selling arrangements for selling coal, coke and other by-products?
- 16. State briefly the terms of remuneration to selling staff agents, etc. Please also state whether you have any central selling office, and if so, the nature of work performed by this organisation.
- 17. Please intimate the amounts paid (if any) in respect of the following item relating to half year for which costs have been furnished:
 - (i) Interest paid on Borrowings.
 - (ii) Interest on Debentures.
 - (iii) Managing Agents' Remuneration.
 - (iv) Directors Commission or Remuneration.

If debentures or loans now outstanding have been obtained on the security of the assets of the company or any other security the nature of the security offered against the debentures and loans may please be indicated.

18. In addition to above you may add short notes on any other points which you consider relevant to the present enquiry and which may have a bearing on the capital expenditure required or cost of Tandaury and which may have a bearing on the capital penditure required or cost of production of coal.

FORM I

I. Name of Colliery:

GENERAL

2. Address: Post Office:

Nearest Railway Station to Colliery:

Head Office:

- 3. Constitution: **Public/Private/Limited Company.
- 4. Managed by: **Managing Agents/Board of Directors.
- 5. Name and Address: **Managing Agents/Board of Directors.
- 6. Terms of remuneration to: **Managing Agents/Board of Directors.
- 7. Financial accounts made up to:
- 8. Latest year for which certified financial accounts are available:
- 9. Name and address of Auditors:
 - **Strike out whichever is not applicable.

Colliery Working Details

	For half yearly period in previous year corresponding to costing period			Latest half y	yearly period (costing period)			
Months	Total No. of	Total No. of Total Colliery		Average No. of workers employed		Total	Average No. of workers employed	
	Man Shifts	Shifts	Surface	Under- ground	Man Shifts	Colliery Shifts	Surface	Under- ground
•								
•								
•								
•								
Total								

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FORM III

Name of Colliery:

Details of Production

Grades of Coal/Coke	For half yearly period in pre- vious year corresponding to costing period	Half yearly costing period
(By-Products)	Tonnes	Tonnes
,		
•		
Gross raisings output		
Less: Own consumptions:*		
(a) Boiler		
(b) Free issues to workers etc		
(c) Others (to be specified)		
Net Raisings/output		

^{*}If separate figures are not available under (a), (b) and (c) total consumption may be indicated.

Note.—Where other products like coke, etc. are also produced details for each product should be shown in a separate form.

FORM III-A

Details of Production (from 1960/1960-61)

Year		Gross raisings/ output	Colliery's own consumption	Net saleable output
		Tonnes	Tonnes	Tonnes
1. 1960 or 1960-61 . •	•	••		
2. 1961 or 1961-62				
3. 1962 or 1962-63 .				
4. 1963 or 1963-64 .				
5. 1964 or 1964-65 .				
6. 1965 or 1965-66 .				
Average		,		

Note:—Where other products like Coke, etc. are produced in addition to Coal, details for each product should be shown in a separate form.

Details of Despatches and Sale Proceeds Realised

· 					
Item* (Coal, Coke and other Bye- Products)	For half year previous year ding to cost	ly period in s correspon- ing period	Half yearly costing period		
Troductsy	Quantities Tonnes	Sale Proceeds	Quantity Tonnes	Sale Proceeds	
		Rs.		Rs.	
				· · · · · · · · · · · · · · · · · · ·	
TOTAL				· · · · · · · · · · · · · · · · · · ·	
Less:					
(a) Brokerage					
(b) Commission					
(c) Other selling					
(d) Total selling expenses .					
Net Sale Proceeds					

^{*}Where other products like Coke, etc. are also sold in addition to Coal, details for each product should be shown in a separate form.

FORM IV-A

Details of Despatches and Sale Proceeds from 1960 (or 1960-61)

Year			Quantity	Gross sale proceeds	Commission, Brokerage & other expenses	Net sale proceeds
			Tonnes	Rs.	Rs.	Rs.
1. 1960 (1960-61)	•	•				
2. 1961 (or 1961-62)	•					
3. 1962 (or 1962-63)	. •			F		
4. 1963 (or 1963-64)	•	•				
5. 1964 (or 1964-65)	•	•				
6. 1965 (or 1965-66)	•	•				
				_		
				1		

Note:—Where other products like Coke, etc. are sold in addition to Coal, details for each product should be shown in a separate form.

Capital Structure

A. Authorised, Issued and Paid-up Capital for latest year (please specify):

Kind of Shares	Face Value of each share	Authorised		Issued		Paid-up	
		No.	Value	No.	Value	No.	Value
Total (All Kinds)					.		

_	•					•	
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Long term loans:

Serial No.	Face Value of each	Number issued	Rate of interest	Date due to be repaid	Total value
1. Debentures : (i)					
Total Debentures					
2. Long term loans: (i)					
TOTAL LOANS	·				

A. Details of Fixed Assets as in 1965 (or 1964-65)

Item	Original down value as per the		Allocated to		
		books of the Company	Coal	Coke	Others
Land					
Buildings —Fy					
Buildings—Non-Fy.					
Plant and Machinery (under suitable groups)				·	
Railway siding					
Tramway, Trolly Lines, etc.					
Rope-ways					
Cars and Trucks		İ			
Other Fixed Assets (to be shown under groups).					
TOTAL FIXED CAPITAL			<u> </u>		

B. Details of written down value as accepted for Income-Tax purposes as in 1965 (or 1964-65)

Item	Original value	Written down value as at the end of the year for which assess- ment is com- pleted	Written down value as at the end of the half year for which cost have been fur- nished	Depreciation chargeable
Land				
Buildings—Fy.				
Buildings —Non-Fy				
Plant and Machinery (under suitable groups)				
Railway siding				
Tramway, Trolly Lines, etc.				
Ropeway				
Cars and Trucks				
Other Fixed Assets (to be shown under groups).				·

^{*}Note:—Initial and additional normal depreciation and extra allowance for third shift working should not be included in calculating depreciation chargeable. Only normal and extra shift allowance for 1st and 2nd shift should be included here.

FORM VII

Name of Colliery:

Details of Working Capital as in 1965 (or 1964-65)

	······································
Current Assets	
Cash	
Bank	
Book Debts (less Reserve for Bad debts).	
Stock of Coal, etc.	
Stores and Raw materials	
Deposits and Advances	
Other items (to be specified)	
Less	
Current Liabilities	
Sundry creditors	
Temporary Bank overdrafts and short term loans.	a
Deposits and Advances	
Other Items (to be specified)	
·	
Net Working Capital	
Notes:—(1) Investments should not be	included under current assets, unless the y

- represent security, etc., deposits required to be lodged for the busi ness.
 - (2) Any other payments like advance, loans etc., not relating to the business of coal raising should also not be included.
 - (3) Reserves and other provisions not required to be paid immediately, debentures and long-term loans, etc. should not be included under current liabilities.

FORM VIII

Name of Colliery:

Details of Wages for the Half-Yearly costing period

		,	
Details	Underground	Surface	Total
I. Wages			
2. Dearness allowance .			
3. Other allowances . (i.e., underground allowances, lead and lift allowance, etc.)			
4. Bonus			
5. Provident Fund .			
6. Workmen's Compensation Insurance .			
7. Leave with pay			
8. Paid festival holidays .			
9. Railway fare			
10. Petty contracts			
11. Other items (to be specified)			
TOTAL			

FORM IX

Name of the Colliery:

Gross production:
Colliery consumption:

(ii) (iii)

6. Administration:

5. Depreciation (Form VI)

Statement showing the Cost per ton of Coal during the half yearly costing period.

							Total Expenses	Rate per Gross Tonne
							Rs.	Rs.
r. Wages (Form VIII)	•	• .						
2. Salaries		•	•	٠		•		
3. Stores (including work	shop	s) vide	For	rm]	X-	в.	Į.	
4. Overhead expenses:		•				•		
(a) Power	• .		•		•			
(b) Royalties .			•					
(c) Cess	• .							
(d) Miscellaneous (F	orm	X)				. •		
(e) Other items (to b	e spe	cified)) .	:				
(i) Labour Welfar	e and	other	am	enit	iés	•		

FORM IX-contd.

	Total Expenses Rs.	Rate per Gross Tonne Rs.
9. Cost of Production		
 Gross Expenditure incurred on stowing and/or on account of difficult mining conditions [as per I(1)(ii) & II(1)(ii) below]. 		

- Note: (i) No item of expenditure of a capital nature should be shown here.
 - (ii) Item No. 6: Where there is a central office managing more than one Colliery, the total expenses of such office relating to the period costed should be shown in a separate statement together with the share allocated to the colliery costed and the basis for such allocation.
 - (iii) Expenditure incurred on sand stowing on account of difficult mining conditions should be included in respect of calculations upto item 9 above but the following details should be furnished:

I. Cost of Stowing

(1) Gross Expenditure

Total Rate per tonne of Net Production as at 'C' above.

(i) (ii)

- (2) Value of claims filed before the Coal Board for stowing assistance on account of stowing done during this period:
- (3) Amount granted as subsidy by the Coal Board out of the claims in (2) above:

Subsidy	Value	of	claims	relating	thereto
		_			
(i)			(ii)		

(4) Value of claims for the period still pending with the Coal Board, if any and subsidy receivable therefor:

value of claims pending	Amount of subsidy receivable therefor							
(i)	[the proportion of (i) that 3(i) bears to 3(ii)]							
	(35)							

(ii)

FORM IX-concld.

- (i) Total amount of subsidy received and receivable [3 (i) + 4(ii)]
 (ii) Rate of subsidy per tonne of Net Production as at 'C' above.
- (6) Net Expenditure [(1)-5(i)]
- (7) Net cost of stowing per tonne of Net Production as at 'C' above.
- II. Additional expenditure incurred on account of difficult mining conditions:

Specify the nature of the difficult mining conditions:

(1) Gross Expenditure incurred on account of difficult mining conditions:

Total Rate per tonne of Net Production as at 'C' above.

(ii)

- (2) Value of claims filed before the Coal Board on account of expenditure incurred during this period for difficult mining conditions:
- (3) Amount granted as subsidy by the Coal Board out of the claims in (2) above:

Subsidy Value of claims relating thereto.

(ii) (ii)

(4) Value bof laims for the period still pending with the Coal Board, if any and su isdy receivable therefor:

Value of claims pending

(i)

Amount of subsidy receivable therefor:

(i) [the proportion of (i) that 3(i) bears to 3(ii)]

(ii)

- (5) (i) Total amount of subsidy received and receivable [3(i) + 4(ii)]:
 - (ii) Rate of subsidy per tonne of Net Production as at 'C' above.
- (6) Net Expenditure [(1) 5(i)]
- (7) Net cost for difficult mining conditions per tonne of Net Production as at 'C' above.

In respect of I(1), (6) & (7) and II(1), (6) & (7), give the break up of the figure under the following heads:

- (i) Wages.
- (ii) Labour amenities and Coal Mines Regulations.
- (iii) Salaries and Administration.
- (iv) Stores.
- (v) Power and Miscellaneous items (specify the miscellaneous items)
- (vi) Depreciation.

The basis of distribution of the expenditure under the above head should be explained.

FORM IX-A

Name	of	the	Coke	Plant	4
------	----	-----	------	-------	---

Statement showing the cost of production of Coke during the half yearly costing period.

Gross production:

Self consumption (if any):

Net production:

		Total Expenditure	Rate per Tonne
		Rs.	Rs.
1. Coal used (Form XII)	•		
2. Other materials	•	-	
3. Wages (Form VIII)	•		
4. Salaries			
5. Stores (including Workshops) .	•		
6. Overhead expenses:			
(a) Power			
(b) Royalties	•	.	
(c) Cess			
(d) Miscellaneous (Form X) .			
(e) Other items (to be specified):		.1	
(i) Labour Welfare and ameni	ties .		
(ii)	•		
7. Depreciation (Form VI)	•		
8. Administration:			
(i) Works			
(ii) Head Office	•		
9. Selling Expenses	•	•	
J. Comme Expenses	•	•	
T			
Total	•	•	
		J	\

FORM IX-contd.

				Total Expenditure	Rate per Tonne
				Rs.	Rs.
Less: Credits for by-products House Rent Recovered Sundries	•				
Total Credits		J	•		
Net Cost of Production of Coke	•	•			

Note:—No item of expenditure of a capital nature should be included. Item No. 8 (Administration): Where there is a central office managing more than one colliery the total expenses of such office relating to the period costed should be shown in a separate statement together with the share allocated to the colliery costed and the basis for such allocation.

FORM IX-B

Break-up of Stores consumed

(Item 3 of Form IX)

	Quantity	Rate	Amount
		Rs.	Rs.
I. Explosives		ĺ	j.
(a) Gelatine		ĺ	Í
(b) Fuse Blue Sump		į	.}
(c) Open Detomators			
(d) Others (specify each item separately)			
2. Spares—Conveyor (Specify each item separately)			
3. Coal Cutting Spares etc.			
(a) Trailing Cable		}	}
(b) Cylinder Oil	Į.		
(c) Flexible Rope	ł		}
(d) Others (specify each item) .			1
4. Drilling M/C Spares (Specify each item separately)			
5. Haulage		1	
(a) 3/4" Haulage Ropes		ļ	
(b) Adcol Colliery Oil]	
(c) Wooden Sleepers			
(d) Others (specify each item separately)			
6. Timber			
(a) Props of sizes			.
(b) Other (specify each item separately)			

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FORM IX-B—contd.

	Quantity	Rate	Amount
		Rs.	Rs.
7. Miscellaneous			
(a) Bamboo Mattings			
(b) Iron & Steel Materials	ļ	Í	
(c) Kerosene Oil	ļ		
(d) Other (specify each item separately)			
8. Other items not covered upto 7 above (Specify each separately)			
i			<u>.</u>
Total			

FORM X

Name of Colliery:

Details of Miscellaneous Expenses (For the half-yearly costing period, 1957)

.No.		Detail						Amount
								Rs.
ı.	Rent, rates and propert	y taxes			•	•	•	
2.	Insurance (excluding V	Workmer • •	n's C	ompe	nsation	In	sur-	
3.	Printing, stationery and	postage		•			• •	
4.	Telephones and telegran	ms .					•	
5.	Legal expenses				÷			
6.	Advertisement		٠.				•	
7.	Directors' fees	•	•		•		•	
8	Auditors' fees			•			•	
9.	Motor car expenses .	•		•			•	
ro.	Motor lorry expenses	•	• ,	•	•		•	
ıı.	Charities	•		•	•		•	
12.	Donations		•	•	•		•	
13.	Ex-gratia/gratuity payme	ents.		•	•			
14.	Travelling expenses .	. •	•		•	•		
15.	Entertainment	•			• .	•	•	
16.	Other items	•		•	•		•	
	TOTAL .	•	•	•	•		•	

Note:—This form to be repeated for coal, coke and bye-products.

FORM XI

Dividends

			27014011	••				
Kind of Shares								
Denomination of Share								
S. No. F	or financia	al year end	led			Rate o	f Divider eclared	
r.								
2'.								
3•								
4.								
· 5•								
6.								
7 •								
8.								
9.								
10.								
				_				

Note:—The above statement to be completed with data since the year 1960 or 1960-61.

A 11/	Types
ΑШ	I vnes

Note:— (i) Where the rates of coal and slack used are different from the prescribed rates, the reasons for adopting such rate may be indicated.

(ii) Please furnish the following data from 1960 or 1960-61 to date.

Year					Coal used	Slack used	Coke produced	Yield %
I. Year .		1		•				
II. Year .				•				
III. Year .	•	•	•					

Weighted average for 5 years.

FORM XIII

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in ame	O1	CORE	Plant	-

Coke By-Products Sales

S. No.	By-products items	Half-yearly costing period					
	Dy products rems	Quantity	Rate	Value			
		Tonnes	Rs.	Rs.			

TOTAL .					

Notes:—(i) Please indicate the basis on which sale prices of by-products are fixed. If they are different from those prevalent in the market, what is the basis of fixing such prices.

⁽ii) Please furnish the quantities of by-products recovered in the five immediately preceding years.