



**REPORT OF THE
COMPTROLLER AND AUDITOR GENERAL
OF INDIA**

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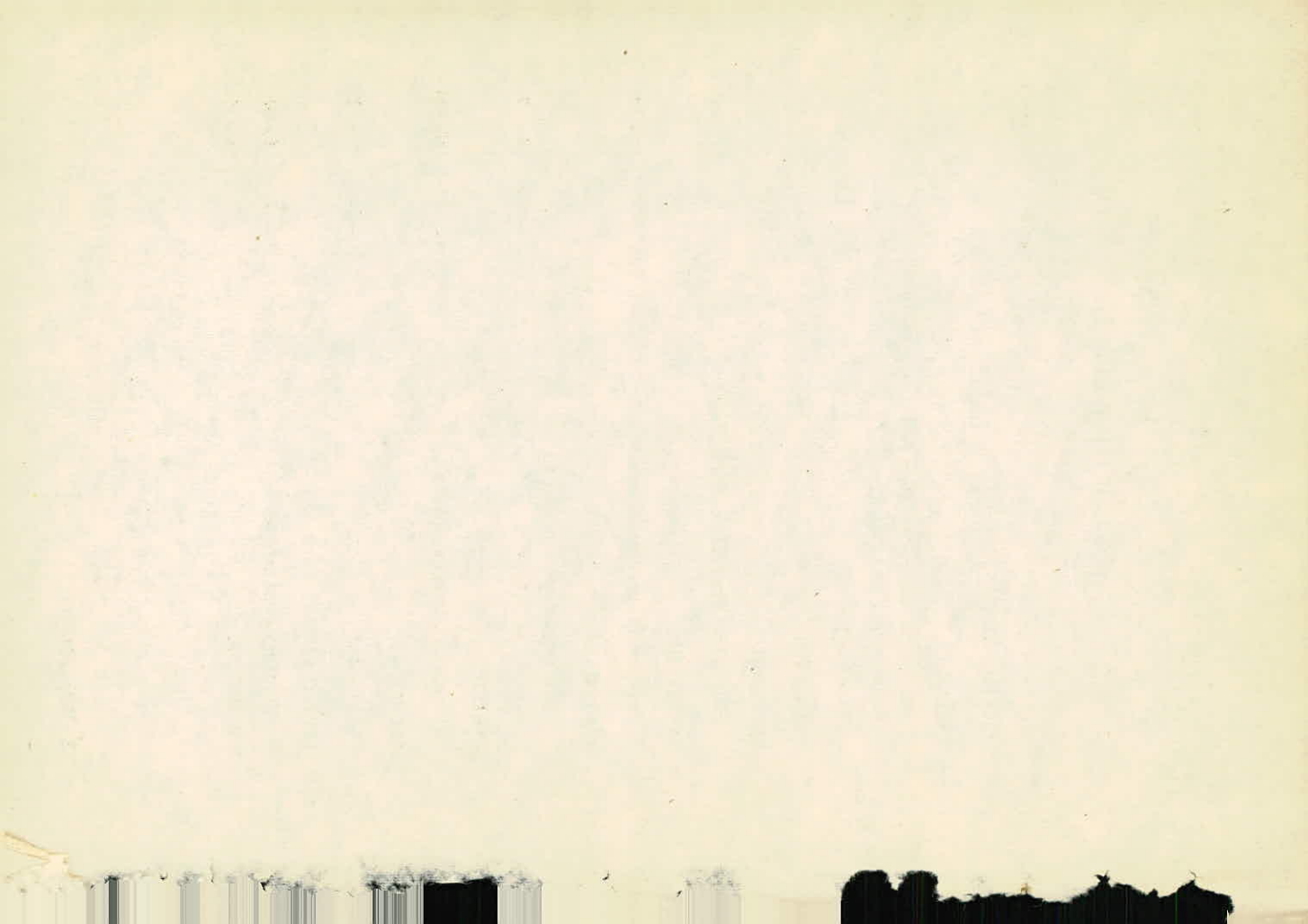
THE YEAR 1973-74

UNION GOVERNMENT (RAILWAYS)



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PREFATORY REMARKS

This Report relates mainly to matters arising from the Appropriation Accounts of Indian Government Railways for 1973-74 together with other points arising from audit of the financial transactions of the Railways.

2. The cases mentioned in this Report are among those which came to notice in the course of test audit during the year 1973-74 as well as those which had come to notice in earlier years but could not be dealt with in previous Reports; matters relating to the period subsequent to 1973-74 have also been included, wherever considered necessary.

3. The points brought out in this Report are not intended to convey or to be understood as conveying any general reflection on financial administration by the Ministry of Railways.



CHAPTER I

COMMENTS ON APPROPRIATION ACCOUNTS 1973-74 AND CONNECTED DOCUMENTS

1. Financial Results

1.1 The Railway budget for the year 1973-74 envisaged a surplus of Rs. 23.86 crores, but the actuals showed a deficit of Rs. 115.51 crores. This is the largest deficit ever shown by the Railways, the previous largest being Rs. 31.53 crores in 1967-68. The anticipated and actual revenue receipts and expenditure for the year 1973-74 and the actuals for the preceding three years are shown below:—

	Actuals 1970-71	Actuals 1971-72	Actuals 1972-73	Budget 1973-74	Actuals 1973-74	Variation with re- ference to budget
	(crores of rupees)					
Gross Revenue receipts	1006.96	1096.97	1162.77	1263.41	1138.19	—125.22
<i>Deduct</i>						
(a) Revenue expenditure	862.22	927.89	998.34	1066.94	1082.78	+15.84
(b) Dividend payable to General Revenues	164.58	151.24	161.51	172.61	170.92	—1.69
Surplus(+) or Deficit(—)	—19.84	+17.84	+2.92	+23.86	—115.51	—139.37

1.2 For the first time, the Railways were unable to pay this year the full dividend due to General Revenues, amounting to

Rs. 170.92 crores. Estimating that the deficit for the year would be Rs. 99.75 crores in the revised estimates, the Railways borrowed in March 1974 Rs. 99.72 crores from General Revenues to enable full payment of dividend. However, when the accounts of the year were finally closed the actual deficit for the year was found to be Rs. 115.51 crores. Since additional loan could not then be obtained to cover the difference, the Railways paid only Rs. 155.13 crores as dividend (Rs. 55.41 crores from the net revenue and Rs. 99.72 crores from loan obtained in March 1974). Short payment of Rs. 15.79 crores has been carried over to the year 1974-75 as a liability.

1.3 The deferred dividend outstanding at the end of 1973-74 for new lines was Rs. 82.09 crores of which Rs. 32.76 crores were for new lines which had completed the moratorium period.

1.4 The budget estimates anticipated an increase of Rs. 88.90 crores in the receipts over the revised estimates for 1972-73. The actuals were, however, short of the budget anticipations by more than Rs. 125 crores, *i.e.*, ten per cent and also fell by more than Rs. 24 crores from the levels anticipated in the revised estimates and actuals of the previous year.

1.5 On the expenditure side the actuals exceeded by Rs. 15.84 crores the budget estimates which provided for an increase of Rs. 68.01 crores over the revised estimates of the previous year to cover additional expenditure attributable to escalation in staff costs, increased cost of repairs and maintenance, coal and other fuel etc. The actuals were also more than the expenditure in 1972-73 by Rs. 84.44 crores which is the highest increase in expenditure in decades. The increase was due mainly to grant of four instalments of dearness allowance to staff sanctioned by Government and part payment of arrears owing to implementation of recommendations of the Third Pay Commission.

1.6 During this year also works chargeable to Development Fund were financed by a loan of Rs. 22.65 crores obtained from General Revenues. The Fund closed with a loan liability of Rs. 108.30 crores to General Revenues on 31st March 1974.

There were net accretions of Rs. 0.89 crore and Rs. 12.10 crores to Depreciation Reserve Fund and Pension Fund respectively. The closing balance in these funds were Rs. 175.74 crores and Rs. 142.21 crores respectively.

1.7 The Plan outlay during 1973-74, the last year of the Fourth Plan, was as below:—

	Budget	Actuals	Variance
	(crores of rupees)		
Capital	164.00	166.98	+2.98
Depreciation Reserve Fund	137.54	125.13	-12.41
Development Fund	20.00	19.39	-0.61
Open Line Works—Revenue	8.00	6.76	-1.24
Metropolitan Transport Projects	8.00	4.65	-3.35
TOTAL	337.54	322.91	-14.63

The Railway Board imposed a cut of 10 per cent in August 1973 on Plan expenditure and reduced the allotment to zonal Railways as a measure of economy. The actual savings were less.

2. Performance of Zonal Railways

During the year under report only three Railways, Central, South Central and Western, showed a surplus as against five Railways—Central, Northern, South Central, South Eastern and Western—in the previous year. The anticipated surplus/deficit and the actuals for the zonal Railways are shown in Annexure I. Deterioration occurred on all Railways.

There was steep deterioration in the operating ratio of the Railways (ratio of gross working expenses to gross earnings). It increased from 84.47 per cent in 1972-73 to 93.39 per cent

in 1973-74 as the working expenses increased by 8.8 per cent while earnings fell by 1.6 per cent.

3. Revenue Receipts

3.1 The revenue receipts during 1973-74 were Rs. 1138.19 crores which were less than the budget estimates by Rs. 125.22 crores. The details are shown below:—

	Actuals 1972-73	Budget 1973-74	Actuals 1973-74	Variation with reference to budget
	(crores of rupees)			
Passenger earnings				
Upper classes	41.38	47.38	43.42	-3.96
Second class	302.43	331.83	323.73	-8.10
TOTAL	343.81	379.21	367.15	-12.06
Other coaching earnings	65.64	66.39	59.35	-7.04
Goods earnings	720.68	784.70	680.41	-104.29
Sundry earnings	35.60	37.90	40.09	+2.19
Suspense	-3.31	-5.00	-9.11	-4.11
Gross Traffic receipts	1162.42	1263.20	1137.89	-125.31
Miscellaneous receipts	0.35	0.21	0.30	+0.09
Total Revenue Receipts	1162.77	1263.41	1138.19	-125.22

3.2 At the time of presentation of the Railway budget in February 1973 an increase of about 4 per cent in passenger earnings over the previous year was anticipated. An addition of about 10 million tonnes of revenue-earning goods traffic over the traffic in 1972-73 was also anticipated. The increase in earnings on account of increase in traffic was expected to be about Rs. 46 crores, of which Rs. 35 crores were to be under goods traffic.

3.3 The budget envisaged adjustments in freight and fares in order to meet the increased liabilities in working expenses and payment of dividend to General Revenues. The revision of freight and fares was expected to yield about Rs. 43.20 crores.

3.4 The actuals showed a steep fall of Rs. 125.31 crores under traffic receipts. For the first time after 1968-69, passenger earnings were less than the budget estimates although such earnings for 1973-74 were Rs. 23.34 crores more than those of the previous year. The increase in number of passengers originating was very small (about 0.03 per cent compared to 4.6 per cent in the previous year) and that in passenger kilometres was 1.6 per cent as against 6.5 per cent in the previous year. This increase was only in suburban traffic while there was a decline in non-suburban traffic.

3.5 Under goods traffic not only the anticipated additional traffic of 10 million tonnes did not materialise, but the traffic carried was very much less than in the previous year, both in terms of originating tonnes and net tonne kilometres. The originating revenue-earning traffic was 162.05 million tonnes only (the level attained eight years ago in 1965-66) which was 13.23 million tonnes or 7.54 per cent less than the traffic during 1972-73. The traffic in terms of net tonne kilometres was also less by 9.7 per cent.

3.6 The actual revenue receipts fell short, by Rs. 15.79 crores, of the final estimate made in March 1974 for obtaining loans from General Revenues to cover the deficit in dividend payable. This shortfall led to part payment of dividend during the year as indicated in paragraph 1.2 ante.

3.7 The Passenger fare tax levied with effect from 15th November 1971 under the Railway Passenger Fares Act 1971 was withdrawn from 1st April 1973.

3.8 The Indian Railways Act 1890 was amended in December 1973 raising the limit of maximum compensation to a passenger, in case of death or total disablement caused in a railway accident, from Rs. 20 thousand to Rs. 50 thousand. To cover the extra liability on account of additional compensation, surcharge ranging from five paise to one rupee per passenger ticket was levied from 1st January 1974.

4. Revenue Expenditure

The revenue expenditure during 1973-74 was Rs. 1082.78 crores. Details are shown below:—

	Actuals 1972-73	Budget 1973-74	Actuals 1973-74	Variation from budget
	(crores of rupees)			
I. Working Expenses				
(i) Administration, staff welfare and operating staff	305.67	327.18	341.34	+14.16
(ii) Repairs and maintenance	309.90	337.73	356.28	+18.55
(iii) Fuel	162.37	171.67	158.85	-12.82
(iv) Miscellaneous expenses including operation other than staff & fuel, payments to worked lines and suspense	78.83	81.83	79.01	-2.82
(v) Appropriation to Depreciation Reserve Fund	110.00	115.00	115.00	..
(vi) Appropriation to Pension Fund	15.85	15.85	15.85	..
II. Miscellaneous expenditure such as cost of Railway Board and its attached offices, Surveys, Audit and Subsidy paid to branch line companies.				
	8.64	9.68	9.69	+0.01
III. Open line Works—Revenue				
	7.08	8.00	6.76	-1.24
TOTAL	998.34	1066.94	1082.78	+15.84

The increase of Rs. 84.44 crores in revenue expenditure over the actuals of previous year was the largest in decades.

The increase of Rs. 15.84 crores over the budget was made up of excesses of Rs. 61.19 crores and savings of Rs. 45.35 crores. The excesses were mainly attributable to grant of four instalments of dearness allowance to staff sanctioned by Government and part payment of arrears due to implementation of recommendations of the Third Pay Commission (Rs. 49.01 crores), fluctuations in adjustment of freight charges on railway materials (Rs. 6.33 crores), expenditure on catering stores and other consumable stores, clothing etc., (Rs. 3.44 crores), repairs and maintenance of buildings, restoration of flood damages to track, maintenance of electrical services etc., (Rs. 2.41 crores).

The Railway Board imposed an *ad hoc* cut in August 1973 on expenditure in view of the difficult economic situation through which the country was passing. The zonal Railways saved and surrendered about Rs. 21.32 crores on this account. Non-materialisation of traffic and less receipt of coal accounted for a saving of Rs. 13.91 crores under 'Fuel'. Other savings were due to adjustment in respect of liabilities under Suspense (Rs. 4.32 crores), less expenditure on Government contribution to provident funds and on payment of compensation under Workmen's Compensation Act (Rs. 2.96 crores), payments under mileage and running allowances (Rs. 1.49 crores), less revenue works done as a measure of economy (Rs. 1.24 crores) and aggregate of minor causes (Rs. 0.11 crore).

5. Budgetary Control

The number of demands voted for the year was 21 aggregating Rs. 2140.41 crores. During the year thirteen supplementary grants were obtained for Rs. 40.16 crores.

The number of charged appropriations for the year was six for a total of Rs. one crore. During the year 10 supplementary appropriations for Rs. 1.37 crores were obtained.

There were no excesses either under voted grants or charged appropriations.

The disbursements during the year showed a saving of Rs. 98.03 crores over the total grants and appropriations as shown below:—

Particulars	Voted	Charged	Total
	Grants	Appropriation	
	(crores of rupees)		
1. Original	2140.41	1.00	2141.41
2. Supplementary	40.16	1.37	41.53
3. Total	2180.57	2.37	2182.94
4. Total disbursements	2082.78	2.13	2084.91
5. Saving	97.79	0.24	98.03
6. Percentage of net saving to total grants/ appropriation	4.5	10.1	4.5
7. Percentage of net saving in the previous year	2.2	12.1	2.2

6. Savings in Grants and Appropriations

A. Savings in Grants

The saving of Rs. 97.79 crores mentioned in paragraph 5 occurred in all but two grants. There were no variations in the two grants voted for appropriations to Depreciation Reserve Fund and Pension Fund.

The two grants obtained for appropriation of anticipated revenue surplus to Development Fund and Revenue Reserve Fund remained unutilised as the year closed with a deficit, accounting for a saving of Rs. 25.01 crores. Though the surplus of Rs. 25.01 crores anticipated in the budget was reduced to Rs. 23.86 crores with the withdrawal of certain proposals for increase in fares and freight, the grants obtained for appropriation of surplus were not correspondingly modified.

A saving of Rs. 17.48 crores occurred under Grant No. 12—Dividend to General Revenues as funds were not sufficient for making full payment of dividend due.

The works grants, namely, Grant No. 13—Open Line Works—Revenue, Grant No. 14—Construction of New Lines and Grant No. 15—Open Line Works—Capital, Depreciation Reserve Fund and Development Fund, accounted for a saving of Rs. 15.79 crores. It was mainly due to *ad hoc* cut imposed in August 1973 by the Railway Board on Plan expenditure. This was implemented by slowing down schemes and postponing certain works.

Substantial saving of Rs. 13.96 crores occurred under Grant No. 7—Working Expenses—Operation (Fuel), which was mainly on account of non-materialisation of traffic and less expenditure on handling charges as a result of less receipt of coal.

The grant of Rs. 8.76 crores obtained under Grant No. 20—Payment towards amortisation of overcapitalisation, repayment of loans from General Revenues and interest thereon remained unutilised as outstanding loans from General Revenues in respect of Revenue Reserve Fund had been cleared proforma in the accounts of earlier year by utilising the arrear relief, in payment of dividend for the years 1969-70 and 1970-71, that became available during the year in terms of the recommendations of the Railway Convention Committee, 1971.

Savings of Rs. 16.79 crores occurred under eleven grants, (Grants No. 1 to 10 and Grant No. 16), mainly due to less payment of arrears of pay towards implementation of the recommendations of the Third Pay Commission (Rs. 4.81 crores), adjustment of liabilities under suspense (Rs. 2.87 crores), adjustment of interest element etc., in the hire charges for interchange of rolling stock among railways (Rs. 1.32 crores),

less expenditure on maintenance of track and electrical and signal services (Rs. 1.13 crores), mileage and overtime allowances (Rs. 0.56 crore), Government contribution to provident funds (Rs. 0.80 crore), less net adjustment through Stock Adjustment Account (Rs. 0.57 crore), non-operation of certain posts (Rs. 0.48 crore), pensionary charges (Rs. 0.45 crore) and aggregated minor savings of less than Rs. 50 lakhs each (Rs. 3.80 crores).

B. Savings in Appropriations

A total saving of Rs. 24 lakhs in charged appropriations occurred under eight Appropriations. The significant savings were under Appropriation No. 8—Working expenses—Operation other than staff and fuel (Rs. 15.6 lakhs) and Appropriation No. 9—Working expenses—Miscellaneous expenses (Rs. 7.4 lakhs).

CHAPTER II

FOURTH FIVE YEAR PLAN OF THE RAILWAYS

Introduction

7.1 The basic objectives of the Railway's Fourth Five Year Plan were to provide for freight and coaching traffic anticipated during the five years from April 1969 to March 1974 and also to modernise the Railway system (by electrification, dieselisation and improvement of permanent way and signalling systems) to the maximum extent consistent with availability of funds so as to improve the efficiency of transport net work and to reduce costs.

7.2 The original allocation for the Railways in the Fourth Plan was Rs. 1525 crores based on anticipation of 265 million tonnes of originating goods traffic at the end of the Plan. As, however, the traffic materialisation was far below the expectations, the Plan outlay was reduced in January 1971 to Rs. 1275 crores; the curtailment was mainly in rolling stock (Rs. 89 crores) and line capacity works (Rs. 121 crores). During a mid-term appraisal of the Plan in December 1971, the allocation was raised to Rs. 1400 crores to cope with growth in traffic anticipated due to commissioning of Bokaro Steel Plant in 1972-73, satisfactory agricultural production and indications of general improvement in the climate of industrial development. The increase was primarily for rolling stock, line capacity works and new lines. A separate provision of Rs. 50 crores was made in the Plan for Metropolitan transport projects and this was reduced to Rs. 20 crores during mid-term appraisal.

7.3 The actual outlay was Rs. 1428 crores (including those on Metropolitan transport projects) as against final Plan allocation of Rs. 1420 crores. The increase was mainly due to receipt of more stores, both indigenous and imported, at higher prices.

7.4 The outlay on inventories during the Plan was Rs. 76.67 crores instead of an anticipated Rs. 15 crores.

Revenue operations

7.5 The financial results of revenue operations during the Fourth Plan are as below:—

	As per Plan	As per Annual budgets	Actuals
	(crores of rupees)		
Gross Traffic receipts	5382	5432.4	5354.9
Total Revenue expenditure	4495	4539.4	4674.7
Payment of dividend to General Revenues	868	832.2	804.6
Net Surplus (+) or Deficit (—)	+19	+60.8	—124.4

7.6 The gross traffic receipts during the Plan period were only marginally less than the original Plan estimate but the revenue expenditure exceeded the estimate by Rs. 179.7 crores or about 4 per cent. In spite of reduction of nearly Rs. 63 crores in dividend payments, the small anticipated surplus turned to a large deficit, most of it arising in 1973-74, the last year of the Plan.

7.7 The Plan had been prepared taking into account the accepted recommendations of the Railway Convention Committee 1965 which covered the inter-Plan period 1966—69. The recommendations of the Railway Convention Committee 1971 covering the Fourth Plan period were received and approved by Parliament in December 1971 only. The revenue surplus

of Rs. 19 crores anticipated during the Plan period did not take into account the substantial reliefs and exemptions in payment of dividend recommended by the Railway Convention Committee 1971. Taking into account these reliefs and exemptions, the annual budgets envisaged surplus of Rs. 60.8 crores for the five years. The actual operating results, however, showed deficit of Rs. 124.4 crores in contrast to the original Plan projection of surplus of Rs. 19 crores and anticipated surplus of Rs. 119 crores taking into account the reliefs asked for.

Sources of financing Plan expenditure

7.8 The Plan anticipated that 52.5 per cent of the outlay would be found by the Railways from their own resources. The percentage of Railway contribution was reassessed as 49.6 during mid-term appraisal. The actual percentage was 38.1.

Fund balances

Revenue Reserve Fund

7.9 At the beginning of the Plan this Fund had a small balance of Rs. 3.49 crores. The first two years of the Plan were deficit years and, therefore, Rs. 33.77 crores had to be obtained as loan from General Revenues for discharging fully the dividend liabilities, payment of interest on outstanding loans as well as repayment partly of earlier loans. The next two years, 1971-72 and 1972-73, were surplus years largely due to concessions and exemptions granted on the recommendations of the Railway Convention Committee 1971. The arrear reliefs for the first two years of the Fourth Plan became available in 1972-73 and were used to wipe out fully the loan liability of this fund. But as the year 1973-74 closed with a record deficit of Rs. 15.51 crores, the balance in the Fund on 31st March 1974 again became nominal.

Depreciation Reserve Fund

7.10 The balance in this Fund increased from Rs. 98.17 crores on 1st April 1969, at the beginning of the Plan, to

Rs. 175.74 crores on 31st March 1974 at the end of the Plan. Accrual to the Fund was Rs. 525 crores and withdrawals Rs. 494.1 crores for meeting expenditure on renewals and replacements during the Plan period.

7.11 The balance in this Fund, the value of real block assets of the Railways (excluding land) as at the end of each Five Year Plan and the related percentages are given below:—

End of	Balance	Value of real block assets other than land	Percentage of (2) to (3)
1	2	3	4
	(crores of rupees)		
First Plan	103.47	1084	9.5
Second Plan	19.79	1842	1.1
Third Plan	52.85	3213	1.5
Fourth Plan	175.74	4735	3.7

Railway Development Fund

7.12 The Fund opened with the small balance of Rs. 1.26 crores at the beginning of the Plan along with a loan liability of Rs. 25.30 crores, after continued depletions on account of deficits in 1966-67, 1967-68 and 1968-69. During the Plan period only a small appropriation from surplus could be made to the Fund and Rs. 82.99 crores were obtained as loan to finance the Plan expenditure on works chargeable to this Fund and payment of interest. The Fund closed with a nominal balance of Rs. 31 lakhs on 31st March 1974 and loan liability of Rs. 108.30 crores.

Railway Pension Fund

7.13 The balance in the Railway Pension Fund increased from Rs. 67.90 crores to Rs. 142.21 crores during the Plan period. Payment of pensionary benefits rose from Rs. 6.37 crores in 1968-69 to Rs. 12.33 crores in 1973-74. The Fund

was constituted in 1964; the annual contributions to it have not been arrived at on actuarial basis. The annual contributions were made on *ad hoc* basis. During 1971-72 the contribution was also reduced *ad hoc*, as a measure of economy, to Rs. 12 crores against Rs. 15.5 crores in the previous year.

Growth of traffic and receipts

7.14 Based on traffic projections by the Working Group on Rail Transport, the Fourth Plan was drawn up to move originating freight traffic of 264.7 million tonnes in 1973-74, the last year of the Plan. At the time of mid-term appraisal (December 1971), this was revised down to 240.5 million tonnes. The actual traffic was much less. The highest level reached was 207.9 million tonnes in the first year of the Plan and the lowest 184.9 million tonnes in the last year which was even below the traffic moved in 1963-64 (191.1 million tonnes).

7.15 Total traffic anticipated to be moved during the Plan period was 1091 million tonnes of which 928 million tonnes were to be revenue-earning and the rest were to be on Railways' own account. The actual revenue-earning traffic moved during the Plan period was only 849 million tonnes. The shortfall was mainly in movement to and from steel plants and coal and iron ore (for export) traffic.

7.16 It was expected that non-suburban passenger traffic (in terms of passenger vehicle kilometres on broad gauge and metre gauge) would grow by 23.06 per cent. The actual growth was 3.34 per cent. The proportion of subsidised suburban traffic (in terms of passenger kilometres) which was 18.2 per cent in 1968-69, immediately before the Fourth Plan, rose to 20.7 per cent in the last year of the Plan.

7.17 Traffic receipts of Rs. 1137.89 crores in 1973-74, the last year of the Fourth Plan, were more than those of 1968-69 (the year before the Fourth Plan) by Rs. 239.04 crores. Of

that increase Rs. 117.62 crores and Rs. 102.05 crores related to goods and passenger earnings respectively. The increase in goods earnings was mainly due to increase in freight rates as the originating traffic in 1973-74 was less than in 1968-69. The increase in passenger earnings during the Plan period was 38.5 per cent while the increase in passenger kilometres was 26.9 per cent.

Working expenses

7.18 The working expenses in 1973-74, last year of the Plan, were Rs. 1066.33 crores, exceeding those in 1968-69 by Rs. 324.40 crores or 44 per cent while the corresponding increase in traffic receipts was 27 per cent. The increase was mainly on staff expenses.

7.19 The expenditure on staff, which was 53.0 per cent in the year preceding the Plan, rose to 53.5 per cent during the last year of the Plan. The number of staff increased to 14.31 lakhs from 13.54 lakhs during that time span.

Zonal Railways working on loss

7.20 North Eastern, Northeast Frontier and Southern Railways continued to show deficits during the Fourth Plan. Eastern Railway has been operating on a loss since 1970-71. During 1973-74 only three Railways (Central, South Central and Western Railways) showed profit as against six Railways in the first year of the Plan. The deficit of Rs. 48.80 crores in 1973-74 of Eastern Railway was the highest amongst all the individual Railways during the five years.

Rate of return and contribution to General Revenues

7.21 The capital invested in Railways has increased year after year and was Rs. 3902.03 crores at the end of the Fourth Plan. The average percentage of net revenue to capital-at-charge during this plan period came down to 3.9 as against more than 5 in the earlier three Plans.

7.22 Upto the end of the Third Five Year Plan the dividend paid to General Revenues exceeded the interest on loan capital, at the average borrowing rate of Central Government applicable to commercial undertakings, by over Rs. 34 crores in each of the earlier Plans. This margin, termed 'contribution', went down during the Fourth Plan to Rs. 17.2 crores mainly on account of the concessions and exemptions granted on the recommendations of the Railway Convention Committee 1971. In 1972-73 and 1973-74, payment of dividend to General Revenues fell short of the interest element; in other words, return to the Central Government on the capital invested in the Railways fell below its average borrowing rates during these two years.

7.23 The capital outlay in Railways during the Fourth Plan was Rs. 801.97 crores which was 26 per cent of the total outlay before the Fourth Plan. On account of concessions granted to Railways as recommended by the Railway Convention Committee 1971 the percentage of capital on which dividend was payable came down from 89 to 80 during the Fourth Five Year Plan period.

Foreign exchange expenditure

7.24 The total foreign exchange expenditure of Railways during the Fourth Plan was about Rs. 180 crores. Out of this Rs. 103.5 crores (\$ 139.6 million) represented the utilised portion of credits extended by International Development Association; the corresponding figure for the Third Plan was Rs. 108.24 crores (\$226 million).

Metropolitan Transport Projects

7.25 During the Plan period the Railways undertook techno-economic feasibility studies for mass rapid transit system in Bombay, Calcutta, Delhi and Madras. Railway Metropolitan Transport Organisations were set up in Calcutta and Bombay in

July 1969 and in Delhi and Madras in July 1971. A separate provision of Rs. 50 crores for these projects was made for Railways outside the Railway's Plan. The allocation was reduced to Rs. 20 crores during mid-term appraisal. However, only one project of rapid transit system (underground) from Dum Dum to Tollyganj in Calcutta estimated to cost Rs. 140.3 crores was sanctioned, in June 1972, during the Plan period. The total outlay on Metropolitan Transport Projects (including surveys) during the Plan was Rs. 8.66 crores, less than half of the reduced allocation of Rs. 20 crores.

CHAPTER III

ECONOMY IN COAL CONSUMPTION

8.1 Coal worth about Rs. 100-101 crores (pit mouth value Rs. 52-53 crores) is being used annually by the Indian Railways. It is almost entirely consumed by steam locomotives in hauling goods and passenger trains and for certain other purposes, namely, shunting, haulage of wagons over sidings, haulage of departmental trains etc. The statement below shows goods traffic hauled, engine hours and coal consumption relating to steam engines for certain selected years from 1960-61 to 1972-73 :—

Year	Net tonne kilometres (millions)	Engine hours (thousands)				Coal consumed by locomotives (million tonnes)	Pit mouth value of coal (crores of rupees)	Coal consumed by goods train locomotives (million tonnes)
		Passenger train engine hours	Goods train engine hours	Other engine hours	Total engine hours			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1960-61	78337	6409	9809	18824	35042	14.80	32.97	7.02
1970-71	37796	6634	6546	19934	33114	14.34	51.67	4.94
1971-72	36649	6582	6129	19703	32414	14.25	51.38	4.72
1972-73	33045	6334	5704	19062	31100	13.73	51.52	4.41

8.2 It will be seen from the above that during 1960-61 to 1972-73, the passenger train engine hours and other engine hours for steam engines have remained at about the same level. The net tonne kilometres hauled by steam engines in 1972-73

was only 42 per cent of that in 1960-61 and goods train engine hours also reduced to 58 per cent, and yet the coal consumed in 1972-73 by goods train locomotives was nearly 62 per cent of that in 1960-61.

8.3 The statements below show the engine hours for different services and corresponding coal consumption, separately for broad gauge and metre gauge steam locomotives:—

Year	Engine hours (thousands)				Coal consumption (million tonnes)			
	Broad gauge							
	Pas- senger	Goods	Mixed	Others	Pas- senger	Goods	Mixed	Others
1960-61	3276	6244	193	12534	3.03	5.49	0.13	2.32
1970-71	3296	3734	232	13602	3.42	3.47	0.21	2.90
1971-72	3294	3469	241	13486	3.47	3.27	0.21	2.99
1972-73	3148	3252	234	13150	3.42	3.06	0.21	2.89
	Metre gauge							
1960-61	2416	2996	398	5766	1.24	1.44	0.16	0.68
1970-71	2680	2413	224	5874	1.71	1.41	0.10	0.81
1971-72	2641	2278	213	5766	1.75	1.40	0.10	0.75
1972-73	2549	2094	209	5468	1.73	1.28	0.10	0.74

8.4 Engine hours in 1972-73 for passenger services decreased by 3.9 per cent from the level of 1960-61 on the broad gauge but coal consumption went up by 12.8 per cent; on metre gauge the passenger engine hours increased by 5.5 per cent while coal consumption therefor increased by as much as 39.5 per cent. As compared to 1960-61 the engine hours for other services (shunting, departmental and miscellaneous) during 1972-73 went up by 4.9 per cent for the broad gauge and came down by 5.2 per cent for metre gauge. However, the corresponding coal consumption increased by 24.6 per cent and 8.8 per cent respectively.

8.5 *Prima facie*, the present level of coal consumption by the Railways seems excessive.

8.6 Coal consumption by steam locomotives depends on a variety of factors, for example, too early lighting up of and keeping locomotives in steam for long periods, extent of shunting, maintenance of locomotives, quality of coal, operating features, drop in speed etc.

8.7 In January 1968 and May 1972, the Railway Board issued specific instructions to the General Managers of the Railways for effecting economy in coal consumption. The extent to which concrete steps have been taken by the individual Railways for economising coal consumption by steam locomotives used for goods trains, shunting and departmental services was reviewed by audit on a selected basis for three months each for the two years 1972-73 and 1973-74 and the results of review are given in the succeeding paragraphs.

Lighting up, banking and dropping of fire

8.8 A steam locomotive is to be lighted up on the basis of train departure forecasts made by the Operating Department, so that it attains full steam just before the planned time of departure of the train which the locomotive is to haul. A broad gauge steam locomotive normally attains full steam after six hours and a metre gauge steam locomotive after four hours from the time it is lighted. Once a locomotive is lighted up, its fire is not dropped unless it has no booking during the next eight to fourteen hours or till it is due for periodical wash out or repairs. Where a locomotive has to remain idle for short spells in a loco shed, its fire is banked (*i.e.*, the fire is covered to reduce coal combustion). Review by audit showed that most of the selected locomotives were lighted up too early and kept idling under full steam, sometimes even for 23 hours before the scheduled times of departure of the trains they were to haul. The number of hours during which the engines were kept in full steam, instead of on banked fire, was, on an average, as high as 9 hours in Central and Northeast Frontier Railways. Further, the selected locomotives were kept, on an average, more than

Central, Northern, North Eastern and Southern Railways the percentage was less than 69. Further details are given in Annexure IV.

Maintenance of steam locomotives

8.12 Efficient maintenance of locomotives, particularly of blast pipe orifice, helps largely to ensure economies in coal consumption. In accordance with the instructions issued in May 1972 by the Railway Board, officers of the Mechanical Department were required to pay special attention to those aspects which particularly contribute towards raising fuel consumption; drivers were required to eliminate steam leakages, wastage of water by injectors and inefficient burning and heating caused by air drawn in smoke boxes etc., and boiler tubes were required to be thoroughly cleaned periodically, if necessary, by using JAMS gun developed on the Northern Railway which had been found to be effective.

8.13 During review it was seen that maintenance of engines was generally not satisfactory on the Eastern, Northern, North Eastern, Northeast Frontier and South Eastern Railways as locomotives with leaky boilers, smoke tubes badly jammed, injectors wasting water etc., had been put into service by some of the major sheds (Mughalsarai and Garhara). On the Central, Eastern, Northern, North Eastern, Northeast Frontier and Western Railways, the number of engine failures, particularly those in goods service, increased during 1973-74 compared to 1972-73 indicating inefficient maintenance.

8.14 While on Northern Railway JAMS gun has been utilised in all major sheds, it is still to be introduced in all the major sheds of Eastern Railway. JAMS guns procured for Gorakhpur and Gonda sheds of North Eastern Railway are not in use as these are stated to be not suitable for metre gauge locomotives. The JAMS guns are yet to be brought into use in Northeast Frontier Railway.

Quality of coal

8.15 One important reason attributed by the Railways to the present high level of coal consumption is the quality of coal. Selected grade coal represented about 24 per cent of the total coal consumed by the Railways in 1960-61. This came down to about 10 per cent in 1972-73. During that period consumption of grade I coal increased from 37 per cent to 64.5 per cent. More details are given in Annexure V.

8.16 In its instructions to the General Managers in May 1972, the Railway Board had stated as follows:—

“Repeated stress has also been laid on the Railways checking the quality of coal. It is found that destination inspections are not thorough and frequently disputed. It is not much use complaining about poor quality unless it can be substantiated. Action is afoot to nominate Deputy Chief Mechanical Engineer (Fuel) of each Railway and also authorise him to nominate officers/senior subordinates under him to conduct inspections of coal at the loading/colliery ends. Wherever your Railway feels that particular colliery is continuously supplying bad coal it would be desirable if your Dy. C.M.E. (Fuel) or one of the senior officers goes to the loading point and carries out inspections strictly in accordance with the specified procedure and under the frame-work of the contractual clauses. Reports of such inspections must immediately be made to the Chief Mining Adviser, Dhanbad with copy to the Board.”

8.17 In Eastern Railway, officers and senior subordinates were nominated by the Deputy Chief Mechanical Engineer (Fuel) to conduct inspections at the loading or colliery ends but such inspections were conducted mostly by senior

CHAPTER IV

SUPER EXPRESS GOODS TRAINS AND RAJDHANI EXPRESS

9. Super express goods trains

9.1 The Railway Board decided in June 1964 to introduce through super express goods trains between important pairs of stations to move consignments quickly. Consignments pertaining to container service, quick transit service and freight forwarder schemes are generally carried by these trains. Container service is a road-cum-rail transport service provided for high rated commodities in 4.5 and 5 tonne containers from and to the customers' warehouses. Quick transit service guarantees goods delivery within a specified period, on payment of five per cent surcharge (subject to a minimum of one rupee) in addition to the ordinary freight, and if delivery is not effected within the stipulated period the surcharge is refunded. Under freight forwarder scheme the approved freight forwarders collect smalls (less than wagon load) consignments from individual traders and deliver them at the destination stations after transporting them in wagon loads by rail.

9.2 Super express goods trains (in addition to express and other goods trains) run between four principal cities—Delhi, Calcutta, Bombay and Madras. While the service from New Delhi to Madras continues, that from Madras to New Delhi was discontinued from September 1973 owing to difficulties reported in marshalling at Tondiarpet yard (Madras).

9.3 These trains are normally hauled by diesel locomotives and by electric locomotives on electrified sections. They are

normally capable of hauling a maximum of 75—80 loaded wagons (four wheelers) at an average speed of 60 kms per hour and with a maximum speed of 70 to 80 kms per hour. However, depending upon the capacity of loops, gradients and condition of track, lower loads (ranging from 60 to 75 wagons) and maximum speeds (between 60 to 65 kms per hour) have been prescribed in different sections.

9.4 These trains are to run according to fixed advertised timings. The permitted journey times include time for halts at nominated stations for attachment or detachment of wagons, load formation, change of crews and locomotives and examination of wagons by train examiners as well as for giving precedence to passenger trains. For example, the permitted time of 73 hours for the train from Howrah to New Delhi includes 40 hours for these operations at 12 stations. Two days are added to the permitted journey time to fix the stipulated period for delivery of quick transit service consignments.

9.5 A review in audit of the performance of these trains for five selected months (January 1973, February 1973, March 1973, February 1974 and March 1974) showed that most of the trains from New Delhi and Madras started late by more than one hour. About 76 per cent of the trains arrived late by more than three hours. The average late arrival of the trains which were late by more than three hours ranged between 10 and 55 hours.

9.6 Further details about these trains are given in the succeeding paragraph. The number of wagons have been indicated in terms of four wheelers. Late start of trains upto one hour and late arrival upto three hours have not been taken into account.

Howrah—New Delhi (daily service)

Permitted journey time—

- | | |
|-----------------------|----------|
| (i) Howrah—New Delhi | 73 hours |
| (ii) New Delhi—Howrah | 70 hours |

9.7 The largest number of trains ran on this daily service—147 originating from Howrah and 149 from New Delhi. About 36 per cent of the trains starting from Howrah were terminated at Ghaziabad (25 kms short of New Delhi) because nearly two-third of the wagons in these trains were consigned to other destinations via that station. However, four trains with all wagons bound for New Delhi were also terminated at Ghaziabad. The trains from New Delhi were terminated midway at Mughalsarai as the loaded consignments for Howrah were inadequate for a full train.

9.8 From New Delhi, 141 (or 95 per cent) trains started late by 3 to 4 hours and 88 per cent were handed over to Eastern Railway at Mughalsarai late by 11 to 22 hours. Out of the 135 trains formed and started from Mughalsarai for Howrah, 112 (or 83 per cent) reached Howrah late by 10 to 14 hours.

9.9 Sixty-six trains started late by over one hour from Howrah; 95 per cent were handed over at Mughalsarai to Northern Railway, on an average, late by 10 hours. One hundred and five trains (or 77 per cent) reached Ghaziabad late by about 11 to 20 hours.

9.10 The trains which originated from New Delhi carried 5 to 61 empty wagons per train.

9.11 Late departures and arrivals of trains were attributed to late formation of trains, vacuum trouble, late arrival of locomotives, engine failures, detachment of disabled and mismarshalled wagons, accidents, emergency power block at Howrah, thefts of overhead wires and components on the electrified sections, increase in the frequency of air conditioned express trains and introduction of Rajdhani Express. Excess hours on road between New Delhi and Mughalsarai were also stated to be due to detentions short of Mughalsarai and trains becoming out-of-path due to late starts.

New Delhi—Bombay (daily service)

Permitted journey time—

- | | |
|--------------------------------------|----------|
| (i) New Delhi—Bombay (Carnac Bridge) | 54 hours |
| (ii) Bombay—New Delhi | 54 hours |

9.12 For these trains starting from Bombay two (instead of the normal one) brake vans were generally attached—one for the group of wagons for New Delhi and the other for loads beyond that station.

9.13 Out of 148 trains from New Delhi 119 (or 80 per cent) started late by more than one hour and upto seven hours and handed over to Central Railway (at Tughlakabad, 18 kms from New Delhi). They were handed over to Western Railway (at Mathura Junction, 141 kms from New Delhi) late by about 5 to 11 hours and reached Carnac Bridge, late by 10 to 20 hours. Late start of trains from New Delhi was attributed to late arrival of diesel locomotives and goods trains from Bombay side with wagons not marshalled in the prescribed order necessitating re-marshalling. It was also stated that sometimes the trains did not carry extra brake van which had to be provided at Tughlakabad.

9.14 The trains received at Mathura Junction from New Delhi were stated to have not been marshalled according to prescribed marshalling order necessitating re-marshalling at the next yard (Gangapur city).

9.15 Almost all the trains from Carnac Bridge were handed over by Western Railway at Mathura late by 8 to 12 hours; and they arrived late in New Delhi by 10 to 13 hours.

9.16 From New Delhi, on an average, 8 empty wagons were carried by each train.

Calcutta—Bombay

Permitted time—

- | | |
|--|----------|
| (i) Calcutta (Shalimar)—Bombay (Wadi Bandar) | 86 hours |
| (ii) Bombay—Calcutta | 75 hours |

9.17 During the period covered by the review, this service was biweekly from Calcutta and six times in a week from Bombay; 116 trains started from Wadi Bandar but 97 trains were received at Shalimar late by 14 to 134 hours. Forty-one trains from Shalimar arrived at Wadi Bandar late by 12 to 36 hours. The late arrival is attributed to late start of these trains from Ajni (inter-change point between Central and South Eastern Railways) causing out-of-path running of these trains.

Bombay—Madras (triweekly service)

Permitted time—

- | | |
|--|----------|
| (i) Bombay (Wadi Bandar)—Madras (Salt Cotaurs) | 83 hours |
| (ii) Madras—Bombay | 87 hours |

9.18 Ninety-eight trains started from Wadi Bandar. Sixty-three trains were handed over, on an average, late by 2.45 hours to South Central Railway (at Pune, 192 kms from Bombay); 96 trains were handed over by that Railway to Southern Railway (at Raichur, 570 kms from Madras) late by 15 hours on an average.

9.19 The trains from Wadi Bandar reached Arkonam (69 kms short of Madras) late by 37 to 56 hours and were terminated there itself. It was explained that they had loads for Bangalore City and other stations in West Coast area necessitating re-marshalling and re-formation of trains at that station.

biweekly super-fast train between New Delhi and Howrah covering the distance of 1,441 kms in 17 hours. The train consists of six air-conditioned passenger coaches (one first class coach and five second class chair cars) and three service coaches (two generator cars and one pantry car). The coaches were specially designed and manufactured at the Integral Coach Factory, Perambur, at a cost of Rs. 1.28 crores. The train is hauled throughout, even on the electrified sections of 1,237 kms (i.e., about 85 per cent of the distance), by a diesel locomotive modified at a cost of Rs. 45,000 for attaining high speed. The maximum permissible speed of the train is 130 kms per hour while the booked speed is 120 kms per hour. The special fares charged from passengers travelling by this train cover catering during the journey.

The next fastest train between Delhi and Howrah, running on the same route as Rajdhani Express (except 25 kms between Ghaziabad and New Delhi), is Kalka-Delhi-Howrah Mail which has a normal load of 16 passenger coaches, one postal van and a pantry car (on the Northern Railway portion) and covers the distance in 24 hours. This train is hauled by an electric locomotive except over a distance of 204 kms (between Delhi and Tundla), which is not yet electrified. Other fast mail and express trains on this trunk route are also mostly hauled by electric locomotives on the electrified sections. Electric traction is cheaper than diesel traction, but additional cost of haulage of Rajdhani Express by diesel locomotive on electrified sections has not yet (March 1975) been worked out.

The route of Rajdhani Express has the heaviest traffic density ranging from 10,000 to over 60,000 net tonne kilometres per day. To deal with such heavy traffic and also to cater to the high speed running of Rajdhani Express, tracks on this route have been improved by laying 52 kg rails, increasing the sleeper density and ballast cushion and better signalling system at a

cost of Rs. 2.19 crores (upto 31st March 1973). Except the special signalling works completed at a cost of Rs. 4 lakhs, it is not possible to identify other elements of expenditure incurred solely for running of the Rajdhani Express. Look-out men are posted at level crossings of restricted visibility on the days this train runs. The expenditure on these men during 1971-72 and 1972-73 in Eastern Railway was Rs. 98,630. The corresponding expenditure in Northern Railway is not available separately.

It is estimated that on the days this train runs, there is a loss of nearly three paths of goods trains on an average and also increase in detention of goods trains (including the super express goods trains) and other passenger trains on the route, with consequent loss of earnings not susceptible of precise quantification.

During 1971-72 the average occupancy and punctuality of this train was over 90 per cent. A study by the Research, Designs and Standards Organisation of the Railways has shown that during 1971-72 the total cost of running this train was Rs. 84.07 lakhs while the gross earnings (including cost of meals) were Rs. 76.08 lakhs; and that taking into account only direct costs the profit was Rs. 15.21 lakhs during 1971-72 or about Rs. 7 thousand per trip. The conclusions of this study, which was submitted to the Railway Board in June 1974, have not been accepted by the Railway Board because, amongst others, in the study the already available unit costs (indirect) for goods operations have been adopted in the absence of corresponding data for passenger services which are not worked out.

Apart from Rajdhani Express and Kalka-Delhi-Howrah Mail, another air-conditioned (Deluxe) train, with ordinary first class and second class coaches as well, runs thrice a week between New Delhi and Howrah on the same route (except

between Allahabad and Mughalsarai). It takes almost the same time as Kalka-Delhi-Howrah Mail. During 1971-72 the occupancy ratio was about 90 per cent and above in all these three trains. Taking into account only the direct costs of running the trains, the net earnings per trip (in 1971-72) were computed as Rs. 27,373 for Kalka-Delhi-Howrah Mail. It has been stated (March 1975) that no study of economics of the air-conditioned (Deluxe) train has been undertaken so far.

A similar biweekly Rajdhani Express train has been introduced between New Delhi and Bombay Central from 17th May 1972.

CHAPTER V

PURCHASES, STORES AND WORKS

11. Disposal of scrap rails

Under a scheme finalised by the Ministry of Steel and Mines in March 1972 for disposal of 2.05 lakh tonnes of scrap rails expected to be available with the Railways by the end of July 1972, it was envisaged that :—

- (1) Fifty-five thousand tonnes, out of the above lot, were to be reserved for sale to public sector undertakings and Government Departments. The balance of about 1.50 lakh tonnes was to be sold and transported to the stockyards of the three main steel producers, Hindustan Steel, Tata Iron and Steel and Indian Iron and Steel, for further sale to scrap rerollers.
- (2) The rate payable by the scrap rerollers would be equal to the rate fixed for mild steel bars and rounds produced out of off-grade billets, less a conversion margin.
- (3) Out of the above selling rate, a further reduction was to be made, as stockyard margin, to determine the rate payable (which was f.o.r. stockyards) by the steel producers to the Railways.
- (4) The rerollers were required to place at the disposal of the stockyards (without physical transfer there-to) finished products to the extent of 80 per cent

of the quantity of rails supplied to them. The re-rolled products were to be allotted by the Joint Plant Committee just like other steel products. According to priorities given by that Committee, Defence consumption gets the highest priority followed by requirements of other Government Departments, public sector undertakings etc. These products were to be sold at the controlled rates.

- (5) The scrap rerollers were free to sell these products to others, if the priority consumer allottees did not lift the products.

The scheme was intended to be operated through, principally, the stockyards of Hindustan Steel so as to ensure that the benefit derived out of these controlled concessional transactions accrued to Government to the maximum. The scrap rails were allocated by the Ministry of Railways to all the three steel producers, based on the distribution advised by the Ministry of Steel and Mines. Out of 1.23 lakh tonnes despatched by the Railways, 54 thousand tonnes or 44 per cent moved to the stockyards of the other two main steel producers, in some cases at stations where Hindustan Steel had its own stockyards.

The fluctuations in prices of scrap were shared between the Railways and the stockyards equally. The stockyard margin deducted by the main steel producers from the sale proceeds realised from the rerollers ranged between Rs. 137.50 and Rs. 315.50 per tonne. This rate was fixed adhoc to compensate the main steel producers for services rendered in implementing the scheme; the amount was approximately Rs. 2.05 crores. It may be observed that at one stage (July 1972) Hindustan Steel had assessed this cost at Rs. 40 per tonne; its average handling expense was Rs. 25 per tonne during 1972-73.

It had been contemplated by the Ministry of Steel, while introducing the scheme, that it would help utilisation of scrap

rails to feed the rerolling industry and make available the rolled products for developmental purposes at reasonable prices.

Prior to March 1973, the Railways had little use for products made out of scrap rails. The Research, Designs and Standards Organisation of the Railways had recommended to the Railway Administrations in March 1973 and November 1973 use of such products (from scrap of rails manufactured after 1934) in construction works as reinforcement in concrete structures, except where they are dynamically loaded, such as bridge girders/slabs, pipes, box culverts and gantry girders. With this restriction, the Central, Southern, South Eastern and Western Railways could use only 4,133 tonnes of rerolled products out of such scrap rails during 1972-73 and 1973-74. Offtake by other priority consumers was low because of the high carbon content of these products.

Pricing policy had a shift in October 1973, when price control of steel was lifted. Demand from the priority consumers for products rolled out of scrap rails had dwindled. The scheme was abandoned in January 1974. During the life time of 21 months of the scheme, 1.23 lakh tonnes of scrap rails, sufficient for production of 98,400 tonnes of bars and rounds, were sold by the Railways to the main steel producers at prices ranging from Rs. 787 to Rs. 1,002.50 per tonne only. It may be mentioned that in auctions conducted by the Railways during January to March 1974 for direct public disposal of 79,000 tonnes of scrap rails after abandonment of the scheme, the rates fetched ranged between Rs. 1,610 and Rs. 2,420 per tonne. The stockyard margin recovered by the main producers reduced what the Railways got for their scrap rails.

The scheme did not succeed in its objective of making available products rolled out of the scrap rails at controlled rates to priority consumers. It seems to have benefited the scrap rerollers and, in the process, provided a low return to the Railways

with stockyard margin benefits to the main producers of steel of the order of Rs. 2.05 crores out of which Hindustan Steel received about Rs. 1.18 crores.

12. Purchase of wear-resistant rails

The Kirandul-Kottavalasa broad gauge line (445 kms), constructed at an approximate cost of Rs. 54.58 crores, has been in use since May 1967, mainly for transport of iron ore from Bailadilla iron ore mines to Visakhapatnam port for export. It has steep gradients including five stretches of ghat sections and a large number of sharp curves. The track was originally laid with 90 lb. (45 kg) rails. BOX/BOI wagons with axle load of 20.32 tonnes and pay load of 54/58 tonnes run in closed circuit on this section. Electrification of the section, started in March 1971 at an estimated cost of Rs. 33.59 crores, is in progress.

Within three years, in May 1970, the rails laid in the section, especially in the ghat sections, were found to have been worn out to the maximum limit, after carrying about 30 gross million tonnes of traffic. The renewal of track in the ghat sections with 52 kg (per metre) wear-resistant rails (ordered on Hindustan Steel Limited in January 1970) was sanctioned in November 1971 at an estimated cost of Rs. 1.36 crores. There was delay in supply of the rails by Hindustan Steel. The rails required for this work (4,127 tonnes) were received between April 1972 and December 1973. The work of relaying, originally scheduled to be completed by December 1973, is still going on (December 1974).

The Ministry of Railways had planned and developed by January 1970 a new wagon (BOY) with increased payload of 72 tonnes and higher axle load of 22.9 tonnes for use on this section. Between February 1971 and April 1972 orders for

such wagons for Rs. 11.54 crores were placed. Since rail wear would be even more on account of these wagons having heavier axle loads, the Ministry of Railways decided between May and November 1972 to strengthen the track further with wear-resistant rails and increased sleeper density and ballast cushion at a total estimated cost of Rs. 10.30 crores, out of which works have been sanctioned for Rs. 6.38 crores so far (December 1974).

Due to limited indigenous supply, the Ministry of Railways invited global tenders in January 1973 for supply of 9,000 tonnes of 60 kg wear-resistant rails with matching fish plates, bolts and nuts. (The standard for rails in use on heavy density trunk routes, main lines and mineral lines in European Railways was stated to be 60 kg as against 52 kg rails supplied by Hindustan Steel.) The tender stipulated delivery period of only three months from March 1973. Response was poor, there being no offer either from the firm which had earlier showed interest or from any of the Japanese firms which had in the past executed large orders for supply of steel to the Railways. Only one tender from a West German firm was technically acceptable and orders were placed on it in May 1973 at a price of Rs. 2,128 per tonne ex-Europe and landed cost of Rs. 3,544 per tonne for 60 kg rails, as against Rs. 1,580 paid to Hindustan Steel for 52 kg rails. For the fish plates, the contract was awarded to a French firm in the same month which had submitted the only technically acceptable bid. There was no offer for bolts and nuts which, therefore, were decided to be procured indigenously.

The supply of imported wear-resistant rails and matching fish plates was completed by April 1974 at a total cost of Rs. 4.33 crores (including Rs. 3.05 crores in foreign exchange). They have not yet been utilised (December 1974) as the earlier phases of works in the section like improvements in sleeper density and ballast cushion have not yet been completed.

Ordering of 60 kg wear-resistant rails with a short delivery schedule may have resulted in lack of competition among the suppliers and the Railways may not have received the most competitive tender.

13. Procurement of BOY wagons

BOX and BOI wagons (with axle load 20.32 tonnes and carrying capacity 54 to 58 tonnes) are mostly used for carrying iron ore from Bailadilla mines of National Mineral Development Corporation (on Kirandul-Kottavalasa section) to Visakhapatnam port for export. To increase ore movement, anticipated to rise to about 6 million tonnes by 1972-73, without running more wagons, the Ministry of Railways designed in 1966 a wagon of higher capacity called BOY wagon with axle load 22.9 tonnes and carrying capacity 72 tonnes. For standardising the bogies for such wagons, prototypes of 40 cast steel bogies of each of three imported designs (Amsted, Sumitomo and National) were procured at a cost of Rs. 22.25 lakhs for trials to determine their suitability. The Research, Designs and Standards Organisation of the Railways also developed a design of a bogie (Casnub) for BOY wagon. Trials with these four types of bogies showed in 1969 that while the Sumitomo design had a speed potential of only 85 kms per hour, the three others were suitable for speed of 100 kms per hour, but the oscillation behaviour of the bogies designed by the Railways was distinctly superior to that of the other designs. It was decided in January 1970 to have trials on a larger scale on these three designs and, subsequently, one of the imported designs (National) was eliminated.

The first order for 100 Amsted bogies, which was patented in the United States of America, was placed in February 1971 on firm A which held a licence for manufacturing them. That firm recommended that for these bogies indigenous bearings,

developed for the Casnub bogie designed by the Railways, would be unsuitable as, if indigenous bearings were to be used, the bogies would have to be modified and that would lower the efficiency of the bogies. This was accepted and the firm permitted to supply bogies with imported bearings. The cost of imported bearings was Rs. 812.50 each (with foreign exchange content of Rs. 547.50) with life rating of 0.8 million kms, as against the price of Rs. 850 with higher life rating of 1.37 million kms for the indigenous bearing. Before any Amsted bogie was delivered, further orders for 2,200 Amsted bogies (later raised to 3,000) were placed in March 1972 but they were to have indigenous bearings. These included a second order for 1,000 (later raised to 1,400) bogies on firm A. The total value of the order for 3,100 bogies was Rs. 5.28 crores, including royalty of Rs. 11 lakhs payable in foreign exchange to the United States patent holder. An order for 100 Casnub bogies of the design developed by the Railways, which is stated to have distinctly superior oscillation behaviour, was placed on firm B in January 1973. This order was placed ten months after the bulk order of March 1972. The Casnub bogies are in a way, superior to the Amsted bogies and yet each is cheaper by Rs. 200 than an Amsted bogie. It may be stated that the National Mineral Development Corporation exported only 3.9 million tonnes of ore in 1972-73 and 4.1 million tonnes in 1973-74 from the Bailadilla mines.

Besides these bogies, orders for the wagon bodies, roller bearings, axle boxes, and wheel sets, required for the BOY wagons, were placed for a total value of Rs. 6.26 crores between October 1971 and April 1972.

Till August 1974, 924 bogies of the Amsted design were supplied. Some of these bogies have been already used for delivery of 216 completed BOY wagons till November 1974. When the wagons were put on line, heavy flange wear of rails

was noticed. Trials conducted in November 1974 disclosed that on extreme curves there was tightness which could lead to such wear of rails. Certain adjustments in the bogies to rectify this are stated to be under consideration.

No Casnub bogie designed by the Railways has been supplied by firm B till December 1974. The initial stipulated time for completion of supply was June 1973 (which has since been extended up to June 1975).

As early as May 1970, that is, before placement of bulk orders for BOY wagons, it was known that there was heavy rail wear even with BOX and BOI wagons, which had lower axle loads, mainly due to steep gradients and large number of sharp curves in Kirandul-Kottavalasa section where the BOY wagons were planned to be used. As mentioned in paragraph 12, the orders placed for BOY wagons between February 1971 and April 1972 were followed by sanctions (up to December 1974) to works for Rs. 6.38 crores for strengthening the Kirandul-Kottavalasa section so that BOY wagons could run.

14. Procurement of handling equipments for concrete sleepers

Orders were placed for two sets of "on track equipments" (equipments which move on rail track and block rail movement on the line occupied by them) in March 1969 on an Austrian firm for handling and laying of heavy concrete sleepers, at the rate of Rs. 13.59 lakhs per set including spares. A second order was placed on the same firm in June 1970 for four sets at the price of Rs. 16.31 lakhs per set. These sets were delivered and commissioned as detailed below:—

- (a) First two sets—December 1970 and February 1971.
- (b) Next four sets—June 1972, August 1972, November 1972 and January 1973.

Rated capacity of these six sets of handling equipments is about 3 lakh sleepers per year. Production of concrete sleepers ran into difficulty during 1969 to 1972 and they were not available in sufficient numbers. As a result, only three sets have been put to regular use so far (January 1975). Guarantee periods for all the sets have expired.

Indigenous content of the first two sets was about 55 per cent and of the next four sets about 60 per cent. Items to be imported with the equipment, as listed in the contracts, included, amongst others, hydraulic high pressure flexible hoses, electrical generators, accumulators (batteries), rail wheels (450 mm diameter), working lamps and warning hooters. Spares imported (worth Rs. 7.06 lakhs) with those sets also included, amongst others, working lamps, warning hooters and accumulators. The Ministry of Railways stated (December 1974) that all these items had been tailored to the specific requirement of the machines.

Even in February 1970, while scrutinising the detailed designs of the equipment before placing the second order, it was noticed that a diesel engine with considerably reduced horse power would be adequate instead of an imported engine with 75 horse power, which was provided in the contract for the first two sets. The firm supplied the sets with engines of lower horse power. In addition during trials in April 1970, it was seen that performance of chain lifting arrangement provided in the first set was not fully satisfactory and safe under different conditions of working. The firm agreed in May 1970 to carry out necessary modifications in the sets. Reduction of price remained unnegotiated till June 1974. It has been stated by the Railway Board (in December 1974) that the firm has agreed to refund the difference in the cost of engines of the first two sets.

Delivery in all cases had been delayed. The first two sets were delivered and commissioned in December 1970 and

February 1971, when they were both due in January 1970. The latter four sets were delivered and commissioned between June 1972 and January 1973 against the contracted delivery dates of August 1971 for two sets and January 1972 for the rest. Levying of penalty was not contemplated in the contracts and the question of recovery of liquidated damages for delayed delivery is under consideration (January 1975).

15. South Eastern Railway—Procurement of spares for diesel locomotives

Prior to 1971, most of the spares required for the compressor exhaustors of diesel locomotives were imported. After ascertaining indigenous availability of these spares from a firm in Poona, which was the Indian collaborator of the foreign manufacturer, an order for 90 items of such spares was placed on it by Diesel Locomotive Works in March 1972.

Subsequently, Diesel Locomotive Works came to know in September 1972 that another firm in Calcutta was also supplying some of these spares to the zonal Railways who were satisfied with the performance of the spare parts developed by it. After negotiating with both the firms, a rate contract valid for one year from 1st December 1972 for supply of 93 items of spares was placed in December 1972 on the Poona firm. A similar rate contract also valid for one year from 23rd December 1972 was placed in the same month on the Calcutta firm for 51 items. Of these, 37 items were common to both the rate contracts, but the rates of the Calcutta firm for 34 items were cheaper by 2 to 62 per cent. It was left to the zonal Railways to operate the contracts and procure the spares from either of these two firms.

The South Eastern Railway Administration, however, held in January 1973 that it had no experience with the Calcutta firm and consequently decided as a matter of policy that only

educational orders for small quantities should be placed on the firm in Calcutta where the administration could afford to wait with comfortable stocks in hand. Two orders for the bulk of the spares required at that time were placed by that Railway Administration in January 1973 on the Poona firm. The rates of this firm for 22 items in these orders were higher than those of the Calcutta firm. The total value of the order for the 22 items was Rs. 13.58 lakhs and procurement from the Poona firm entailed extra expenditure of Rs. 3.47 lakhs.

Eastern, Northern and Western Railways did not make such preferential purchase from the Poona firm.

16. North Eastern Railway—Payments against proof of despatch of stores

The Director General, Supplies and Disposals, placed an order in April 1971 on a Calcutta firm for supply of 24,700 channel iron cross arms (4-way) to the Telecommunication Inspector (Construction), North Eastern Railway, Varanasi, at the rate of Rs. 10.25 each (less trade discount of 5 per cent). The stipulated date for completion of supply was 15th October 1971, which was extended to 31st January 1972. The first lot of 8,000 channel cross arms was reported to have been inspected by the Director of Inspection on 16th December 1971 and despatched on 29th December 1971. Neither the railway receipt nor the consignment was received by the consignee. In March 1972 a debit was received from the Pay and Accounts Officer, Calcutta, for Rs. 76,225, representing part payment made to the firm on proof of inspection and despatch of the cross arms. On investigation, it came to light that the firm had despatched different materials to a different consignee on the railway receipt which it had quoted for obtaining the advance payment and that cross arms had actually not been booked and despatched to the North Eastern Railway on that railway receipt.

As the cross arms were urgently required for certain construction works, the Railway Administration decided in April 1972 to have them manufactured in its own workshop. Before the Railway Administration requested the Director General, Supplies and Disposals, to cancel the order for the remaining 16,700 cross arms, the latter did so himself in April 1972 at the risk and cost of the firm because of its failure to supply cross arms within the extended delivery date.

Though the firm advised the Railway in August 1972 that it was making arrangements to effect immediate 'replacement' of cross arms, they are yet (January 1975) to be received. In the meantime, 14,120 cross arms have been manufactured in the Railway workshop. No recovery of the part payment of Rs. 76,225 made to the firm in January 1972 has been effected so far (January 1975).

It may be added that for claiming advance payments from Pay and Accounts Officers against purchases through the Director General, Supplies and Disposals, the bills of the firm are required to be supported by a certificate containing the number and date of the railway receipt on which the stores were despatched to the consignee and a declaration by the inspecting agency that the stores inspected and passed have been despatched under that railway receipt. On the other hand, for purchases arranged by the Railways, the suppliers are required to furnish the original railway receipts with their bills for claiming payments from the Railway Accounts Officers.

The Director General, Supplies and Disposals, had also placed an order in December 1970 on this firm for supply of 66,200 galvanized stalk telegraph (insulator) to the District Controller of Stores, North Eastern Railway, Gorakhpur, at a total cost of Rs. 82,750. Forty-three thousand and seven hundred telegraph stalks were inspected by the Director of

Inspection on 2nd December 1971. Out of these, 18,700 stalks were stated to have been despatched under a railway receipt dated 25th December 1971 but were actually despatched in March and April 1972 against four other railway receipts. Eight thousand and seven hundred stalks (worth Rs. 10,875) were rejected by the consignee because of various defects. These are yet to be replaced by the firm. Twenty-five thousand stalks (worth Rs. 31,250) inspected in December 1971 are still (January 1975) to be received by the consignee.

17. Supply of underframe for narrow gauge coaches

In June 1964 the Ministry of Railways placed an order on a firm for 12 underframes for narrow gauge coaches to be delivered by 30th June 1965. Pending delivery of any underframe against this order, an order for 13 more underframes was placed on the firm in August 1965 to be delivered by 31st December 1965. The total value of the two orders was Rs. 4.36 lakhs, excluding wheel sets and centre buffer couplers to be supplied by the Railways.

The firm offered in June 1970 all the underframes for inspection but none was found acceptable. These failed to conform to specifications even after rectification of defects. It was decided in March 1972 to accept the underframes, though defective, with a price rebate of atleast 15 per cent owing to short life expectancy due to reduced web thickness. With this modification, however, no underframe was delivered till November 1974 and extensions of delivery dates were granted from time to time, the last up to 30th September 1974, subject to imposition of liquidated damages for delays in deliveries in terms of the contract and dis-allowance of wages and material escalation claims after June/December 1965. Extensions have been considered, it is stated, to be due to delays in procurement of steel by the firm, supply of materials for which Railway was

responsible under the conditions of the contracts and rectification of defects by the firm. No failures have been attributed to the firm.

Legal advice obtained in October 1969 was against exercising option to cancel the contract at risk and cost of the firm due to difficulty in fixing any definite date of delivery with reference to which breach of contract could be said to have been committed.

Subsequent legal advice obtained in February 1971, after the firm offered all the underframes for inspection, was that, in the absence of any risk purchase clause in the contracts notice for general damages could be issued to the firm on the basis that breach of contract had taken place on 26th August 1970, the date upto which extension was accepted by the firm unconditionally. But this was considered unnecessary as the firm had accepted further extension on the terms laid down by the Ministry of Railways earlier.

Two Railway workshops fabricated, between July 1968 and February 1973, at a cost of Rs. 3.65 lakhs the superstructures for seven coaches for mounting on the underframes to be supplied by the firm. This outlay has remained unproductive till now (January 1975) consequent to non-delivery of the underframes.

It has been stated that orders were placed on the firm after due assessment of its capacity to execute and the underframes, as fabricated, are capable of rectification and it has been considered advantageous to keep alive these old orders for supply of underframes at half the present market price. In the meantime, between February 1966 and February 1970, on account payment of Rs. 1.49 lakhs has been made to the firm, besides the matching financial outlay on fabricated superstructures of

Rs. 3.65 lakhs in the Railway workshops, with no pressing need.

18. South Eastern Railway—Purchase of integral cement water proofing compound

Integral cement water-proofing compound is added to cement to render the mortar or concrete water-proof. The Indian standard for this was laid down by the Indian Standards Institution in 1964.

On the insistence of the Engineering Department of South Eastern Railway, twenty-one purchase orders for 29 tonnes of a proprietary brand of this compound, valued at Rs. 1.04 lakhs, were placed by the Stores Department between May 1972 and September 1973. This brand had been available in the market since its testing by the National Test House, Calcutta, in September 1970. Its producer, however, did not hold a licence from the Indian Standards Institution. It has been stated that this brand had a very small chloride content (.02 per cent) and conformed to the ISI specifications. The rate for 10.5 tonnes ordered between July 1972 and November 1972 was Rs. 3.25 per kg and for the rest Rs. 3.75 per kg. Out of twenty-one purchase orders, eleven for 13.1 tonnes were issued in May and June 1972.

In response to limited tenders invited in April 1973 by the Railway Electrification Branch of South Eastern Railway for supply of water-proofing compound, the same producer offered the rate of Rs. 2 per kg, subject to the condition that minimum of 15 tonnes were ordered. The offer of another producer holding ISI licence for a different brand having the same small chloride content (.02 per cent) was accepted at Rs. 2.20 per kg, subject to trade discount of 10 per cent on payment being made within 30 days of submission of bills. There was delay in supply by this producer who supplied the compound by September 1974.

Had the orders, referred to in the second sub-paragraph, been consolidated, it might have been possible to obtain rates lower than those at which these purchases were made.

19. Northern Railway—Sleeper density in a double line section

Since 1961, the Railway Board has been adopting, in sections carrying annual traffic of less than 10 gross million tonnes, a minimum sleeper density of $M+4$ (M is the length of rail in metres), *i.e.*, sleepers per rail length, numbering four more than M . A higher density of $M+7$ is laid in high speed sections carrying more traffic.

Shakurbasti-Rohtak section (60 kms) was a single line section with annual traffic of less than 10 gross million tonnes till 1968-69 and laid with sleeper density of $M+4$. In May 1970 the Railway Board sanctioned doubling of this section, at an estimated cost of Rs. 2.95 crores, with the same sleeper density on the second line, not expected to carry more than 8 gross million tonnes a year. While the work was in progress, Northern Railway Administration proposed to the Railway Board, in June 1973, that, in view of the prospective increase in traffic in this section, the sleeper density be raised to $M+7$. The Board, however, decided (in July 1973) that the sleeper density need not be increased. The second line was accordingly laid and commissioned in stages between June 1972 and June 1974.

For complete track renewal in parts of the old line between Shakurbasti and Rohtak, Northern Railway Administration submitted in June 1971 an estimate of Rs. 26.43 lakhs (net) without increasing the sleeper density. However, the Board approved, in October 1971, increase of the density to $M+7$. The Board had directed in July 1973, while considering the proposal for increasing the sleeper density of the second line, that the track renewal in this section should be completed without an increase in the sleeper density though on reconsideration,

in August 1973, the Board decided that, in future, track renewals be made with sleeper density suitable for the traffic carried on the line.

The track renewal work was completed in September 1974 at a cost of Rs. 23.42 lakhs. Ballast cushion provided was 8 inches against the standard of 10 inches, prescribed in 1961 by the Railway Board, with sleeper density of M+7 on trunk routes and high speed main lines. Extra cost of providing three additional sleepers per rail length is assessed at Rs. 4.05 lakhs.

Two more track renewal works in the section, with similarly increased sleeper density, have been sanctioned in 1972-73 and 1973-74. The extra cost of providing three additional sleepers per rail length is estimated to be Rs. 3.04 lakhs. These works have not yet (February 1975) been taken up.

The Railway Administration stated (December 1974) that M+4 was only the minimum sleeper density prescribed and not the maximum; it is to be fixed duly taking into consideration the maximum permissible speeds and the traffic density, ordinarily, with no necessity for relaying within the next 20 years; provision of additional sleepers was accordingly justified, considered technically correct and approved by the Railway Board.

Double line section between Shakurbasti and Rohtak had traffic of 10.03 and 8.32 gross million tonnes in 1972-73 and 1973-74 respectively, and in the whole section may not exceed 10 million gross tonnes per annum on each line for some time to come. The extra outlay on providing three additional sleepers per rail length in some parts of the old line, without corresponding increase in the ballast cushion, would not have contributed to securing the whole of the possible improvement in the track.

CHAPTER VI

EARNINGS

20. Northern Railway—Special rate for rubber crude

Northern Railway investigated in January 1967 the traffic potential of rubber crude, a high rated traffic to railways. It was found that, owing to cheaper rate offered by roadways, the traffic moved mostly by road from Bhitaura in Uttar Pradesh to Wadi Bandar in Bombay. To attract this traffic, the Railway Administration, with the approval of the Railway Board, introduced a special station to station rate of Rs. 10.30 per quintal effective for one year from 15th April 1968. The result was encouraging as, between April and December 1968, 7,350 quintals of rubber crude moved against 1,800 quintals during the corresponding period of the previous year, yielding freight earning of Rs. 90,021 as against Rs. 20,734. The special rate was extended for a year and a half from 15th April 1969.

The railway freight structure was modified from April 1970. The special rate was raised to Rs. 12.53 per quintal from 20th July 1970 and remained in force upto 19th January 1972. The traffic to Wadi Bandar from Bhitaura and the corresponding freight earnings realised during the three years 1969-70, 1970-71 and 1971-72 were as below:—

Year	Number of wagons (4-wheelers)	Net weight (quintals)	Freight earnings (units of rupees)
1969-70	171	25,650	2,97,598
1970-71	253	37,950	5,10,003
1971-72	301	48,579	6,25,008

In December 1971 the Divisional Superintendent, Moradabad, recommended continuance of the special rate for a further period

of two years and reiterated his recommendations in January 1972. It was stated that the traffic had increased from 48,100 quintals in 1970 to 52,730 quintals in 1971 and a further 25 per cent increase was anticipated. It was also mentioned that the rates of road hauliers had not changed. The recommendation remained under consideration till 10th January 1973 when the same special rate of Rs. 12.53 per quintal was reinstated for one year from 16th January 1973. During the next two years the traffic was as shown below:—

Year	No. of wagons (4-wheelers)	Net weight (quintals)	Freight earnings (units of Rupees)
1972-73	34	4,991	86,287
1973-74	5	911	16,969

The special rate was not extended beyond 15th January 1974, as it was stated that only three wagons were loaded during 1973 after revival of the special rate.

It is stated that 33,651 quintals of rubber crude moved by road from Bhitaura to Bombay between January and September 1974, as against only 1,270 quintals by rail. The belated decision on re-introduction of the special rate, it seems, was accountable for the loss of traffic.

21. Southern Railway—Detention to wagons loaded with salt

Large scale inter-State movement of salt for human consumption is programmed by the Salt Commissioner in consultation with the State Governments and is given higher priority. Other movements of salt on trade account have lower priority.

Salt for human consumption bound for the North Eastern zone comprising the states of West Bengal, Assam, Tripura etc., is first transported by ships from South India to Calcutta from

where it moves by rail to its destinations. To minimise movement of salt on other account by the all-rail route from southern to north-eastern region of the country and to encourage its movement by the sea route, the Railway Board allotted a restricted quota of 2 wagons per week to Southern Railway for this traffic from November 1972; the quota was raised to seven wagons per week from the middle of May 1973. Transport by sea to Calcutta and then by rail to destinations in North Eastern India takes about 25 days on an average and the freight charges are about Rs. 17 per quintal. Movement by the all-rail route generally takes about 18 days and freight charges are Rs. 12 per quintal (in wagon loads).

To save time and transport costs, notwithstanding restricted rail movement, salt traders seek diversion or rebooking of salt wagons, consigned originally to stations in Southern Railway, to Northeast Frontier Railway. Between November 1972 and February 1973, such diversions were allowed in 21 cases by Southern Railway. Permission for diversion to a destination in Northeast Frontier Railway was refused in March—April 1973 for two consignments of nine and twelve wagons initially booked in March 1973 to two stations on Southern Railway. Before unloading and clearance of salt from Railway premises at these two stations, demurrage charges of Rs. 1,42,692 and wharfage charges of about Rs. 17.8 lakhs accrued during the period March 1973 to end of July 1974. Freight charges amounting to Rs. 20,650 were also due for recovery. The consignments are yet (January 1975) to be delivered; the value thereof is only about Rs. 36,600.

Pending final disposal, the unloaded consignments at the two stations, consisting of 7,250 bags of salt (weighing 5,227 quintals), had been occupying considerable space in the goods shed premises for the past twenty-one months. Considerable deterioration in the consignments had been reported from one station.

Under the Goods Tariff, goods chargeable on the basis of wagon load rates are to be unloaded by the consignees and if they fail to do so within the free time allowed for the purpose (which is generally 5 working hours) and the Railway considers that earlier release of wagons is necessary, the Railway may itself undertake unloading at the cost of the consignors or consignees. Further, the Railway Administration is responsible as a bailee for the loss, destruction, damage, deterioration or non-delivery of goods within a period of seven days only after the termination of transit. Transit terminates on expiry of free time allowed for unloading from railway wagons without payment of demurrage and where unloading has been completed within free time so allowed, transit terminates on the expiry of free time allowed for removal from railway premises without payment of wharfage. If the goods remain undelivered even after expiry of seven days beyond the termination of transit, the Railway Administration can dispose of them after giving 15 days notice of public auction and use the proceeds in satisfaction of Railways' dues.

The Railway Administration stated that it was restrained from auctioning the goods by an injunction order of a High Court issued in August—September 1973 as a result of writ petitions filed by the parties praying for diversion of these goods. It was stated (January 1975) that these writ petitions had been dismissed by the High Court and registered notices were sent to the parties in December 1974 to take delivery of the consignments after paying all the dues of the Railway. The parties are yet (January 1975) to take delivery of the consignments.

It was stated by the Railway Board (January 1975) that amendments to Indian Railways Act to deal expeditiously with such instances are also under consideration.

22. Northern Railway—Demurrage on tank wagons in rakes

In July 1973 Railway Board laid down the following scales of 'free time' for unloading groups of POL tank wagons in rakes, booked to a single consignee and placed at a time for unloading:—

Broad gauge wagons (in terms of 4-wheelers)

- | | |
|------------------------------------|------------------|
| (i) Less than 30 tank wagons | 5 working hours |
| (ii) Between 30 and 45 tank wagons | 8 working hours |
| (iii) Over 45 tank wagons | 10 working hours |

Metre gauge wagons

- | | |
|---|-----------------|
| (i) Less than 20 bogie tank wagons
(40 wagons in terms of
4-wheelers) | 5 working hours |
| (ii) 20 or more bogie tank wagons | 8 working hours |

According to the Railway Board's letter, the entire group of tank wagons placed for unloading should be treated as one unit for the purpose of levy of demurrage charges, when more than 5 hours free time is allowed. Even if one tank wagon out of a group of 30 or more broad gauge wagons or a group of 20 or more metre gauge bogie tank wagons is not unloaded within the prescribed free time, demurrage is to be levied on all tank wagons in the group. On 17th August 1973 the Northern Railway issued necessary notification and made it effective from 1st August 1973. A test check of records at three stations (Patiala, Jullundur City and Shakurbasti), conducted between October 1973 and March 1974, disclosed that demurrage charges were not being collected correctly. The undercharge for the period August 1973 to January 1974 was Rs. 2,99,707.

23. Western and Northern Railways—Wharfage on two wheeled carriages

Prior to January 1970 wharfage charge of Rs. 2 per day or part of a day was levied on two wheeled or four wheeled carriages, dog-carts, tongas and motor cars etc., left on station premises after expiry of 24 hours. The Railway Board issued a notification in January 1970 that wharfage on such traffic should be charged at a rate not exceeding Rs. 10 and not below Rs. 2 per day or part of a day. The Northern Railway Administration reported to the Railway Board in May 1970 that no mention of scooters had been made in that notification; traffic in boat, motor boat, dog-cart and tonga rarely moved on that Railway while the basic traffic moving consisted of scooters. It had, therefore, prescribed wharfage rate of Rs. 10 for scooters as well subject to confirmation of the Board. The Railway Board confirmed the action of Northern Railway in June 1970 and advised other Railways to take similar action.

The Western Railway Administration notified in February 1970 levy of wharfage charge at the rate of Rs. 10 per two wheeled or four wheeled carriage, motor car, boat, motor boat, dog-cart and tonga. In June 1970 this notification was extended to cover scooters.

A test check of the records of nine stations of Western Railway disclosed that wharfage charges on scooters were not realised at the revised rate of Rs. 10 resulting in undercharges of Rs. 20,464 (from August 1970 to September 1973). Wharfage charges at this rate were not also levied on motor cycles and auto-cycles resulting in undercharges of Rs. 95,425 (from February 1970 to September 1973).

Investigation conducted on the Northern Railway disclosed that wharfage on scooters etc., had been realised by certain stations on weight basis instead of at the rate of Rs. 10 as notified by that Railway in April 1970 (reduced to Rs. 5 from

October 1971) resulting in undercharges of Rs. 12,336 (from July 1970 to January 1971), which had been written off.

24. Southern and Western Railways—Undercharges of freight

Southern Railway

Freight rate for zinc ingots/slabs was increased as a result of its upgradation in goods tariff classification from class 85 to class 95 for 'smalls' and from class 70 to class 75 for 'wagon loads' from 15th February 1972. Always, a station on the Southern Railway, did not charge the enhanced rates until noticed by audit in October 1973. Non-receipt of the relevant amendment to the Goods Tariff was stated to be the reason for undercharging. Total undercharges from February 1972 to October 1973 on this account were assessed at Rs. 94,248, out of which Rs. 55,240 are still (January 1975) to be recovered.

Similar instances of undercharges of Rs. 77,032 on account of non-implementation of the revised classifications or the revised minimum weight conditions applicable to wagon loads for other commodities were also observed in audit. Out of these Rs. 56,988 are still (January 1975) to be recovered.

The Railway Administration stated (January 1975) that suitable action had been taken for failure in internal check and action had been initiated to fix responsibility of station staff.

Western Railway

(i) The freight rate on asbestos corrugated sheets and pipes in wagon loads was increased after revision of the goods tariff classification from class 60 to 65 with effect from 7th November 1970. Consignments booked at a siding, served by Sabarmati station of Western Railway, between 7th November 1970 to 15th March 1971, continued to be charged at the lower rates resulting in undercharges of Rs. 64,734, out of which Rs. 56,070 are still (January 1975) to be recovered.

The Western Railway Administration stated (January 1975) that action would be taken against the staff responsible.

(ii) Sulphate of ammonia, if classified as chemical manure, is charged lower rates of freight than those applicable to it when booked for other purposes. The lower rates are payable only if this commodity is intended for manurial purposes and despatched by fertilizer factories specified in the Goods Tariff. From 29th November 1972 the lower rates were also made applicable to despatches of sulphate of ammonia from depots managed or controlled by the Central or State Ware-housing Corporations, provided it was intended for manurial purposes.

A test check of the records of Sabarmati and Dhrangadhra stations of Western Railway for different periods between September 1970 and March 1972 disclosed that consignments of sulphate of ammonia, booked by Ware-housing Corporations prior to 29th November 1972, were charged the lower rates of freight, resulting in undercharges of Rs. 2.89 lakhs.

(iii) Urea booked in wagon loads, to be used as manure, is chargeable at class 45 freight rates (class 47.5 rates from 1st July 1971), if booked by fertilizer factories specified in the Goods Tariff. It is charged at class 100 rates, which are higher, if booked by other consignors.

Urea in wagon loads, booked by a State Ware-housing Corporation in August 1970 from Dhrangadhra station, was charged at class 40 rates. This mistake in classification was detected in internal check but corrected only as class 45 rates (instead of class 100 rates). The actual short recovery of freight was Rs. 38,917, as the consignments were correctly chargeable at class 100 rates.

These short collections have not been made good so far (January 1975).

CHAPTER VII

OTHER TOPICS OF INTEREST

25. Grant of advance increments to loyal workers

Service rules applicable to Central Government employees contain, amongst others, a rule according to which an authority may grant premature increment to a government servant on a time scale of pay if it has power to create a post in the same cadre on the same scale of pay. By an amendment made in 1968 and by virtue of instructions issued by Government, the scope of the rule has been restricted from 1968. For example, that service rule can no longer be invoked for grant of premature increment to an employee who has done meritorious work.

In the context of staff agitations, work to rule, strikes etc., by a section of employees disrupting railway traffic seriously, the Ministry of Railways, in relaxation of the restrictions imposed from 1968, informed the General Managers of Railways on 15th May 1974 that advance increments might be granted to loyal non-gazetted employees not exceeding 4,500 on all the zonal railways, including the three Production Units, who continued to work in the face of intimidation, violence and threat to their lives. The guidelines issued then provided that one advance increment or two advance increments in very exceptional cases should be given only to those who manned essential services, preference being given to those who manned such services or stations either single-handedly or in association with one or two colleagues only. The increment was not to be granted to those working in administrative offices. By a

subsequent order issued on 11th June 1974, advance increment was made admissible to officers and staff in administrative offices and to those who stuck to their posts and did arduous duties to keep the Railways functioning. The number of employees to be granted advance increments was raised from 4,500 to 4,95,300. On 27th June 1974 the benefit of advance increment was extended to the officers and staff of the Ministry of Railways (Railway Board), Indian Railway Conference Association, Railway Service Commission, Metropolitan Transport Projects of Delhi, Bombay, Madras and Calcutta, the Research, Designs and Standards Organisation, Railway Liaison Officer with the Director General, Supplies and Disposals, etc. Their number was not to exceed 4,455, including 1,500 of the Railway Board. After further orders modifying the number of Railway officers and staff to whom advance increment could be given, the total number was fixed in September 1974 as 5.79 lakhs out of about 8.5 lakh employees stated to have stood at their posts during the Railway strike from 8th to 28th May 1974.

The Ministry of Railways also approved grant of cash awards, mainly to those who had reached the maximum of the scale and would not be entitled to advance increments.

The Southern Railway Administration decided that, apart from loyal workers who attended to their work during the strike period, even those who were on authorised absence for not exceeding three days should be considered for grant of awards as loyal workers. Out of about 68,000 employees who did not take part in the strike on that Railway, 55,662 officers and staff were granted advance increments and cash awards till September 1974, and it appears that ultimately all those who did not take part in the May 1974 strike, excluding those on authorised absence for more than three days, would be given the benefits in one form or another.

The annual recurring liability because of premature increments is estimated to be about Rs. 8 to 9 crores. The revenue surpluses/deficits of the Railways during the five years ending 1973-74 and the estimated deficit in 1974-75 have been as follows:—

	(Surplus +)
	(Deficit —)
	(Crores of rupees)
1969-70	—9.83
1970-71	—19.84
1971-72	+17.84
1972-73	+2.92
1973-74	—115.51
1974-75 (revised estimate)	—128.19

The revenue surpluses of 1971-72 and 1972-73 were because of the reliefs, granted on the recommendations of the Railway Convention Committee 1971, in payment of dividend to General Revenues. The deficit of Rs. 115.51 crores in 1973-74 is despite those reliefs.

It was explained by the Ministry of Railways that in view of the Railway unions' heavy demands, acceptance of which would have annually cost the Railways about Rs. 434 crores more and which would have had serious and far-reaching repercussions on the whole economy, and the importance of the railways in the life of the country, it was essential to keep the railways running and grant of advance increments as reward for loyal workers was considered the effective instrument to induce the railmen to continue to keep the wheels moving, and that this measure had succeeded in achieving the desired objective.

26. Export of passenger cars

The State Trading Corporation in association with Integral Coach Factory, Perambur, submitted, in response to global

tender, technical proposals in December 1969 and price proposals in August 1970 for supply of 113 passenger cars (rail coaches) with spares to a foreign railway authority. The contract was awarded to the Corporation in September 1970. Its *c.i.f.* value was Rs. 3.8 crores.

The Ministry of Railways had given to the State Trading Corporation, in December 1969, quotations of Rs. 3.56 lakhs and Rs. 3.52 lakhs for each car with and without conductor compartment respectively. These excluded 80 to 100 per cent of certain indirect charges (for example, expenditure on general administration, contribution to provident funds, dividend on capital, profit etc.,). Amounts refundable by the Central Government on account of customs and central excise duties on raw materials used in manufacture of these cars were deducted from the direct costs while determining the quotations. The State Trading Corporation reduced further the quotations of the Railways by the cash assistance payable by Central Government for engineering exports and offered to the foreign railway authority final prices (*f.o.b.*) of Rs. 3.09 lakhs and Rs. 3.06 lakhs for each car with and without conductor compartment respectively. This offer was accepted by the foreign railway authority.

The Ministry of Railways had originally assessed that, for execution of the order, imported materials worth Rs. 1.10 crores in foreign exchange would be needed. However, foreign exchange to the tune of about Rs. 1.45 crores or about 40 per cent of the value of the order was spent on this account. Also, due to shortage of time, the normal procedure of inviting tenders for procurement of materials was not followed by the Integral Coach Factory, and the State Trading Corporation was requested to arrange their import. The ordering was done by a team consisting of the Corporation and Railway representatives which went abroad for this purpose. The amount spent initially by the Corporation for such purposes were to be reimbursed by the Railways. There was some delay in

remittance of funds by the Railways to the State Trading Corporation and Rs. 1.80 lakhs have been withheld by that Corporation towards interest from the amount payable by it to the Railways.

The prices quoted were for cars with teak wood flooring and rebate of Rs. 1.81 lakhs for all the coaches was offered if cheaper plywood flooring was accepted. While awarding the contract in September 1970 the buyer specified plywood flooring, but the cars were actually designed with teak wood flooring. Efforts were made in December 1970 to get the contract amended to provide for teak wood flooring in place of plywood flooring, but preference for the cheaper flooring was reiterated by the buyer in view of the cumbersome procedure for increasing the value of the contract. It was not possible for Integral Coach Factory to alter the flooring before delivery. Consequently, cars with teak wood flooring were delivered and the buyer made the payment as for plywood flooring in terms of the contract. The Corporation stated (January 1975) that the question of recovery of Rs. 1.81 lakhs on this account could not be pursued effectively with the buyer in view of the fact that the contract was for plywood flooring.

It was agreed at the time of tendering that a commission of one per cent of the *f.o.b.* value of the contract would be paid to the agent of State Trading Corporation in the foreign country. This amount was to be borne by that Corporation. To enable the agent to meet its local expenses to counteract foreign competition, the rate of commission was later raised by the Corporation to two per cent with the agent bearing \$ 250 per coach on account of freight differential. The amount actually paid to the agent was Rs. 4.85 lakhs. The Corporation has withheld Rs. 3.48 lakhs from the amount payable to the Railways pending agreement on apportionment of the liability for the additional commission charge.

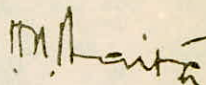
As against the Railways' quotations of Rs. 3.56 and 3.52 lakhs each for cars with and without conductor compartment respectively, the actual total costs came to Rs. 5.57 lakhs and Rs. 5.91 lakhs. Government paid Rs. 49 lakhs to the State Trading Corporation as cash assistance for this export and this amount, in turn, has been passed on by the Corporation to the Railways. Taking this amount into account and even after excluding the elements of costs not covered by the quotation, the export entailed loss of Rs. 42.52 lakhs to the Railways. The Railways' cost included Rs. 1.59 lakhs spent on a mockup coach against an estimate of Rs. 60,000. Expenditure on production of such a coach had not been taken into account by the Railways while framing the quotation.

Net foreign exchange earned on this contract was not substantial. Since this procurement of passenger cars was financed by the buyer from a loan from the International Bank for Reconstruction and Development, only half the sale proceeds were receivable in foreign exchange. The inflow of foreign exchange for this order was Rs. 188.09 lakhs as against outflow of Rs. 149.28 lakhs towards import of materials (excluding those imported earlier and already available for executing this order), and agency commission, the net gain being Rs. 38.81 lakhs for a contract valued Rs. 3.8 crores. It would also be seen that the cash subsidy paid by Government was 130 per cent of the net foreign exchange earning from this export deal.

The Ministry of Railways stated (February 1975) that this was the first major export order secured by Integral Coach Factory, and with the experience gained therefrom the Railways have subsequently secured more foreign orders where profit is expected to be made. The Ministry added that these export orders have made possible fuller utilisation of capacity of Integral Coach Factory than what otherwise would have been the case.

27. Recoveries at the instance of audit

During the year 1973-74, Rs. 20.64 lakhs were recovered or noted for recovery at the instance of audit. As a result of further review made by the Railways of these and similar cases Rs. 2.67 lakhs more were noted for recovery.



(H. K. MAITRA),
Director of Railway Audit.

NEW DELHI ~~5th~~

Dated the ~~5th~~ April, 1975.

~~15th~~ Maitra, 1897.

Countersigned.



(A. BAKSI),
Comptroller and Auditor General of India.

NEW DELHI ~~5th~~

Dated the ~~5th~~ April, 1975.

~~15th~~ Maitra, 1897.

STATE OF CALIFORNIA

125

DEPT OF

NEW DET 27

Comptroller and Auditor General of State

(V. PARRELL)

[Handwritten signature]

COMMISSIONER

127

DEPT OF

NEW DET 27

Director of Education

(H. P. WALLACE)

[Handwritten signature]

By this order there is hereby approved the proposed order of the Board of Education of the State of California, to the effect that the Board of Education of the State of California shall have authority to

Direct the State Board of Education to

to determine the procedure in

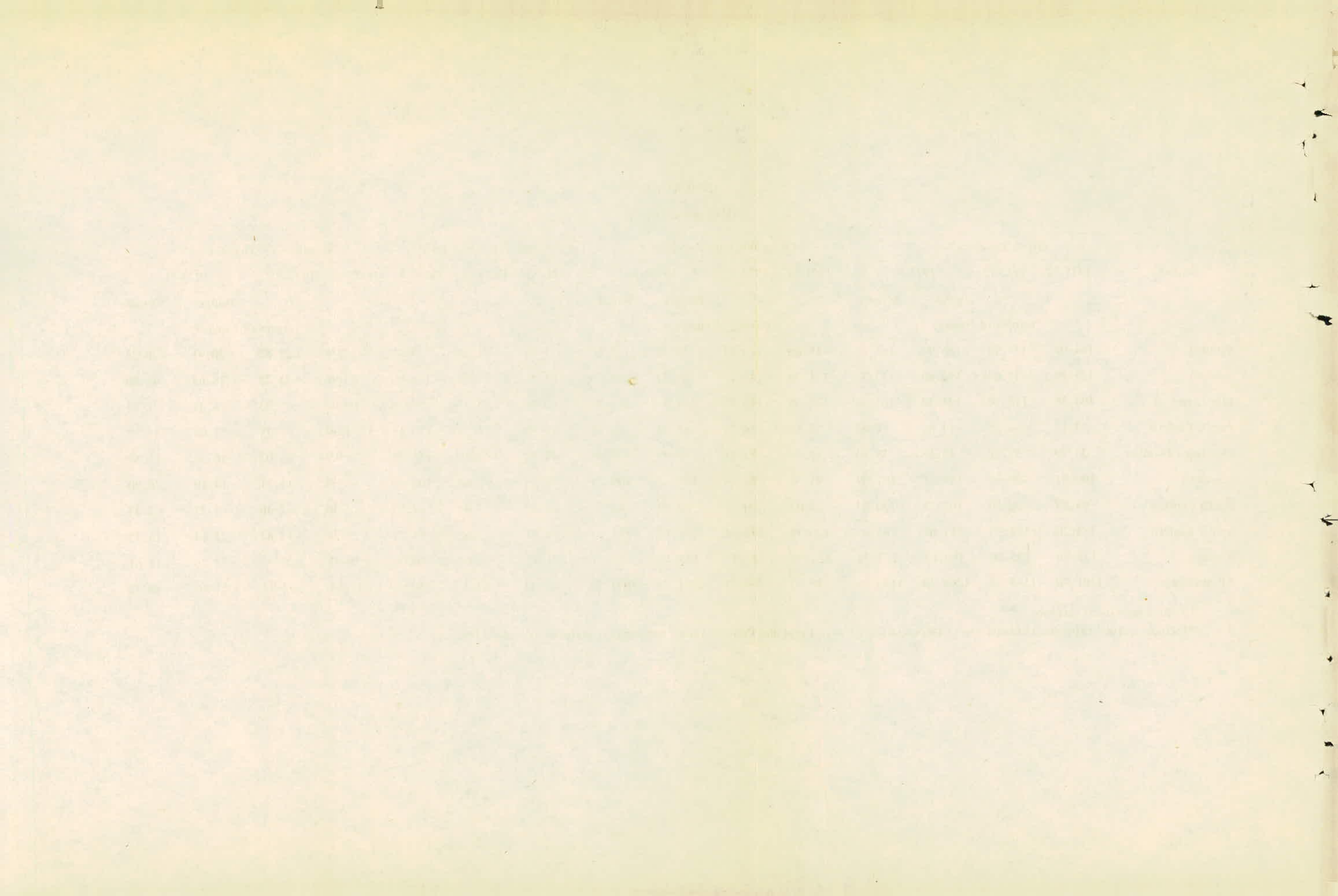
ANNEXURE I

[See paragraph 2]

Railway	Gross Earnings*				Gross Working Expenses**				Operating Ratio (per cent)			Surplus (+)		Deficit (-)	
	1971-72	1972-73	1973-74		1971-72	1972-73	1973-74		1971-72	1972-73	1973-74	1971-72	1972-73	1973-74	
			Budget	Actuals			Budget	Actuals						Budget	Actuals
	(crores of rupees)				(crores of rupees)				(crores of rupees)						
Central	164.08	177.93	185.97	183.83	118.06	126.41	138.79	137.66	71.95	71.04	74.88	+22.78	+27.82	+20.91	+20.23
Eastern	129.19	141.69	152.80	132.36	131.20	141.43	146.74	156.20	101.55	99.81	118.00	-25.98	-25.28	-18.63	-48.80
Northern	163.38	178.36	194.79	165.63	134.39	148.77	159.87	161.95	82.26	83.41	97.78	+6.62	+5.33	+8.39	-21.82
North Eastern	53.17	56.25	59.81	51.62	52.45	54.75	57.09	59.94	98.65	97.35	116.13	-6.30	-5.95	-4.68	-16.58
Northeast Frontier	37.99	39.51	45.49	38.20	54.76	56.83	59.99	57.90	144.14	143.82	151.29	-11.19	-26.02	-10.38	-13.54
Southern	100.81	100.70	111.23	107.09	95.52	98.58	107.62	109.29	94.75	97.89	102.05	-11.48	-15.51	-14.19	-20.90
South Central	94.89	96.16	107.75	100.83	78.04	80.73	89.99	85.52	82.24	83.95	84.82	+5.30	+2.46	+4.22	+2.43
South Eastern	184.20	189.85	211.68	183.65	126.39	139.84	148.18	154.64	68.61	73.65	84.21	+22.78	+12.83	+23.14	-13.35
Western	173.99	185.28	198.68	183.78	124.76	137.37	143.46	148.13	71.74	74.14	80.60	+29.35	+27.72	+32.25	+13.61
All Railways	1101.70	1165.73	1268.20	1146.99	915.57	984.71	1051.73	1071.23	83.11	84.47	93.39	+17.84	+2.92	+23.86	-99.72

*Include unrealised earnings.

**Include accrued expenses, contribution to Depreciation Reserve Fund and Pension Fund, but exclude payment to worked lines etc.



ANNEXURE II

[See paragraph 8.8]

Lighting up, banking and dropping of fire of steam locomotives

Railway	Number of locomotives selected		Number of locomotives lighted up earlier		Average interval (hours) between lighting & planned time of departure		Excess over 7/5 hours required for attaining full steam		Number of locomotives kept on steam		Average time (hours) kept on steam instead of banked fire		Average time (hours) kept on steam or banked fire instead of dropping fire	
	BG	MG	BG	MG	BG	MG	BG	MG	BG	MG	BG	MG	BG	MG
Central	62	4	46	4	18	19	11	14	40	4	9	10	20	16
Eastern	62	—	37	—	30	—	23	—	40	—	30	—	98	—
Northern	40	11	34	9	16	14	9	9	34	9	Not available			
Northeast Frontier	8	13	8	12	21	13	14	7	—	8	—	9	15	21
Southern	21	26	12	25	10	8	3	3	21	26	3	2	13	13
South Central	30	24	30	14	14	15	7	10	26	11	8	—	15	15
South Eastern	28	—	23	—	14	—	7	—	37	Not available			19	—
Western	26	31	7	29	8	6	1	1	Not available					

ANNEXURE III

[See paragraph 8.10]

Average number of steam locomotives in use daily for shunting

Railway	1970-71		1971-72		1972-73		1973-74	
	B.G.	M.G.	B.G.	M.G.	B.G.	M.G.	B.G.	M.G.
Central	189	4	174	4	171	3	Not available	
Eastern	324	..	325	..	321	..	306	..
Northern	201	41	201	41	188	40	182	37
North Eastern	..	96	..	96	..	95	..	92
Northeast Frontier	26	65	23	65	15	65	14	60
Southern	82	74	85	71	80	63	79	66
South Central	70	43	76	42	78	40	78	39
South Eastern	195	..	196	..	198	..	193	..
Western	122	113	122	113	120	114	122	109
TOTAL	1209	436	1202	432	1171	420		

ANNEXURE IV

[See paragraph 8.11]

Number of heavier locomotives employed full time for shunting and the number and percentage of heavier locomotives with reduced fire grate area at the end of 1973-74

Railway	Number of heavier locomotives employed full time for shunting	Number of heavier locomotives with reduced fire grate area	Percentage of locomotives with reduced fire grate area to total heavier shunting locomotives
Central	85	48	56
Eastern	194	179	92
Northern	193	114	59
North Eastern	81	55	68
Northeast Frontier	40	35	88
Southern	93	60	64
South Central	114	111	97
South Eastern	64	52	81
Western	198	196	99
TOTAL	1062	850	80

ANNEXURE V

[See paragraph 8.15]

Coal consumed by Railways

Grade of Coal	1960-61		1971-72		1972-73	
	Quantity (in thousand tonnes)	Percent- age to total consump- tion	Quantity (in thousand tonnes)	Percent- age to total consump- tion	Quantity (in thousand tonnes)	Percent- age to total consump- tion
Selected A	1204	7.4	161	1.1	24.6	0.2
Selected B	2663	16.4	1220	8.2	1416.0	9.7
Grade I	6008	37.1	9479	63.7	9403.2	64.7
Grade II	1507	9.4	1651	11.1	1366.2	9.4
Grade III	14	0.1	55	0.4	4.4	..
Ungraded	4443	27.4	2137	14.3	2182.4	15.0
Small coal	356	2.2	184	1.2	148.7	1.0
TOTAL	16195	100	14887	100	14545.5	100