P. A. C. No. 205

PUBLIC ACCOUNTS COMMITTEE (1968-69)

(FOURTH LOK SABHA)

FORTY-NINTH REPORT

[Action taken by Government on the recommendations of the Public Accounts Committee contained in their 22nd Report (Fourth Lok Sabha) on Third Five Year Plan of the Railways—Chapter I and Paragraphs 16—17 of the Audit Report (Railways), 1967]

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(1968-69)

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*Declared elected on 19th August, 1968 *vice* Shri M. M. Dharia who resigned from the Committee.

INTRODUCTION

I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this Fortyninth Report on the action taken by Government on the recommendations of the Public Accounts Committee contained in their 22nd Report (Fourth Lok Sabha) on Third Five Year Plan of the Railways—Chapter I and paras 16 and 17 of Audit Report (Railways), 1967.

2. On 12th June, 1968, an 'Action Taken' Sub-Committee was appointed to scrutinise the replies received from Government in pursuance of the recommendations made by the Committee in their earlier Reports. The Sub-Committee was constituted with the following Members:

1. Shri D. K. Kunte—*Convener.*
2. Shri C. K. Bhattacharyya
3. Shri K. K. Nayar
4. Shri Narendra Kumar Salve
5. Shrimati Tarkeshwari Sinha
6. Shri N. R. M. Swamy

3. The draft Report was considered and adopted by the Sub-Committee at their sitting held on the 17th February, 1968 and finally adopted by the Public Accounts Committee on 24th February, 1969.

4. For facility of reference the main conclusions/recommendations of the Committee have been printed in thick type in the body of the Report. A statement showing the summary of the main recommendations/observations of the Committee is appended to the Report (Appendix XI).

5. The Committee place on record their appreciation of the assistance rendered to them in this matter by the Comptroller and Auditor General of India.

NEW DELHI;
February 24, 1969.
Phalguna 5, 1890 (*Saka*).

M. R. MASANI,
Chairman,
Public Accounts Committee.

CHAPTER I

REPORT

This Report of the Committee deals with action taken by Government on the recommendations contained in their 22nd Report (Fourth Lok Sabha) on Third Five Year Plan of the Railways—Chapter I and paras 16 and 17 of Audit Report (Railways), 1967, which was presented to the House on 1st April, 1968. Out of 51 recommendations contained in the Report Action Taken note have been received in respect of 50 recommendations. A reply to the recommendation at S. No. 49 is outstanding from the Department of Industrial Development.

1.2. The action taken notes/statements on the recommendations of the Committee contained in this Report have been categorised under the following heads:—

(i) *Recommendations/observations that have been accepted by Government* :

S. Nos. 1, 2, 3, 4, 5, 6, 7, 11, 12, 13, 15, 16, 17, 18, 19, 21, 22, 23, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 41, 42, 43, 50 and 51.

(ii) *Recommendations/Observations which the Committee do not desire to pursue in view of the replies by Government* :

S. Nos. 8, 9, 20, 24, 39, 40 and 44.

(iii) *Recommendations/Observations replies to which have not been accepted by the Committee which require reiteration* :

S. Nos. 10, 14, 25, 29, 37, 38, 46, 47 and 48.

1.3. The Committee will now deal with action taken on some of the recommendaations :

Over-estimation of goods traffic and over-capitalisation during Third Plan Period—Paragraphs 1.20—1.24, 1.28, 1.57 and 6.3 (S. Nos. 1-7, 12 and 51)

1.4. In their 22nd Report, the Committee had commented on the over-capitalisation in the Railways during the Third Plan Period

which arose out of the unrealistic planning for goods traffic. The Plan outlay of Rs. 1325 crores was on the expectation of increased traffic reaching a level of 249 million tonnes of originating goods traffic, in the last year of the Plan, namely 1965-66. This meant an increase of 93 million over the originating goods traffic of 156 million tonnes moved in the last year of the Second Plan. The actual increase was only 47 million tonnes representing a short-fall of about 50 per cent in relation to the target. On the other hand, the financial outlay for the Third Plan turned out to be Rs. 1686 crores representing an increase of 27 per cent over the investment of Rs. 1,325 crores contemplated in the Plan. With all this heavy investment, the capital at charge of the Railways increased from Rs. 1521 crores to Rs. 2680 crores representing an increase of 76 per cent during the Third Plan Period.

1.5. In paragraphs 1.20—1.27 and 1.30, the Committee made the following observations regarding the estimation of traffic by the Railways:—

> "1.20. The Committee are surprised at the explanations given by the Ministry of Railways (Railway Board). In the note furnished to the Committee (Para 1.3), the Ministry had explained that 'production estimates and plans for expansion are obtained, analysed and used for developing traffic forecasts' and that estimates are 'cross checked with empirical data of past growth patterns and firm forecasts are then developed.' In the course of evidence, however, the Ministry stated that they were 'dependent on the forecasts given by others' *viz.*, the Planning Commission and other Ministries. The Planning Commission was responsible for the overall co-ordination and planning and it was not necessary on the part of the Railway Board to duplicate arrangements 'for going into details.' It was, therefore, contended that the Ministry of Railways were concerned with the task of building rail transport which they carried out."

> "1.21. Apparently, the two statements made by the Ministry of Railways are at variance with each other. The Railways have a sizeable establishment for 'planning' in the Railway Board as well as the zonal Headquarters of the Railways. The Committee are inclined to agree with the views of the Financial Commissioner that 'so far as

the Railways are concerned, they should take the responsibility of projections of traffic target."

"1.22. From the facts placed before them, the Committee cannot help feeling that, from the very beginning, planning in respect of goods traffic was far from realistic. As stated in the Ministry of Railways' note (para 1.4), when the first estimates were prepared in 1960, the production targets in the major industrial sectors had not taken final shape and a precise indication about financial outlay was not available. The final estimates included in the Plan were, therefore, tentative. In fact the Third Five Year Plan specifically stated:

'Furthermore, since the overall estimates of traffic can only be treated as tentative at this stage, they will be subject to constant review in the light of the actual trends.'

"1.23. The Committee regret to note that subsequent reviews as contemplated in the Plan were not made and rail programmes not co-ordinated with the production levels reached in the major industries. The actual materialisation of traffic from year to year was not kept in view."

"1.24. It is not businesslike for a commercial organisation like the Railways merely to accept the statements/assessments of other Ministries without critically examining the position themselves. Even when estimated traffic was not forthcoming, the Ministry of Railways did not promptly reduce or revise the programmes merely because 'everybody was confident' that they would produce the goods."

"1.27. The Committee note that the comparisons of traffic anticipations and actuals made in the note submitted by the Ministry of Railways are based on the revised estimates prepared in January, 1962, and November, 1963, and not on the estimates prepared for the Conventions Committee in October, 1960, and for the Third Plan in March, 1961. As indicated in the Audit Report there was a wide gap between the actual traffic and that anticipated in October, 1960. Even in the case of estimates of January, 1962, the Committee note that, while the increase in traffic estimated for the first two years of the Plan over the traffic moved in the last year of the Second Plan was

only 21·9 million tonnes, an increase of 85·9 million tonnes was anticipated over the next three years. The Committee are, therefore, forced to conclude that while formulating their Plan the Ministry of Railways did not pay due regard to the actual trends of traffic. It is regrettable that heavy capital expenditure was incurred in creating traffic capacity far in excess of the requirements on the basis of mere hopes and expectations. Scarce resources which could have been utilised for more productive purposes were blocked."

"1.30. The Committee trust that the Ministry of Railways will put to better use the existing staff for planning at different levels both in the Railway Board and at Headquarters of Zonal Railways in order to avoid the recurrence of a similar situation."

In paragraphs 1.28, 1.57 and 6.3, the Committee made the following observations on the part played by the Planning Commission:—

"1.28. The part played by the Planning Commission also calls for comment. The Commission, which was in overall charge of laying down the targets and for co-ordinating the efforts of different sectors to achieve the objectives did not exercise any check on the Railways incurring heavy capital expenditure without correlating it to traffic requirements. Even as late as November, 1963, at the time of the Mid-term appraisal of the Plan, although it was evident that goods traffic would not come upto expectations the Ministry of Railways were allowed to carry out the rail transport programmes."

"1.57. The Committee cannot but feel unhappy at the manner in which the estimated target for the movement of general goods traffic was revised from 87·9 million tonnes, as envisaged in the original Third Plan estimates (March 1961), to 98 million tonnes in January, 1962. This was done on the assumption that the traffic which could have been carried by the Railways in 1960-61 should be assumed to be 87·5 million tonnes instead of the actual 82·5 million tonnes. The Committee consider that the Planning Commission could and should have exercised the necessary check to curb the persistent tendency of the Railway Board to overestimate traffic requirements. The

Committee would like the Planning Commission and Government to exercise caution in revising the targets upwards so as to avoid the recurrence of such cases of unrealistic planning which result in over-capitalisation."

"6.3. The Committee need hardly point out that both the Ministry of Railways and the Planning Commission failed to take timely measure to curtail the investment programme in the light of actual traffic offering despite the clear stipulation in the Third Five Year Plan that the estimates of traffic would be subject to constant review in the light of actual trends. This underlines the need for reviewing critically the methodolgy as well as the machinery for planning in the Railway Board to ensure that investment in the key sector conforms to the actual trends based on requirements and that the built-in-machinery for review and correction of imbalances is put to use without delay."

1.6. In their reply dated the 3rd December, 1968, the Ministry of Railways (Railway Board) have stated:

"The observations of the committee are noted."

"The Ministry of Railways would, however, venture to reiterate the process of planning for rail transport as it has existed so far and which was operative when the Third Five Year Plan was developed."

"Under the present system of planning at the Central level, final pattern of economic growth to be aimed at, is laid down by the Planning Commission in consultation with various Central Ministries. This necessarily assumed an analysis of the requirements and capabilities of various sectors of the economy; from these are built up production and demand projections for the major industrial and agricultural products. The Railway plan is derived from the co-efficients of rail transport for various commodities in the past, corrected by such specific information, *e.g.* movement of iron ore for export, and the movement of raw materials for the steel plants, as may be available for the future."

"In the above process, the Railway can only exercise a broad economic judgment on the demand production projections

made by the Economic Ministries and approved of by the Planning Commission. Where the Railways can contribute special knowledge is the actual pattern of growth of rail traffic in the past. Such empirical data is used to review the anticipations of rail transport requirements and to correct them, wherever necessary. Beyond this, the ability of the Ministry of Railways to reject or reshape the estimates developed by the other Ministries, is somewhat limited as drastic reductions would be full of rises to the economy in the event of a shortfall in rail transport capacity."

"Along with the production of data relating to rail transport patterns in the past, the Ministry of Railways maintain a close watch on the actual materialisation of traffic. The targets of trffiac initially adopted are subject to review so as to match its actual growth with the development of transport capacity. That six such reviews were actually carried out even for the Third Plan would be clear from the information supplied to the Committee, and reproduced at page 89 of the P.A.C. Report."

"In so far as the remarks of the Financial Commissioner, Railways (quoted by the Committee), are concerned, these were made in the overall context of transport planning as outlined above; the intention was to accept the responsibility of this Ministry for developing estimates of rail transport requirements of various commodities, based on the demand and production estimates received from the other Ministries with appropriate corrections, wherever possible, in the light of the projections of the pattern of past growth."

"For the future, a closer association of the Ministry of Railways with the planning process as a whole is being ensured. This Ministry is represented in the Working Groups set up by the various Ministries in association with the Planning Commission to develop production and demand projections for various commodities. The experience of the Railways in the past is being brought to bear, along with that of the other Ministries, in making these projections; and the financial and technical status of all new projects is being critically examined before accepting their contribution as firm for the new Fourth Plan. The

process of review and evaluation has also been tightened up. Regular meetings are being held with the Planning Commission every three months or so, to review the actual development of rail traffic as against anticipations, so as to adjust the rail transport plan according to requirements from time to time."

"It is considered that the above two changes in the approach to rail transport planning will help to make it as realistic as possible."

"Further, during the Third Five Year Plan as many as six reviews were carried out, the details of which have already been given to the Public Accounts Committee and reproduced at Annexure 'A' at page 89 of the Report. It is true that the mid-term appraisal indicated a shortfall in traffic but at that stage it was envisaged that this was a temporary set back likely to be largely made good in the later years. The heavy shortfall in the last two years was a late development and at that stage only limited steps could be taken to effect economy in expenditure to the extent possible."

"The need for improving the planning procedures is accepted. In the past, planning for additional transport capacity was based on production targets adopted for the various sectors of the economy, converted into rail transport requirements. It has now been decided to co-relate traffic projections more closely with the demand pattern rather than the production capacities, as done earlier. It has also been decided to increase the frequency of co-ordination with the Planning Commission and other Ministries and improve the Railways' own methods of evaluating transport requirements. With this end in view quarterly meetings are now being held with the Planning Commission and other Ministries concerned, when adjustments in annual plan targets are made, wherever necessary, in the light of the latest developments."

Comments of the Audit

1.7. "The Committee have recommended that Railways as a commercial organisation, should be responsible for the planning of Rail transport. While the methodology explained in the Action Taken Note that the Railway plan

is evolved from the plans evolved for other sectors of economy seems unexceptionable, the determination of precise traffic forecasts and the physical requirements derived therefrom as well as the subsequent adjustments in the traffic forecasts and the corresponding physical requirements are more appropriately dealt with by the Ministry of Railways themselves. Acceptance of this position would, perhaps, meet the recommendations of the Committee."

Further Comments of the Ministry of Railways (Railway Board)

1.8. "The new methodology of planning has already been explained to the Public Accounts Committee. To elucidate it further, the planning process falls into two major parts. The first concerns the formulation of rail traffic estimates, based on the projections of demand/production of major commodities received from various Economic Ministries. The second part consists in translating these traffic projections into their rail transport equivalents, and the investment planning needed to achieve these physical targets."

"The starting point of the first part of the process is naturally the demand/production estimates made out by other Ministries. An Inter-Ministerial Working Group will thereafter review these projections, examine them in the light of the past indices of rail traffic growth, and arrive at rail transport estimates. The Ministry of Railways is represented on this Group and will naturally exercise whatever moderation is possible, and considered necessary in the light of the Railways' own experience."

"The second part of the process is naturally the responsibility of the Ministry of Railways, exercised jointly with the Planning Commission in respect of the overall Plan size as well as the outlay proposed, and in respect of large, individual new projects on the Railways."

"Subsequent adjustments in traffic forecasts, and the corresponding physical requirements, will be made by this Ministry in consultation with the Planning Commission and the other Ministries. A review Group has already been set up for this purpose, and meets at intervals, under the auspices of the Planning Commission."

1.9. In their reply dated 20th September, 1968, the Planning Commission stated:—

"The observations of the Committee are noted."

"It has been decided in consultation with the Railway Board that a small group in the Planning Commission, with which the Ministry of Railways, other Ministries concerned and the Divisions of the Planning Commission will be associated, will review periodically (say, every quarter) the estimates of growth of railway traffic. In making this review, the Group will take into account the targets of production of major commodities and past trends in the production and rail movement of these commodities. In the past, the traffic targets were reviewed generally at the time of formulation of annual plans or when specific requests were received from the Railway Board for adjustments in traffic targets or financial allocations. It is expected that an exercise of this nature on a quarterly basis will help in making suitable adjustments in the investments in railway programmes."

1.10. At the instance of the Committee, the Planning Commission in their reply dated 24.12.1968, furnished the following further information:—

"As indicated in the Planning Commission O.M. No. T&C:7(30)/67 dated the 5th October, 1968, it has been decided, in consultation with the Railway Board, that a small group in the Planning Commission, with which the Ministry of Railways, other concerned Ministries and the Divisions of the Planning Commission will be associated, will review periodically (say, every quarter) the estimates of growth of railway traffic. In making this review, the Group will take into account the targets of production of major commodities and past trends in the production and rail movement of these commodities. In the past, the traffic targets were reviewed generally at the time of the formulation of annual plans or when specific requests were received from the Railway Board for adjustments in traffic targets or financial allocations. It is expected that an exercise of this nature on a quarterly basis will help in making suitable adjustments in the investments in railway programme."

2. "Since the beginning of this year three meetings have already been held in the Planning Commission to consider rail traffic requirements for 1968-69. The representatives of the concerned Ministries participated in these meetings and it was possible to review the rail traffic requirements in the light of the trends of production particularly of major commodities, viz., iron and steel and their raw materials, coal, iron ore, cement, POL, foodgrains and fertilisers, which together account for 65 per cent of total rail traffic. The trends in other goods were also reviewed. For the formulation of rail traffic targets in the new Fourth Plan (1969-74), a Working Group has been set up in the Ministry of Railways under the chairmanship of the Chairman, Railway Board, with which the Planning Commission, the Ministry of Transport & Shipping and other concerned Ministries have been associated. Under this Working Group, two sub-Groups have been set up, one to formulate traffic targets for iron and steel and raw materials, coal and iron ore for export, and the other for cement, petroleum products, foodgrains, fertilisers and other goods. The Ministry of Railways are also represented on some of the Working Groups which have been set up in the other Ministries for determining production targets of various major commodities."

3 "The Third Five Year Plan which was published in August, 1961 provided for a traffic target of 249 million tonnes for the railways to be achieved by 1965-66. This target included 76.8 million tonnes for general goods (excluding iron ore for export and railways' own materials). As early as March 1961 itself, the Railway Board wrote to the Planning Commission suggesting that the target of traffic for general goods in the Third Plan should be raised by 10 million tonnes over and above the level proposed for the Third Plan (vide Railway Board's O.M. No. 61 PL 3 4(1) dated the 16th March, 1961—copy enclosed at Annexure I*). In this letter, the Railway Board stated that while the actual movement of miscellaneous traffic expected to be achieved during 1960-61 was 82 million tons (excluding ore for export), a further traffic to the extent of 5 million tons was a fair estimate of the miscellaneous traffic generated at the end of the Second Plan having due regard to the loss of traffic on account of

*See page 124-126

the strike in July and the unsatisfied demands. The Railway Board further stated that the total volume of miscellaneous traffic offering as a result of development in various sectors of the National Plan was, therefore, of the order of 87 million tons which showed an increase of about 26 per cent over the actual movement of 69 million tons at the end of the First Plan. In May 1961, the Prime Minister forwarded to the Planning Commission for their consideration, a letter from the Railway Minister in which the latter stressed the inadequacy of traffic targets in miscellaneous goods accepted by the Planning Commission (vide copy of Prime Minister's letter No. 948-PMH/61 dated the 10th May, 1961, enclosed at Annexure II*). Subsequently, further references were made by the Railway Board for additional allocation of funds for general goods traffic in the Third Plan. The Planning Commission wrote to the Railway Board in July 1961 that there did not seem to be any need for any immediate modifications to be made in the Railway Plan at that stage with a view to providing for higher estimates of traffic at assessed by them. The Railway Board's attention was invited to the following statement in the Third Five Year Plan document:—"Furthermore, since the overall estimates of traffic can only be treated as tentative at this stage, they will be subjected to constant review in the light of the actual trends in traffic from year to year." The Planning Commission further suggested to the Railway Board that they should keep them apprised of the trends in general goods traffic and the sections on which the pressure on account of traffic in these and other goods was increasing beyond expectations, not merely from year to year, but on a quarterly basis, so that the measures considered necessary to meet the increases in traffic could be planned in time. (A copy of Planning Commission U.O. No. T&C/7(19)/60 dated the 29th July, 1961 is enclosed at Annexure III**)."

4. "The Railway Board's proposals for enhancement of traffic targets in general goods was discussed at a meeting held in the Planning Commission on the 27th January, 1962. At

*See page 126

**See page 128

this meeting, Member (I), Planning Commission, advised the Railway Board as follows:—

'Member (Industry) stated that the Planning Commission had not agreed to provide any additional funds for this purpose since they would be considering this matter only next year when a more definite picture of the industrial production in the country would be available. Since the railways required Rs. 75 crores for this purpose, they could specify the details of the line capacity works that would be necessary for this purpose as those were time-consuming processes and the Planning Commission could consider whether any additional commitment was to be made in this regard immediately. As regards rolling stock, since the delivery period was 12—18 months, the matter could justifiably be considered next year also especially when the railways' expenditure on rolling stock would be considerably less in the last year of the Plan. Chairman, Railway Board, agreed to provide the necessary details.

5. "In February 1962, the Railway Board again approached the Planning Commission reiterating that "as one year of the Plan is already over and the additional capacity will have to be created by the beginning of the last year of the plan for handling the increased traffic target in that year, it is necessary that an immediate decision is taken in the matter because if there is any delay in the authorisation to the Railways to proceed with the works and the procurement of rolling stock, it will not be possible for the Railways to handle the additional miscellaneous goods traffic which they consider would be offering in the last year of the Plan." (A copy of the Railway Board's O.M. No. 61/PL/3/1 (9) dated the 26th February, 1962 is enclosed at Annexure IV*)."

6. "The Planning Commission examined the matter further and sent a communication on the subject to the Railway Board in April, 1962 (vide copy of Planning Commission U.O. No. T&C|7(24)|61 dated the 6th April, 1962 enclosed at Annexure V**). In this note, the Planning

*See page 170

**See page 231

Commission mentioned that they did not receive from the Ministry of Railways any review in general goods traffic with reference to the sections on which the pressure on account of such traffic was growing beyond that it was expected in the Second or the Third Plan. The Railway Board's attention was invited to the fact that the proportion of rail movement to total production in 1960-61 in the case of several commodities was lower than what had been assumed by the Railway Board in anticipating railway movement in these commodities for 1965-66, i.e. the last year of the Third Plan. The Railway Board were accordingly requested to review their estimates of general goods traffic. The Planning Commission, however, agreed to the Railway Board proceeding with the several small line capacity works, such as extension of loops and additional yard capacities which they had proposed."

7. "The Railway Board sent a further detailed memorandum in June 1962 wherein they stated that "The Railway administrations are closely in touch with the users of rail transport and their judgement in respect of the likely volume of additional transport for which demands exist has to be accepted..... There is ample justification for increasing the provision of rail transport for commodities which are covered by the general term of 'miscellaneous goods' traffic in the Third Five Year Plan and unless this is done immediately, the complaints regarding lack of transport, both for industries and trade, will increase in volume and the resultant situation will affect the implementation of the Third Five Year Plan." (A copy of Railway Board's O.M. No. 61|PL|3|1(9) dated the 19th June, 1962 is enclosed at Annexure VI*)."

8. "The traffic targets in general goods were reviewed in the Planning Commission in August, 1963 having regard to the information then available regarding the likely production of major commodities, viz., foodgrains, jute, tea, paper, cotton, oilseeds, sugar-cane, salt, fertilisers and mineral oils etc., and the proportions of total production of these commodities likely to move by rail. It was felt

*See page 137

that the total traffic in general goods by the end of the Third Plan was likely to be somewhat more than what was provided in the Plan even though it might not be of the same order as suggested by the Railway Board. Having regard to the results of this review and the persistent demands of the Railways, it was agreed to increase the target in general goods traffic by 10 million tonnes. It may be mentioned that the traffic in general goods in 1965-66, i.e. the last year of the Third Plan, reached a figure of 78.1 million tonnes, which was somewhat higher than the traffic target of 76.7 million tonnes originally provided in the Third Plan. In 1966-67, the general goods traffic further increased to 80 million tonnes. However, the traffic increase did not materialise to the extent anticipated in August, 1963 largely owing to declaration in the growth of the economy in subsequent years."

9. "It may be mentioned at the outset that the traffic targets for the annual plans are initially formulated by the Railway Board based on the information obtained from the Ministries concerned. The annual traffic targets are reviewed in the Planning Commission at the time of consideration of the annual Plans. During the current year, however, a small inter-Ministerial groups has been formed to review the traffic tragets on a quarterly basis under the auspices of the Planning Commission. The Railway Board formulate the annual traffic targets before the presentation of the Railway Budget in the light of whatever information is then available from the concerned Ministries regarding the production programmes and demand projections for major individual commodities. The information available on production targets at the time of initial formulation of traffic tragets is quite often not complete; nor is it available in sufficient detail. Further, at times there is variation between production which actually materialises during a year compared with the production and demand targets indicated to the Railway Board initially. These factors account for the variations between traffic targets formulated at the beginning of the year and actual traffic realisation."

10. "The following table indicates the estimates of goods traffic on the Railways for the year 1966-67, 1967-68 and

1968-69—the actuals for 1966-67 and the revised estimates for 1967-68 and 1968-69:

Freight traffic on the Railways

(Million tonnes)

	1966-67		1967-68		1968-69	
	Estimate	Actuals	Original estimate	Revised estimate	Original estimate (Jan. 68)*	Revised estimate (Aug. 68)
1	2	3	4	5	6	7
1. *Coal*						
a) Steel plants .	13·0	12·1	12·3	12·0	12·7	12·6
(*b*) Railways .	18·3	19·5	19·5	18·9	19·1	18·5
(*c*) Other users .	37·7	34·2	36·7	35·5	38·4	36·3
(*d*) Total .	69·0	65·8	68·5	66·4	70·2	67·4
2. *Steel Plants*						
a) Raw materials	18·7	16·5	16·5	17·3	17·7	17·1
b) finished products	6·8	6·3	6·5	6·4	6·6	6·6
c) total .	25·5	22·8	23·0	23·7	24·3	23·7
3. Iron ore for export	7·2	6·3	8·3	6·7	9·5	9·0
4. Cement .	9·9	8·9	9·6	9·3	9·8	9·7
5. Railways' own materials (excluding coal)	20·7	17·9	17·9	15·9	16·3	15·4
6. All other goods	82·9	79·9	82·9	76·4	79·5	78·9
7. TOTAL .	215·2	201·6	210·2	198·4	209·6	204·1

*" With reference to the figures of estimates of traffic, the Audit has remarked that these figures are somewhat different from those used by the Railways for calculating goods earnings for the relevant years. It has been explained by the Railway Board that the difference in figures is due to the fact that at the time the calculation of earnings is made, figures of actual traffic orginating during the previous year are not available. The total estimated traffic for the Budget year and the goods earnings are, therefore, based on the revised estimates of the previous year, plus the additional traffic anticipated during the Budget Year. Moreover, since the Budget papers are got ready some time in January every year, additional traffic anticipations are made on whatever data are available at that time and are subject to change later when more firm indications of trafic become available. The estimates for the various years indicated in the table above, on the other hand, take into account all additional information which becomes available subsequent to the presentation of Railway Budget including the previous year and hence the difference in the figures ".

"It will be noticed that there have been shortfalls in traffic both in 1966-67 and 1967-68. The shortfall in traffic 1966-67 was considered due mainly to the fact that production of steel, coal and cement did not come to the exepected leve's. Due to the slackening of works on several railway projects. the movement of railway materials also went down. The decline in general goods traffic also

reflected the recessionary trends in certain industrial sectors. During 1967-68 also, the decline in goods traffic has been considered to be due to recessionary trends in the economy. In 1968-69 also, the estimate of traffic as revised in August, 1968 indicates a lower level of likely realisation than anticipated in January 1968. At the meeting of the Group which has been set up to review the estimates of railway traffic, held in the Planning Commission on 12-8-1968, it was indicated on behalf of the Railway Board that the trends in actual traffic during 1968-69 would be kept in view in formulating investment requirements for the next year."

11. "As stated earlier, for the formulation of rail traffic targets in the new Fourth Plan, a Working Group has been set up in the Ministry of Railways with which the Planning Commission, the Ministry of Transport & Shipping and other concerned Ministries are associated. The Working Group has already held a few meetings and the report of the Group is expected to be finalised shortly. Railways are also represented on some of Working Groups which have been set up in the other Ministries for determining production targets of various major commodities."

12. "In regard to the question as to how the Planning Commission would ensure that excessive investment does not take place on increasing rail capacity, it may be stated that it is initially for the Railway Board to fully establish the justification for new works for increasing rail capacity before these are included in the Plan and to ensure that their phasing is coordinated with the requirements of traffic. It may be added that the Railway Board have set up a special Economic Cell for conducting economic analysis on matters concerning railway traffic forecasts and investment plans in consultation with other Ministries and agencies, as may be required for coordination between Railways and other modes of transport, in the framework of traffic growth in the country. A mention about the Cell has been made in the report of the Railway Board for 1966-67 (Vol. I, page 5). The Planning Commission, however, attempts to bring about coordination between traffic forecasts and production targets which are approved for inclusion in the Plan. The Planning Commission also reviews the broad economic justification for major programmes.

and projects such as projects for construction of new railway lines. Both at the time of the formulation of the Five Year Plans and annual Plans, the Planning Commission attempts to ensure that investment proposed by the Ministry of Railways is in accordance with the anticipated growth of traffic."

1.11. The Committee cannot resist the impression that the Railways persistently over-estimate traffic requirements while planning for rail capacity. An illustration of this is available in the manner in which the estimates for general goods traffic were framed for the Third Plan. The target for general goods fixed in the Third Five Year Plan as published in August, 1961 was 76.8 million tonnes, out of 249 million tonnes of originating goods traffic anticipated in the last year of the Plan. This target was fixed when the development programmes for certain important industries had "not yet all been worked out in detail." However, after this target was fixed, the Railways initiated and systematically built up pressure on the Planning Commission for its enhancement by 10 million tonnes, which was ultimately agreed to. It is significant that this revision of targets was not based on a review of the trends in general goods traffic repeatedly suggested by the Planning Commission to the Railways. The Railways themselves had in fact stated that "there are no statistics in the accepted sense of the term which are compiled or can be compiled as a regular measure to reflect the actual demands for transport of miscellaneous goods traffic from and to different areas." It is also significant that this upward revision of target occurred despite the fact, specifically brought to the notice of the Railways, that the proportion of rail movement to total production was going down. The actual general goods traffic that materialised against the target of 86.8 million tonnes, was only 78.1 million tonnes, while, in respect of the total goods traffic, against an anticipation of 249 million tonnes, to which the entire planning was geared, the traffic moved was only 203 million tonnes.

1.12. The Committee are emphatically of the view that planning for rail capacity should be done on a more realistic basis, so that scarce resources, which could be deployed for more productive purposes, do not get unnecessarily blocked. The Committee note that the Railways themselves have accepted "the need for improving planning procedures" and the responsibility for ensuring "whatever moderation is possible" in framing rail transport estimates and are tightening up the process of review and evaluation of production and demand projections for various commodities. The Committee would like the Planning Commission and Government to ensure that while draw up the Fourth Plan planning for

rail capacity is done on a more realistic basis and the persistent tendency to over-estimate traffic requirements and push up investment is firmly curbed. In particular, the Committee would like the Planning Commission and Government to take note of the significant trend the world over for goods to move increasingly by road. This vital development should be kept constantly in view in estimating the share of total traffic to be moved by rail and road and in determining the allocation of scarce plan resources for their respective development.

Traffic for Coal, Paragraphs 1.43 *and* 1.44 (*S. No.* 8, 9 *and* 10).

1.13. The traffic estimate for movement of coal in the Third Plan was envisaged as 91.4 million tonnes and it was reduced to 89.0 million tonnes in the mid-term appraisal (November, 63). The actual traffic was only 66.7 million tonnes. The Committee made the following observations in para 1.44.

> "In this connection the Committee would also invite reference to the recommendations of the Estimates Committee made in para 56 of their Thirty-Third Report (Third Lok Sabha).
>
> 'The Committee observe that although the year-wise targets of coal production as worked out by the Working Group in its Second Report have been agreed to by the Railways and they are broadly committed to move the quantity indicated therein, the fieldwise target of production and directionwise movement thereof during each of the remaining three years of the Third Five Year Plan, have still not been furnished to them by the Ministry of Mines and Fuel. It is unfortunate that the lessons of the Second Plan when production was deliberately stepped up regardless of the fact that corresponding transport facilities were not available, have yet to be learnt.
>
> Now that a coal production target of 98.3 million tonnes has been agreed to by all concerned, the Committee would stress upon the Ministry of Mines and Fuel the need to work out the fieldwise targets of production and directionwise movement thereof for each of the remaining three years of the Third Five Year Plan so that the Ministry of Railways get timely notice to gear up their transport arrangements to meet in full the requirements.'
>
> "In reply (page 23 of Eighty-eighth Report of Estimates Committee, Third Lok Sabha) the then Ministry of Mines and Fuel stated that the direction-wise transport requirements

for movement of Coal during the final year of the Plan had been furnished but information for the intervening years could not be made available as the sponsoring authorities were not able to furnish detailed destination-wise requirements from year to year. It has been added—

'For the purpose of future planning, however, it has been decided that the Coal Controller will organise, on a continuing basis, the collection of factual information in regard to direction-wise requirements, so that a realistic assessment of direction-wise movement of coal can be made from year to year.'

The Committee would like to be informed as to whether the above procedure is since being strictly followed by the Coal Controller and whether the Railways take into account in planning for Coal traffic the direction-wise transport requirements."

1.14. In their reply dated the 19th September, 1968, the Ministry of Railways have stated:

"In regard to the Third Plan, the Working Group on Coal Production & Transport, under the Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) had developed detailed rail transport requirements for the movement of coal for all the major routes on the Railways. The detailed requirements of wagons in different fields for different destinational routes were given."

"For the old Fourth Plan ending in 1970-71, the Ministry of Steel, Mines & Metals furnished information concerning anticipated field-wise production of coal and its consumption requirements for each of the major industries. The rail movement pattern, on the lines of that developed for the Third Plan, was, however, not indicated in detail."

"For the present Fourth Plan (1969-70 to 1973-74) the Ministry of Mines & Metals has been requested to furnish a direction-wise breakdown of the rail transport requirements. This is awaited and the Ministry of Mines & Metals is being reminded to expedite supply of the information. The rail transport capacity will be determined on receipt of this information, as desired by the Estimates Committee and the Public Accounts Committee. It is proposed to keep the information under constant review in

consultation with the Ministry of Mines & Metals and the Planning Commission to modify the rail transport plan from time to time to the extent necessary."

1.15. In the reply dated the 9th October, 1968, the Department of Mines and Metals have stated:—

"The factual information in regard to direction-wise requirements was duly collected and a realistic assessment of direction-wise movement of coal was furnished to the Railways for 1964-65 and 1965-66."

"The transport requirements from each coal field to various categories of coal consumers during each half year of 1967-68 and 1968-69 were worked out and furnished to the Railways. In respect of all the major consumers, the details related to the individual consuming units while in respect of small consumers, the information was given statewise. The transport requirements for the new Fourth Plan starting on 1st April, 1969 will be worked out after the report of the Planning Group on coal is finalised."

"One important development which has taken place recently is the removal of control over the distribution of coal (other than coking coal required for the metallurgical industries) with effect from 24th July, 1967. After decontrol the Coal Controller no longer draws up programmes of the non-coking coal consumers. Hence, the collection of factual information on a continuing basis may not be easy. The forecasts of transport requirements have to be based on the estimated demands for coal is assessed by the Planning Group on coal. The Coal Controller is, however, taking steps to collect as much statistical information as possible with the available staff and facilities and such information will be made use of in making the estimates and in reviewing them periodically."

1.16. The Committee note that with the removal of control over distribution of coal (other than coaking coal required for metalurgical industries) with effect from 24th July, 1967, the Coal Controller with no longer be in a position to furnish a detailed programme of rail transport requirements for non-coking consumers. This, coupled with the experience in the Third Plan Period where there was a shortfall in traffic of 24.7 million tonnes against the Plan estimates of 91.4 million tonnes, suggested the need for extreme circumspection in planning for movement of coal traffic. The Committee would also suggest that, by way of abundant caution, projection

of traffic assumed in planning for extra capacity during the Fourth Plan should be subject to careful annual review in the light of empirical data.

1.17. The Committee had asked the Department of Mines & Metals to furnish the following data, conjointly with the Railways to help them assess how the planning for coal traffic was done during the Third Plan:—

1. (a) Estimates of coal required in the Third Plan particularly for Railways, Steel Plants and others (c.f. Table at pages 5-6 of 22nd Report) (Fourth Lok Sabha).

Estimates may be given for the following stages:

(i) As mentioned in the Third Plan.

(ii) As mentioned in the First Report of the Working Group on Coal Production and Transport (April, 1962).

(iii) As mentioned in the Second Report of the Working Group on Coal Production and Transport (August, 1962).

(iv) As mentioned in the Third Plan Mid-term Appraisal.

(v) As appraised subsequently from time to time.

(b) The estimates of coal to be moved by rail at each of the stages mentioned above.

Copies of correspondence exchanged between the Planning Commission and the Railways, where estimates of coal to be moved by rail were revised, at each stage may be furnished.

(c) The actual movement of coal by rail for each year of the Third Plan.

2. (a) The estimated requirements of coal for Railways, Steel Plants and others for 1966-67, 1967-68 and 1968-69.

(b) The quantity of coal which was estimated to be moved by rail for each of these years.

(c) The actual movement of coal by rail for each of these years.

(d) The reasons for variations between the estimated and actuals in respect of coal moved by rail.

(e) What measures have been taken since 1966 to draw up realistic estimates of coal requirements and movement by rail in the light of experience gained in the Third Plan.

3. (a) What precise progress has been made in drawing up estimates of requirements of coal for Railways, Steel Plants and others and for its estimated rail movement during each year of the new Fourth Five Year Plan.

(b) The precise progress made by Government in working out field-wise targets of production and direction-wise movement of coal for each year of the new Fourth Plan.

1.18. The information which was called for on October, 1968 is still awaited.

1.19. The Committee regret that the Department of Mines & Metals have still not furnished the information called for. They would like to emphasise the necessity to have the requisite data speedily collected and reviewed. Based on such a review it may be examined whether the estimates of coal traffic drawn up for the Fourth Plan would need revision. The Committee would like particularly to stress that the estimates should be built up, on realistic field-wise targets for production and for direction-wise movements of coal.

Traffic for Steel Plants—Paragraph 1.50 (*S. No.* 11)

1.20. In para 1.46 and 1.47 of the Report, the Committee had taken note of the shortfall in traffic for Steel Plants during the Third Plan period. The Shortfall was 10.8 million tonnes in relation to the Plan estimate of 34.5 million tonnes to be achieved in the last year of the Plan. Commenting on this position, the Committee had made the following observations:—

"1.50. The Committee regret that Government have not furnished the requisite information despite a reminder. The Committee are surprised that the Department of Iron and Steel have not been able to indicate any basis for the yard-stick adopted by them to determine the traffic of raw materials and the finished products of Steel Plants required to be moved by the Railways during the Third Plan period. It appears that Government did not pay close attention to this vital matter while fixing initially or revising upward the targets for the movement of traffic by rail for the Steel Plants during the Plan period. The Committee suggest that Government should from now on review carefully yard-sticks for the movement of raw materials and finished products by rail in the light of the experience gathered in this behalf during the last ten years

so as to have realistic targets and avoid a shortfall to the extent of more than 33 per cent which occurred due to unrealistic planning in Third Plan."

1.21 In their reply dated 21st September, 1968, the Department of Mines & Metals furnished the following information:

(1) "A statement containing information in respect of quantities of raw materials and finished products for steel Plants moved by rail during the Second Five Year Plan and Third Five Year Plan is enclosed" (Appendix I).

(2) "By the end of Second Five Year Plan, all the units of the one Million tonnes Steel Plant at Bhilai, Rourkela and Durgapur had not been commissioned. The Plants went into operation fully during the Third Plan period. The requirement of the raw materials during the Third Five Year Plan was assessed in April, 1959 on the basis that about 2.9 tonnes of raw materials (other than coa') would be required for every tonne of steel. Subsequently the co-ordination Committee on Expansion of the Steel Plants of Public Sector in June, 1960 revised the requirements of the raw materials. The requirement then re-assessed for the three steel plants worked out to an average of 2.76 tonnes of raw materia's excluding coal for one tonne of steel. The recommendation of the Co-ordination Committee was subsequently discussed at an inter-Ministerial meeting consisting of representatives of Department of Iron and Steel, Ministry of Commerce, Planning Commission, Ministry of Irrigation and Power, Ministry of Railways and Ministry of Finance, held in October, 1960. The Committee had observed that the sources of raw materials had changed some what resulting in longer leads, particularly of limestone, dolomite and manganese ore. These had resulted in higher requirements of wagons."

(3) "The information is contained in the statement attached and which is referred to in reply to (1) above. The average of the ratio worked out in the statements for the three steel plants compares fairly satisfactorily with the ratio of 2.76 worked out on the basis of requirement of raw materia's assessed by the Co-ordination Committee for Steel Plants referred to above."

(4) "A tentative estimate of requirements of raw materials for Fourth Plan has been worked out on the basis of the assessment made in the Project Report for expanded plants.

The experience gained by Hindustan Steel Ltd., during the past years has also been taken into account in assessing the requirements. This assessment will be further reviewed."

(5) "The comparative figures of raw materia's actually moved during the years 1966-67 and 1967-68 have also been given in the statement attached."

(6) "The experience gained during the past years will be taken into account while finalising the requirement for Fourth Plan and the yard-stick will also be modified suitably.".

"The observation made by the Committee has been noted. The past experience will be taken into account and a more realistic yard-stick will be evolved to form the basis for assessment of target of the requirement of raw materials for the Fourth Plan."

1.22. In a further reply dated 30th November, 1968. the following further information was furnished:

"It may be clarified here that no yard-stick for consumption of raw materials was ever laid down or assumed. The average of 2.76 tonnes of raw materials excluding coal for one tonne of steel intimated in reply to para 1.49(2) of the Public Accounts Committee Report is the ratio that was arrived at on the basis of the total assessment of requirement of raw material made by Coordination Committee for the three steel plants at Durgapur, Rourkela and Bhilai. Total requirements of raw materials for steel production were estimated and this as related to steel production gave the 'Ratio' of 2.76 indicated above. Therefore, it is not as if, the requirement of raw materials were worked out or revised on the basis of a yard-stick."

"The requirement of raw materials estimated by the Coordination Committee was not revised at the Inter-Ministerial meeting. As intimated in reply to para 1.49(2), it was observed in the meeting that the sources of raw materials had also changed somewhat resulting in longer leads, particularly for limestone, dolomite and manganese ore."

"The basis now adopted in calculating the requirement of raw material, is the norms of consumption of raw materials that goes into the production process. The norm would depend upon the following factors:—

(a) Quality of raw materials—Chemical and Physical.

(b) Changes in technological process like say

(i) Use of super self fluxed sinter in the Blast Furnace Iron Making Process.

(ii) Intensive use of oxygen in open Hearth Steel Making Process.

(c) Growth of operating skill."

"Raw Material requirement also depends on Base Production targets like Hot Metal and Ingot steel. These are normally fixed based on Technical capacity of the shops *vis-a-vis* Demand forecast, for the saleable products."

"On the basis of the estimates in the detailed project reports for the three expanded plants and the estimates for the sixth blast furnace at Bhilai, the total requirement of raw materials other than coal over the 4th Plan period would be 77 million tonnes."

"The experience of the past years has proved that detailed assessment of each and every raw material should be made year-wise for each plant based on the following factors:—

1. Fixation of targets for Hot Metal and ingot steel allowing for demand forecast for products and technical limitations of the plant.

2. Adoption of realistic consumption rates of major raw materials—giving due consideration for quality and technological improvement in the process; and

3. Total raw material requirement should not be assessed on the basis of a single overall ratio or yard-stick as related to saleable production.

On the basis of the above, the raw material requirements other than coal as estimated at this stage would be roughly 83 million tonnes."

1.23. The Committee cannot help feeling that the traffic for Steel Plants estimated as 34.5 million tonnes in the last year of the Third Plan was not based on any precise assessment of raw materials for the plants to be moved by rail. As pointed out in para 1.48 of their 22nd Report, the estimate was apparently based on a formula which assessed that 3 to 3.2 tonnes of raw materials would be required per tonne of finished product. However, the information furnished to the Committee does not show on what basis this formula was worked out. The average raw material requirement as worked out in the project reports of the Steel Plants, prepared by the Collaborators was 2.53 tonnes per tonne of finished product. A Coordination

Committee for expansion of Steel Plants had assessed the requirements of raw materials for the Plants in June, 1960 and, on the basis of their calculations, the formula worked out was that 2.76 tonnes of raw materials would be needed per tonne of finished product. At an Inter-Ministerial meeting held subsequently in October, 1960, it was pointed out that the leads required for raw materials would be longer, but the papers relating to the meeting which have been furnished to the Committee do not show that any formula as such was worked out. The Committee are, therefore, unable to understand on what basis the traffic was assessed as 34.5 million tonnes, including 26.1 million tonnes on account of raw materials. The actual traffic that materialised was 10.8 million tonnes less.

The above resume clearly indicates that Government did not carefully assess the requirements for the movement of raw materials by rail for steel plants either on the basis of their past experience or on the basis of figures estimated by the foreign collaborators but fixed them arbitrarily at 3 to 3.2 tonnes of raw materials for one tonne of finished steel. This resulted not only in creating rail-capacity far in excess of requirements but also in burdening the Railways with heavy capital investment on which a fixed dividend has to be paid to the general exchequer and diverting scarce resources which could have been better utilised in building roads or otherwise.

1.24. The Committee would like Government to draw benefit from this costly experience and ensure that in future the requirements for the movement of raw materials for steel plants are realistically worked out on the basis of experience gathered during the last decade.

Construction of new lines and retention of unremunerative lines - paragraphs 2.10 and 4.24 (S. Nos. 14 and 38)

1.25. Referring to 9 new lines constructed during the Third Plan period which are not expected to become remunerative even by the 11th year of their construction, the Committee made the following observations in para 2.10:

> "In this connection the Committee would like to invite the attention of the Ministry of Railways to the following observations made by the Committee on Transport Policy and Co-ordination in January, 1966 on which the Chairman of the Railway Board was represented:
>
> "....there are several instances of decisions on new railway lines being taken on considerations other than commercial, such as, administrative need or general regional

development. It is necessary to reconsider the approach to be followed in the construction of new railway lines in future. We are of the view that, generally, the Railway should provide for only those lines which are expected to yield, over a period of time, normal return on the investment involved in their construction. The lines which are expected to be unremunerative even after a few years of their opening should be taken up only in exceptional circumstances and in all such cases provision should be made to compensate the Railways for the losses involved."

"The Committee endorse the above recommendations made by the Committee on Transport Policy and Co-ordination and suggest that the Railways should not provide for any new lines unless it is expected to yield over a period of time a normal return on the investment involved in its construction. Where, in exceptional circumstances, the construction of an unremunerative line has to be taken up by the Railways there should be specific provision for compensating the Railways against losses by whosoever sponsor the proposal, so that the general user of the Railways is not burdened with avoidable surcharge which results from such unremunerative capitalisation."

1.26. In regard to 71 already existing uneconomic branch lines, the Committee made the following observations in para 4.24:

"The Committee agree that the sound principle of providing transport at the lowest cost and to the maximum advantage of the economy should outweigh all other considerations in deciding upon the retention of unremunerative lines. In view of the growing difficult financial position of the Railways it is desirable that an early decision should be taken about the operation of those lines on which the Railways have been persistently losing heavily. The Committee also consider that in the case of marginal lines the Railways should intensify their efforts to attract more traffic so that these can be made to pay their way."

1.27. In their reply, the Ministry of Railways have stated:

Paragraph 2.10:

"The observations of the Committee are noted."

"The Ministry of Railway would, however, like to clarify that, except in the case of strategic lines required for defence purposes, the construction of new lines is ordinarily undertaken only if their financial liability is accepted. Where any non-strategic line which is not expected to be finan-

cially remunerative is nevertheless to be taken up on other important considerations, the liability is taken to be that of the Railways in terms of the arrangement decided upon at the time of the 1949 Convention (which arrangement is still continuing.)"

"The question whether the resultant loss should not be passed on to the sponsoring authorities will be reconsidered at the time of the next review of the Separation Convention."

Paragraph 4.24:

"As already stated in the note submitted to the Public Accounts Committee, out of the forty unremunerative branch lines reviewed, it was found in respect of fourteen that road transport could without difficulty and without detriment to the economy of the area replace rail transport. The concerned State Governments were, therefore, requested to confirm that there would be no difficulty in making arrangements for such additions to road transport as might be necessary to fill the gap in road transport capacity likely to be created by the closure of those branch lines."

"Replies have so far been received from the State Governments in respect of ten lines as mentioned below:

Name of branch lines	Name of State	Reaction of the State Governments
(*i*) Madhosingh Mirzapur Ghat (*ii*) Mathura-Vrindaban (*iii*) Akbarpur-Tanda (*iv*) Barhan-Etah	Uttar Pradesh	Not agreeable to the closure of the lines.
(*v*) Gwalior Shivpuri	Madhya Pradesh	Agreeable to the closure of the line subject to the Railway providing funds for a improvement of the Gwalior-Shivpuri section of the National Highway No. 3.
(*vi*) Mettupalai—Yam-Ootacamund	Madras	Not agreeable to the closure of the line.
(*vii*) Peralam—Karaikkal	Pondicherry	Not agreeable to the closure of the line.
(*viii*) Rohtak-Gohana	Haryana	Not agreeable to the closure of the line.
(*ix*) Batala-Quadian	Punjab	Not agreeable to the closure of the line.
(*x*) Bhagalpur—Mandar Hill	Bihar	Not agreeable to the closure of the line."

"Replies from the following State Government are still awaited:—

Name of State	Name of branch lines
Madras	(*i*) Mayuram—Tranquebar (*ii*) Nidamangalam-Mannargudi
Punjab	(*iii*) Nawa Shahr-Doba Rahon.
Mysore	(*iv*) Bangalore-Bangarpaded (NG)."

"The Committee will appreciate that the review of unremunerative lines had to be continuing affair and that in considering the closure of any line regional and political sentiments, and the deep rooted conviction that rail transport is necessary for the development of under-developed areas have to be reckoned with."

"The recommendation of the Committee that in the case of marginal lines railways should intensify their efforts to attract more traffic so that those lines can be made to pay their way, has been accepted and instructions have been issued to the railways to keep a close watch on the working of the marginal lines and to take steps for attracting more traffic and to reduce the working expenses."

1.28. The Committee note that the question whether the loss on the working of new lines should not be passed on to the sponsoring authorities is proposed to be considered at the time of the next review of the Separation Convention. Now that the Railway Convention Committee (1968) has been appointed, the Committee hope that this matter will be placed before them.

1.29. The Committee also note that some of the State Governments are not agreeable to the closure of certain branch lines on which the Railways have been consistently losing. According to the Railways own estimate, the total annual loss on uneconomic branch lines works out to Rs. 6.69 crores. The Committee recommend that Railways should examine what effective measures, if nay, could be taken to reduce the losses on these lines by introducing optimum number of services, speeding up of trains, ensuring safe handling of goods and, in general, improving customer's satisfaction. Where rail development justifies it, the question of conversion of these existing narrow gauge lines into metre gauge/broad guage lines in the interest of reducing the losses may also be considered. The Committee suggest that, in a case where a State Government is not agreeable to the closure of unremunerative lines, the question of passing the losses on to the concerned Government should be considered. The Committee suggest that this matter may also be placed before the Railway Convention Committee (1968) for their consideration.

Wagons—Para 3.15 (*S. No.* 25)

1.30. The Third Plan provided for the procurement of 1,17,141 wagons to create an additional capacity of 98 million tonnes (to take the total capacity to 249 million tonnes from 156 million tonnes in the last year of the Second Plan). The average number of wagons for an additional capacity of 1 million tonnes was thus 1,260. The

actual procurement was stated as 1,25,480 wagons (after wiping out the throw forward of 19,309 wagons from Second Plan), that is 8,336, wagons more than the number required for a capacity of 249 million tonnes. The actual capacity available at the end of the Third Plan should thus have been about 255 million tonnes in terms of wagons.

1.31. The Committee made the following observations in para 3.15:

"The Committee are disturbed to find that although the Railways procured 8.336 wagons more than the number provided in the plan to create a capacity of 249 million tonnes, the actual capacity generated at the end of the plan period in terms of wagons was stated to be only 225 million tonnes i.e. 24 million tonnes less than that anticipated. This shows that either the assessment of capacity at the end of the plan is incorrect or the estimation of physical requirements to achieve the envisaged Third Plan target of rail capacity was defective. As for the plea regarding the turn-round of wagons, the Committee find that the Third Plan envisaged that the turn-round of wagons would come down to 9.5 days for B.G. wagons and 6.5 days for M.G. wagons. From the statistics published in the Railway Board's Annual Reports, it is, however, seen that the turnround (i.e. intervening period between two loadings) had actually increased. The figures are as follows:—

	B.G.	*M.G.*
1960-61	11.2 days	7.2 days
1965-66	11.8 days	8.4 days

The average of lead of traffic (the distance over which the wagons move) in these two years was as follows:—

	B.G.	*M.G.*
1960-61	572 Kms.	316 Kms.
1965-66	556 Kms.	365 Kms."

"Thus, on Broad Gauge (which accounts for 80 per cent of the originating goods traffic) the turn-round of wagons had increased despite the reduction in the average lead of traffic."

"Apparently, the turn-round of wagons has increased because of an increase in their number. Being surplus to requirements a large number of wagons are lying idle or are under-used and the interventing period between two loadings has increased. The Committee desire that the Minis-

try of Railways should make a reappraisal of their wagon requirements in the light of these facts."

1.32. In their reply dated 25-9-1968, the Ministry of Railways have stated:

"The observations of the Committee are noted."

"It is, however, submitted that when the Third Five-Year Plan was prepared in the beginning of 1961, detailed information concerning the direction-wise movement and distrition of coal was not available. This information was not supplied by the Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) till the end of January, 1962, after the Plan had been finalised. The estimate of wagon requirements for the initial target of 248.9 million tonnes thus suffered from want of this vital information. In regard to the iron ore traffic programme, similar uncertainties existed. The total wagon acquisition planned at that time was 117,144 of which 90,447 was on additional account. The rail transport crisis of 1960-61, which had its maximum impact on the movement of coal, underlined the necessity for a complete review of the assumptions on which rail transport capacity had been planned. The Coal Transport Study Team of the World Bank which had gone into the Coal transport problem in detail, came to the conclusion that there was a heavy shortage of locomotives and wagons throughout the First and Second Plans. The Third Plan had to make sufficient provision for these."

"These factors were duly taken into account at the time of the Mid-term Appraisal of the Third Plan in November, 1963. For the revised traffic target of 245 million tonnes, therefore, the total requirement of wagons was re-assessed at 157,227, of which 136,288 were on additional account."

"Against the revised estimates mentioned above, the actual procurement of wagons was only 144,789 including 116,410 on additional account. In other words the effective procurement on additional account was 19,873 wagons less than the anticipated requirement against 245 million tonnes of traffic."

"It may be added that the entire 144,789 wagons were not available for use during the final year of the Third Plan as many as, 7,300 being added only in the last quarter of the last year of the Third Plan period. The effective availability, except in the last quarter of that year, was thus around 137,000 wagons."

"It was on account of all these factors that a peak level capacity of 225 million tonnes (in terms of wagons holdings) was estimated to have existed at the end of the Third Five Year Plan."

"As regards wagon turn-round, it will not be correct to say that the turn-round of wagons had increased entirely because of an increase in their number. A number of factors go into wagon turn-round, namely, increased leads of traffic, unplanned and changed patterns of movement specially that of foodgrains as in this case, interruption to movement of traffic due to agitations, bundhs and squatting on railway tracks, etc."

"As to the railways' not having achieved the turn-round of 9.5 days on the broad gauge and 6.5 days on the metre gauge during the Third Plan, these figures were never visualised as targets for full achievement. They were necessarily calculated as factors towards greater efficiency, built into the Railways' plans for expansion. By themselves, they were affected by longer leads in commodities like coal and raw materials for steel plants, coal for Railways, cement, mineral oils, foodgrains, etc. The changed patterns of traffic, particularly the emergency movement of foodgrains from ports and other distant areas to scarcity affected places in U.P. and Bihar not only increased the turn-round period of wagons but required long empty hauls in the interest of quick movement of foodgrains."

"A re-appraisal for the wagon requirement is now being made in connection with the preparation of the new Fourth Five Year Plan."

1.33. Audit have offered the following comments:

"The Third Plan target for procurement of wagons on additional account *viz.*, 90,447 wagons (in terms of 4 wheelers) was in relation to the additional capacity of 93 million tonnes of originating goods traffic (average number of wagons for 1 million tonnes. 972). The Ministry have stated that in the light of the considerations set out in para 2 of their note, these requirements had been reassessed at 1,36,283 wagons on additional account. It has, however, been stated that these revised requirements were in relation to the revised traffic target of 245 million tonnes. This is factually incorrect. As the Ministry are aware, this up-

ward revision in the wagon requirements was made by them in Jauuary, 1962 when the traffic target was put up from 249 million tonnes to 264 million tonnes. This is also borne out by the observations made in the mid-term appraisal that though traffic towards the end of the Third Plan was reckoned at only 245 million tonnes, the Railway Programmes themselves provided for capacities adequate for carrying 264 million tonnes."

"Thus, the revised requirements of 1,36,283 wagons was related to the incremental capacity of 108 million tonnes giving average wagon requirements of 1,262 wagons per 1 million tonnes of incremental capacity. Even on the basis of this revised norm the actual procurement of 1,16,410 wagons on additional account during the Third Plan should have generated a much larger capacity than the 69 million tonnes stated by the Ministry. It, therefore, appears that not only the initial requirements at the time of framing the plan did not take into account all the relevant factors into consideration, but also that the planned capacity as assessed on the basis of the revised requirements was larger than the 225 million tonnes stated by the Ministry."

"It is true that the wagon requirements may not admit of a very strict arithmetical equation with the capacities generated. It may also be true that the capacities in one sector cannot be transferred to another sector (*e.g.* where covered wagons are required one may not always be in a position to use box wagons). But very wide fluctuations in the requirements of wagons in relation to the traffic capacities would also not seem to be justified. It may be relevant to recall in this context that in a meeting with the Planning Commission on 27-1-62, the then Member (Transportation) stated that with 20,000 box wagons, it was hoped to move 50 million tonnes of coal to the major consumers in bulk loads. Thus, the requirement of wagons for moving 1 million tonnes of coal was 400 box wagons or 1,000 four wheelers. In the light of the above, to say that additional procurement of 1,16,410 four wheelers during the Third Plan generated an additional capacity of only 69 million tonnes (putting up the average requirements of wagons to move 1 million tonnes to 1,687 four wheelers), is not quite convincing."

"We are not aware whether the Ministry have made any detailed analysis to bear out their general conclusions on the non-achievement of targetted turn round. While the explanations given are plausible we do not know in what manner the Committee would like to satisfy themselves, in the absence of even a rough quantification, that the capacities sought to be generated through a certain public investment (delineated into physical components like wagons locomotives etc.) voted by the Parliament, have actually been generated and, if the capacities are not so generated with the reasons therefor."

Further Audit Comments

With reference to last year of Third Plan	Target of additional traffic	Procurement of wagons on additional account (in terms of four wheelers)	Average number of wagons for 1 million tonnes of originating goods traffic
	million tonnes		
Original 3rd Plan target .	93	90,447	972
Revised target (January, 1962)	108	1,36,283	1,262
Actuals	69	1,16,410	1,687

In other words the wagon requirements had gone up by more than 73 per cent although the average lead of traffic for all goods on the Broad Gauge was less than the average lead at the end of the Second Plan. The Audit observations tried to bring out this basic aspect of wagon requirements because the turn round itself is adversely affected by the availability of more wagons. Since the future wagon requirements will also be based on this inflated turn round of wagons it is possible that a vicious circle of deteriorating turn round and increasing wagon requirements is created, with the attendant financial consequences in terms of both capital outlay and working expenses. It would therefore, seem necessary that the wagon requirements are broadly related, in any manner that the Ministry may deem fit, to the quantum of traffic moved and such a wide variation as 73 per cent in the wagon requirements avoided."

1.34. In their reply dated 14-2-1969 the Ministry of Railways (Railway Board) have stated:

"The observations of the Committee are noted. The original Third Plan figure of 90,447 wagons (excluding 18,509 throw-forward from Second Plan) on additional account for a traffic target of 249 million tonnes was based upon an exercise conducted in 1961. When the traffic target was revised to 264 million tonnes in January, 1962, an extra 21,000 wagons on additional account were added based on the traffic trends at that time, without detailed calculations. Due to changed pattern of movement and increased leads of certain major commodities which had developed during the Third Plan and which also affected the turnround adversely, the basis adopted for assessing wagon requirements was found to be inadequate in relation to actual demand for traffic.

The figures of average lead as mentioned in the recommendation are derived from the movement of a large number of classification of commodities (149). The figures relating to major commodities are, however, indicated below:—

		(in Kms.) 1960-61	B.G. 1965-66
1.	Public Coal	645	546
2.	Coal for Railways	708	765
3.	Raw material for Steel Plants	N. A.	191
4.	Cement	345	418
5.	Mineral Oils	516	536
6.	Foodgrains	718	746
7.	Iron & Steel	681	811

It will be noted that although the average lead for all commodities has gone down, there has been an increase in the lead of some of the major commodities except in the case of public coal.

Taking note of the traffic trends during the Third Plan, it is proposed to further refine the method for working out the wagon requirements during the Fourth Plan. The wagon requirement for each major commodity will be worked out in detail in relation to its lead, empty haulage, lead per wagon, speed of goods train, etc."

1.35. The Committee are not happy to learn that wagons were purchased by Railways during the Third Plan "without detailed calculations". The estimation of wagon requirements 'on additional

account' included in the Third Plan was 108,956 wagons, based on a traffic target of 249 million tonnes. In January, 1962, when the traffic target was revised to 264 million tonnes, provision was made for the purchase of 21,000 more wagons, 'on additional account'. The actual number of wagons procured on 'additional account' was 116.410 or 13.546 wagons less than the estimated requirement for a traffic target of 264 million tonnes. Even if, as stated by the Railway Board, this estimate was not based on detailed calculations, it would appear that the additional procurement should have created a capacity more than the peak level capacity of 225 million tonnes estimated by Railways as having existed at the end of the Third Five Year Plan. Considering, moreover, that the originating goods traffic moved in the last year of the Third Plan was only 203 million tonnes, it is evident that there was ample surplus wagon capacity with the Railways at the end of the Third Plan. Now that an appraisal of wagon requirements is being made for the Fourth Plan, the Committee would like to impress on the Railways and the Planning Commission the need to arrive at a reliable assessment of wagon capacity created, taking into account the change in pattern of movements and in the leads mentioned by the Railways, so that the acquisition of wagons on additional account is based on dependable estimates of surplus wagon capicty already existing.

1.36. **The Committee are surprised by the explanation of the Railways that the 'turn-round' of 9.5 days on Broad Gauge and 6.5 days on Metre Gauge envisaged in the Third Plan "were never visualised as targets for full achievement". If, as stated by the Railways, they were "built into the Railways' plan for expansion", they were necessarily visualised as goals capable of realisation. While planning the acquisition of extra wagons during the Fourth Plan, the Committee would like both the Railways and the Planning Commission to examine how far the existing 'turn round' leaves scope for improvement, so that fuller use is made of the existing wagon stock before making further capital investment.**

Utilisation of wagons—Para 3.20 *(S. No.* 27)

1.37. In para 3.20, the Committee made the following observations:—

> "Now that the Railways have a surplus capacity and are looking for traffic, the Committee feel that it should be possible to meet the consumers' requirements of wagons in less than a week of the registration of the demand."

1.38. In their reply dated the 19th September, 1968, the Ministry of Railways have stated:

> "The Railways' capacity for clearance of traffic is determined by several factors, of which the most important is the line

capacity for goods traffic. The existing surplus transport capacity relates to capacities created for movement of raw material including coal for Steel Plants, finished products of Steel Plants and export ore. The movement capacities developed for these items of traffic cannot be transferred to other sectors, and as such this surplus capacity is not available for meeting the demands of other users of rail transport."

(2) "It should be possible for the Railways to meet the consumers' requirements of wagons in less than a week of the registration of the demands provided the patterns of traffic offerings conform to movement capacities developed on each of the Zonal Railways, and there are no setbacks in Railway operation on account of uncontrollable factors, such as civil disturbances, labour strikes, floods, labour shortage at transhipment and unloading points, etc. Further, the overall transport capacity available on the Railway has to be seen in relation to the overall demand: it is not equally available for full application at all points of requirement at all times. In the circumstances, there will always be some delay in regard to clearance of demands submitted in excess of loading and movement capacities during the busy season."

(3) "The Railways accept indents from consumers regardless of the physical loading capacities available at the loading points. There is consequently scope for bulk registration of demands which may exceed the daily loading potential at certain loading points to such an extent that the demands cannot be cleared within a week of the registration despite full utilisation of the daily loading potential. Delays also occur whenever restrictions are imposed on the loading of traffic for particular destinations or routes to suit dislocations and setbacks in Railways operation caused by various factors, some of which are beyond the control of the Railways as mentioned above.

(4) "A special watch is being kept by the Railway Board and Zonal Railways on the clearance of outstanding registrations, and every effort is being made to meet the consumers' requirements of wagons in less than a week of the registration of the demands."

1.39. While the Committee appreciate that some times there might be delay in the allotment of wagons due to unavoidable circumstances, they feel that with the surplus capacity available with the

Railways, it should be possible to meet the consumers' requirements of wagons in less than a week of the registration of the demand. The Committee suggest that the Ministry of Railways should make a public declaration that wagons would be made available, save in exceptional circumstances, within a prescribed period. This would not only dispel any lingering suspicion that there are still some malpractices in the matter of allotment of wagons but also help to build an image of Railways as a consumer-oriented service.

Economics of hauling POL by longer route on Metre Gauge vis-a-vis *shorter route on Broad Gauge—Para* 3.26 (*S. No.* 29).

1.40. In paras 3.21 to 3.23, the Committee had commented on the surplus M.G. oil tank wagons with the Railways. The Committee had pointed out how the surplus was *inter-alia* caused by the Railways' policy of procurement of these wagons even after the commissioning of the Gauhati-Siliguri pipeline. In this connection they had made the following observations:

> "The Committee are not satisfied with this explanation. As stated in the note furnished by the Ministry the number of M.G. oil tank wagons on the Railways on the 1st April, 1961 to 1964 were as under:—
>
> | | |
> |---|---|
> | 1-4-1961 | 2,567 |
> | 1-4-1962 | 3,247 |
> | 1-4-1963 | 4,086 |
> | 1-4-1964 | 4,230 |
>
> This clearly shows that about one thousand Metre Gauge wagons were added after 1st April, 1962, even though the Ministry of Railways became aware of the proposal for the construction of the pipeline between Gauhati and Siliguri. Had the Ministry curtailed their orders for oil tank wagons expenditure on the procurement of wagons in excess of requirements would have been avoided."

1.41. **The Committee were informed that steps had been taken to absorb the surplus Metre Gauge Oil Tank wagons by moving traffic meant for points in Northern India by all Metre Gauge Route instead of the shorter Broad Gauge—Broad Gauge route by offering some freight concessions to the Indian Oil Corporation.**

In para 3.26, the Committee made the following observations:

"The Committee would like Government to examine the question of relative economics of hauling POL by the longer route on Metre Gauge *vis-a-vis* the shorter route on Broad Gauge so as to adopt the most economic path consistent with operational requirements."

1.42 In their reply dated 27-9-1968, the Ministry of Railways have stated:

"In 1966-67 about 31,000 tonnes of POL products loaded in 1218 bogies tank wagons (or 2436 four-wheeler tank wagons) moved from Barauni and New Jalpaiguri to Shakurbasti by the all metre gauge route. As indicated earlier in this Ministry's reply, the B.G. tank wagon fleet was inadequate to meet the entire demand for movement of POL on the broad gauge including this movement, while there was enough capacity for this movement along the all metre gauge route. Had this traffic not been carried by the metre gauge route of the Railways, it would have been diverted to the road, and this would have meant a higher cost to the economy, as the quotations below will indicate:—

(i) "The figures demonstrate that trucks even of higher capacity on good roads show a higher cost than rail except when the haul is less than 200 kilometres. However, the favourable trucking costs below 200 kilometres cannot be attained until there is a vast improvement in the condition of the highways near the collieries and on the main routes and until trucks of far greater capacity than those now in use in India are produced. Moreover, the trucking costs do not include any capital charges for improvements in highways. For the foreseeable future, therefore, it is indicated that the costs of the rail movement of coal will be below those by highways."

". . . If the ultimate destination of the coal is a local station served only by shunting goods trains, the cost would be somewhat higher and, if the coal were delivered at a station served only by metre gauge, the cost would be further increased. Nevertheless, there is no indication that even these costs, except for short dis-

tances, would be higher for the rail movement than those by the most efficient type of truck conditions."

(Report of World Bank Study Team on Coal Transport)

(ii) "It will be seen that road transport costs for a 13-tonne tractor-trainer are higher than rail costs for bulk movement at and above 100 kilometres on both broad and metre gauges. For light merchandise, costs of road transport in 8-tonne trucks are lower than cost of haulage of light merchandise by rail up to a distance of about 50 kilometres on the broad gauge and up to about 100 kilometres on the metre gauge."

(Report of the Committee on Transport Policy & Coordination)

"The all-in cost of rail transport, whether on the metre gauge or on the broad gauge, depends upon a variety of factors, which include type of wagon, loadability, empty return ratio, type of traction, density of traffic, extent of their capacity available and other operating conditions. These factors, particularly the last, do not operate identically on all sections even on the same gauge and sometimes not even at all times the same gauge and sometimes not even at all times on the same section. With reference to this particular recommendation of the P.A.C., however, direct costs of the movement of 31,000 tonnes of POL by the broad gauge route and by the metre gauge-*cum*-broad gauge route have been worked out, which include terminal costs at both ends, marshalling and engine changing cost *en route*, the cost of fuel and lubricants, the cost of loco crew and train staff, the cost of repairs and maintenance of engines and wagons and interest and depreciation on locomotives and tank wagons, but exclude the cost of provision of track and signalling, which latter are a 'Sunk' cost so far as this particular movement is concerned. It is estimated that direct costs of the broad gauge and metre-*cum*-broad gauge movement would have been about 81% of the all-metre gauge direct costs. But the revenue earned by the longer all-metre gauge route was higher even after allowing for the concession on this traffic. If this element also is taken into account as a deduction from the all-metre gauge route costs, the broad gauge cost would be about 5 % lower than the all metre gauge costs."

"The rates actually charged by the all metre gauge route not only fully covered the direct costs but left a substantial contribution towards overheads and profit."

1.43. Audit have offered the following comments:

"It is seen from the details of comparative cost of haulage that the cost of returning the empties has been worked out on the basis of tare weight of the empty wagons. This is not correct as the number of wagons carried by a goods train is limited by the hauling capacity of the locomotives to about 55 wagons on both the B.G. and M.G. Sections, further limited by the length of the loops in each section and the average speed of the goods trains on the B.G. & M.G. Sections. On this basis the return of empties on the B.G. to base station requires considerably less number of goods trains than the return of empty bogies on the M.G. The cost of haulage of empties may, therefore, be worked out after ascertaining the extent of the limitations referred to above."

1.44. The Committee see force in the view of Audit that return of empties from broad gauge to base stations requires considerably fewer goods trains than the return of empty bogies on metre gauge. The Committee desire that the relative economics of hauling POL by the longer route on Metre Gauge vis-a-vis the shorter route on Broad Gauge may be reexamined, so that the more economic course consistant with operational requirements is adopted.

Loss incurred on Southern Railways—Para 4.20 (*S. No.* 37).

1.45. The net loss in the working of the Southern Railway increased from Rs. 1.2 crores in 1960-61 to 6.4 crores in 1965-66. The loss in 1966-67 was expected to increase further to Rs. 10.82 crores. The Committee made the following observations in para 4.20:—

"The Committee desire that special attention should be directed towards improving the financial position of the Southern Railway by effecting economy, improving efficiency and by attracting more traffic. They would watch the result of the working of this Railway in subsequent Audit Reports."

1.46. In their reply, the Ministry of Railways stated :—

"Noted. Efforts are continuously being made to improve the financial position of the Southern Railway (as well as other Railways) by various measures of economy in expenditure and by attracting additional traffic."

1.47. At the instance of the Committee, the Ministry of Railways furnished the following further information :

"(i) Economy measures are being enforced on Southern (as well as other Railways) in respect of all items of expenditure (capital, revenue and other heads). Reduction in expenditure on staff is being pursued with vigour. The ban imposed on creation of posts and filling up of posts in administrative offices at all levels is being observed."

"Efforts are being made to secure more traffic by improving the quality of service offered, for instance, in the matter of adequate and timely supply of wagons, speeding up transit and ensuring safe transit. A Marketing and Sales Organisation is making vigorous efforts to keep in closer touch with and meet as far as possible the specific needs of rail users, in order to retain existing traffic and also capture additional traffic."

"Some of the specific steps taken during the last two years to make rail transport more attractive are indicated below :

(1) Quotation of special station to station rates for the movement of cotton yarn from Madurai, Coimbatore, Salem and Bangalore to Wadi Bunder (Bombay) and from Madurai to Tuticorin.

(2) A special rate for turmeric from Cuddapah to Shalimar is being quoted.

(3) Reduction of the tariff minimum weight from 90 quintals to 80 quintals for coconuts moving in four-wheeled wagons on Metre Gauge.

(4) The minimum weight condition for motor tyres was lowered from W 100 B. G. to W 85 B. G. from 16-6-1968. With effect from 20-8-1968, it has been altered to W/90 B.B.

(5) Introduction of a tri-weekly Super-Express Goods train service between Madras and Shalimar (Calcutta) reaching the destination on the fifth day. Groundnut Oil traffic moving in large quantities by sea was canvassed for movement by this service and considerable success has been achieved. Similar Super-Express Trains have been introduced between Madras and Bombay and Madras and New Delhi, reaching their destination in five and seven days respectively.

(6) A scheme for 'Overnight' delivery of non-perishable parcels has been introduced between 11 pairs of points on the Southern Railway.

(7) New City Booking Offices have been opened in newly developed industrial estates.

(8) In order to attract tea traffic, an Out-Agency has been opened at Coonoor.

(9) To cater for traffic in motorf-cars|chassis between Madras and Calcutta, coaching specials are being run at regular intervals and frequent contacts maintained with the manufacturers of motor cars and chassis.

(10) 18 Quick Transit Services have been introduced to various destinations to capture additional traffic.

(11) A quick Transit Service has been introduced for the traffic in ground-nuts moving to Bombay from Guntakal Division.

(12) Special arrangements have been made to move vege- parcel van on the Brindavan Express by putting a parcel van on the Brindavan Express, by which parcels booked up to 13 hours at Bangalore are made available for delivery at Madras on the same day."

(ii) The current financial position is as under:—

	1967-68 : Actuals*
	(In thousands of rupees)
Gross Traffic Receipts	76,30.66
Ordinary Working Expenses	64,41,49
Appropriation to Depreciation Reserve Fund	9,94.90
Appropriation to Pension Fund	94.73
Net Miscellaneous Expenditure	1,49,26
Net Revenue	49,72
Dividend to General Revenues	15,16.25
Net Loss	(—)15,65,96
Ratio of Ordinary Working Expenses to Gross Traffic Receipts	98·70 %

*The figures have been furnished by Audit.

1.48. The Committee are distressed to note that in spite of various measures taken during the last two years to make rail transport more attractive on the Southern Railway, the loss during the year 1967-68 has increased to Rs. 15.66 crores from Rs. 10.32 crores in 1966-67. The Committee desire that the Ministry of Railways should examine what further steps should be taken to improve the financial working of the Southern Railways by attracting additional traffic and by effecting apropriate economies in expenditure. The Committee would like to watch the working of this Railway through future Audit Reports.

Manufacture of electric traction equipment and crank shafts required for diesel locomotives—Para **5.37** *(S. No.* **46**).

1.49. The Heavy Electricals, Bhopal undertook in July, 1962 to supply a good portion of the traction equipment including traction motors, generators and control equipment required for diesel locomotives the manufacture of which was undertaken at the Diesel Locomotive Works, Varanasi. The equipment to be supplied constituted 30 per cent of the total cost of locomotive. A letter of intent was issued to them in September, 1962 for supply of 120 sets of complete traction equipment during 1964-65 and 1965-66. Actually, however, no deliveries had been made till March, 1966.

1.50. The Heavy Engineering Corporation, Ranchi informed the Ministry of Railways in July, 1962 that they could manufacture crank shafts and later, in July, 1964 they also stated that they had sufficient capacity for producing heavy and medium size crank shafts to meet the entire demand of Diesel Locomotive Works. No crank shafts were, however, actually manufactured by the Heavy Engineering Corporation. It was decided in August, 1965 that the requirements in this respect would be imported. In paragraph 5.37, the Committee made the following observations:

> "The Committee are not impressed with the leisurely manner in which the Public Undertakings, particularly the Heavy Electricals, Bhopal and the Heavy Engineering Corporation have proceeded in developing indigenous manufacture of traction motors and crank shafts respectively.
>
> The Committee consider that the Heavy Electricals and the Heavy Engineering Corporation should accelerate their programme for indigenous manufacture of these vital components and parts to as fully to meet the production requirements of the Diesel Locomotive Works."

1.51. In their reply dated 27-9-1968, the Ministry of Railways have stated as follows:

> "The rate of production of electric traction equipment by Heavy Electricals India Ltd. for Diesel Electric Locos still falls short of actual requirement and further action is being taken to increase the rate and also to improve the quality of the equipment."
>
> "It was as far as July, 1962 that Heavy Engineering Corporation, Ranchi was contacted to undertake manufacture of crank shafts for the diesel locomotives. As desired by the Corporation, an educational order for ten crank shafts has been placed in January, 1966. Supplies have not yet commenced. The price to be paid will be finalised at a high level meeting as soon as Heavy Engineering Corporation finalise their collaboration with a suitable party."

1.52 At the instance of the Committee, the Ministry of Railways have furnished the following further information regarding manufacture of electric traction equipment for Diesel Locomotives:

> "The manufacture of diesel electric locomotives was taken up indigenously at Diesel Locomotive Works, Varanasi during the year 1963-64. This first locomotive which was assembled from knocked down assemblies received from U.S.A. was turned out on 3rd January, 1964. The indigenous manufacture of diesel locomotives was concurrently commenced and the first locomotive with indigenously built chasis super structures and piping system was turned out in July, 1964."
>
> "In the initial stages of production of diesel electric locomotives at DLW, consideration was given to obtaining the electric traction equipments from HEIL, Bhopal and a letter of intent was placed on HEIL for 120 sets of complete traction equipment as far back as September, 1962.
>
> However, for several reasons *viz.* the time required for finalising the design for the electrical equipment, considerable delay in the procurement of imported machinery and raw-materials and delays on the part of HEIL suppliers in supplying tools and components according to schedule, the final programme of manufacture of traction equipment for diesel electric locos by HEIL could only be finalised by March, 65. In view of this the Railways had made arrangements for meeting their requirements of electric traction

equipment for their anticipated production of diesel electric locos upto March, 67 by importation. On this basis 121 sets of electric traction equipment were ordered by import in various batches depending on the availability of foreign exchange, including the 12 Nos. in the knocked-down locomotives."

"The production programme of the Railways, the supplies proposed to be made by HEIL as indicated in March, 65 and the actual deliveries during the various periods from 1966-67 onwards are indicated in Appendix VI."

"These anticipations were, however, changed on a number of occasions based on the progress made by HEIL/Bhopal and these are indicated in Appendix VII."

"In August 1966, the Railway Board when considering the import of various components for production of 100 locos beyond March, 67 were advised by HEIL/Bhopal that the following supplies of traction equipment were expected to be made by them in 1966-67 and 1967-68:

1966-67 . .	21 sets (supplies commencing from Sept., 66)
1967-68 . . .	50 ,,
	71 ,,

"Taking into account the fact that HEIL had not yet supplied the equipment and the likely teething troubles in developing the production in the initial stages, it was considered necessary to import additional sets to keep up the production programme of diesel locos. It was also observed that as per the schedule of supplies promised in March, 65, HEIL would only be able to supply 116 sets by March, 69 subject to the development progressing satisfactorily, whereas the requirements for production upto March, 69 and for inprocess requirements of 6 months would be as under:

1967-68 . . .	66
1968-69 . . .	68
In process requirements .	36
	170
Less No. of sets available from earlier orders . .	5
Total .	165

"On this basis it was decided to import 60 sets of equipments to match the production programme upto March, 1969."

"Again in a subsequent review in December, 66, taking into account the progress made by HEIL/Bhopal it was considered necessary to import 30 more sets. This course of action proved to be prudent as confirmed later on because the actual deliveries materialised by HEIL during 1966-67 and 1967-68 were only 7 and 24 respectively. Against the total promise of 71 sets by March, 68, the actual delivery was only 31 sets."

"For the diesel loco production in 1968-69, DLW has to depend on the supply of electrical equipments from HEIL which have become the major constraint to determine the out-turn from DLW. Taking into account the capacity of HEIL for the manufacture of the various equipments for Railways, the following supplies have been promised in the years 1968-69 to 1970-71:

1968-69	44
1969-70	72
1970-71	72

"The above delivery of equipments will generally meet the production programme of the Railways but based on the past experience of supply it may be necessary to import a few more sets to keep up the production programme. The position is being watched carefully and necessary action will be taken as considered justified."

"It can be said that based on the production programme of the Railways and the anticipations of supply by HEIL/ Bhopal the import of 30 sets at a cost of 0.25 million U.S. Dollars is attributable to the shortfall of supplies from HEIL/Bhopal and for keeping the out-turn from DLW."

"The reasons for the shortfalls in the supplies from HEIL are as follows:—

(i) Traction equipment is a very sophisticated product made for the first time in India and the skills and techniques take a long time to develop;

(ii) Before the Diesel Loco orders were received, HEIL had already committed to supply AC&DC EMU equipment for the railways. This additional load at the initial stage had put some pressure on the available manufacturing capacity.

(iii) In the initial stages substantial quantities of components had to be imported from the Consultants' firm in U.K. and deliveries were often delayed.

(iv) As indigenous substitutes were introduced, the establishment of proper quality control caused certain delays due to inferior standards and subsequent rejection.

(v) Timely availability of foreign exchange to meet the production plans to HEIL.

(vi) Situations like Suez incident etc. have interrupted the flow of components and raw materials during such periods and reduced production."

2. "The above difficulties are gradually being overcome but they exist to some extent in one form or other. There has been a set back in the promised delivery in the first eight months of this year due to failure of supplies from indigenous sources for special types of castings on account of strikes and shut down in some of the concerned firms in Calcutta, Madras and Delhi areas. Actually over 90 per cent of the manufacture of the equipment are completed and lying in the shops awaiting such residual items for which alternative arrangements are being made. The following further steps are being taken to ensure regular delivery of equipment in future:—

(i) Some of the components have been redesigned to suit indigenous suppliers and two or three suppliers for each item are being developed and orders placed on them. For example Heavy Steel Castings are being ordered on four firms and small control-gear castings on two firms as well as on foreign suppliers as measure of ensurance until Indian suppliers are fully established.

It is hoped that substantial improvement in the delivery of completed equipment, would be made in the remaining four months."

1.53. In the reply dated 27-9-1968 the Department of Industrial Development have stated:

"The rate of production agreed with the Railways for Diesel Loco Traction equipment has, by and large, been established by Heavy Electricals (India) Limited excepting for controlgear. Indigenous sources for certain castings for this controlgear were developed but the supply is very inadequate and irregular.

The main reasons for delay in developing the capacity to produce crankshafts by Heavy Engineering Corporation Ltd. were as under:—

(1) Even though enquiry from D.L.W. was received in July, 1962, the Heavy Engineering Corporation Limited were in the early stages of construction and the necessary forging and machining capacities were only being established. In response to the enquiry it was made clear as early as February, 1968 that forgings could be delivered earlier than 1967.

(2) There was protracted correspondence between the company and D.L.W. before a mutually acceptable forging technology could be agreed upon.

(3) Even after a particular process of forging was accepted in principle by D.L.W. there was further correspondence regarding various technical aspects of the process.

(4) The collaboration agreement could not, in any case, be finalised until there was a firm commitment by the D.L.W. to purchase the crankshafts produced by Heavy Engineering Corporation Limited by the particular process.

(5) Even after the signing of the Collaboration Agreement with the foreign firm, it is estimated it will take another five years to (i) import necessary forging and special purpose equipment after going through the usual formalities (ii) to erect the equipment etc. (iii) to complete the necessary civil construction works and (iv) to produce and delivery the first lot of crankshafts to the D.L.W. Varanasi."

1.54. The Department of Industrial Development have also furnished a note stating the position regarding manufacture of traction equipment by the Heavy Electricals Limited, Bhopal and crankshafts by the Heavy Engineering Corporation.

"1. The supply position in respect of castings and forgings has been very unsatisfactory and the production in Heavy Electricals (India) Ltd., has been seriously dislocated on this account in the past. The following steps have been taken to improve the supplies:

1.1. In the case of AC EMU motors, the forgings required for the commutator hub and end plate were not available

indigenously of the required quality. Hence the components were redesigned as a casting and orders have been placed on more than one casting supplier.

1.2. In the case of machines for both AC EMU and Diesel Loco, the steel castings for the frames have been ordered on three or four indigenous suppliers so that, in the event of failure, either in respect of quality or quantity, of one supplier, there is a reasonable chance of some supply from the other suppliers.

1.3. For certain controlgear castings, orders have been placed on 3 or 4 indigenous firms, and parallel action has also been taken to import them in order to offset the set back in production due to failure of Indian suppliers experienced in the past. H.E. (I).L. are also redesigning some components as a fabrication, though this design will be more expensive."

"2. With greater experience in respect of procurement and production problems, the Corporation are now in a much better position to foresee the problems and take timely corrective action."

"3. Besides, the production capacity is being augmented in respect of motors and generators through an expansion scheme sanctioned by the Government in May, 1967. The scheme is being implemented in phases and the first phase has been sanctioned for Rs. 90 lakhs capital expenditure. Against the first phase, 60 per cent of the factory buildings have been completed and 25 per cent, in terms of value, of plant and machinery has been ordered and the rest are being processed."

"4. It should be mentioned here that certain delays have been experienced by H.E. (I). L. Bhopal in the placement of firm order and release of the required foreign exchange by the Railways. It is obvious that the Company's capacity to effect timely delivery of equipment will be affected by such delays and it is hoped that Railways would take steps to obviate this."

"5. The prospects of supply of electrical equipment required by production units of Indian Railways were discussed at a meeting in Bhopal attended by the representatives of

H.E.(I)L., Bhopal, Railways and the Ministry of I.D.& C.A. and the following position emerged:—

Rotating Machine: Rate of manufacture of the Rotating Machines would be the governing factor for the output of Traction Equipment for AC-DC and Diesel and Electric Locomotives. The following is the yearly planning for build up of capacity of the Rotating Machines Division of Heavy Electricals (India) Ltd.:—

1968-69	750 machines
1969-70	1050 machines
1970-71	1400 machines

"The maximum capacity as planned at present would be 1400 and Heavy Electricals (India) Ltd., have no further plans of expansion at present. If the Railway Board require this capacity to be increased further, the long term assessments of Railways' requirements are to be indicated. The Railways have expressed that the Fourth Plan (1969-70 to 1973-74) was under finalisation and as soon as this is done, Heavy Electricals (India) Ltd. will be advised the extent of future requirements beyond 1970-71. Heavy Electricals (India) Ltd. are of the opinion that if any reasonable assessment can be made even beyond this period, it would help them to ensure that the manufacturing load are sustained."

"Expected delivery from the Heavy Electricals (India) Ltd., would be as under:—

Anticipated supplies in 1968-69:

B.G. Disesel Loco . .	44 sets equivalent to	396	rotating machines
MG Diesel Loco . .	5 sets equivalent to	45	,, ,,
	10 traction motors sets equivalent to	60	,, ,,
AC EMUs . . .	30 sets equivalent to	120	,, ,,
DC EMUs . . .	30 sets equivalent to	150	,, ,,
TOTAL		771	,, ,,

"With regard to the BG diesel sets, Heavy Electricals (India) Ltd., stated that the shortfalls in supplies had been due to certain difficulties experienced in regard to the higher temperature rise obtained during testing of traction generator and failure of supplies of malleable iron castings for the control gear equipment."

"With regard to the AC EMUs, Heavy Electricals (India) Ltd. was not able to exceed the rate of 2.5 sets per month in view of the limitation of the overall capacity of the Rotating Machines Section. Besides, Heavy Electricals (India Ltd., have also experienced difficulties in procuring traction motor magnet frame castings of suitable quality. Another items on which the supply is not satisfactory are tinned, Phosphor, Bronze, Bearing. These have been ordered on Bhopal and Indian Standard Metals, Bombay. With regard to supply of Electrical equipment for MG Diesel Locomotives, 21 traction motors are ready but test on the proto-type have shown the need to modify the air gaps to obtain the design performance characteristics."

"Heavy Electricals (India) Ltd., will be able to complete the order for during the year 1968-69. Heavy Electricals (India) Ltd., is also ahead of schedule as M/s. Jessops did not lift the equipment due to a hold up in productions at their works."

Anticipated supplies in 1969-70:

BG Diesel Loco	72 sets equivalent to	648 rotating machines
MG Diesel Loco	15 sets equivalent to	135 rotating machines
	5 traction motor sets equivalent to rotating machines.	30
AC EMUs	44 sets equivalent to	176 rotating machines
DC EMUs	Nil.	
DC Locos	13 sets equivalent to	78 rotating machines
		1067 rotating machines

"For the BG Diesels, Heavy Electricals (India) Ltd., are likely to supply 72 sets as required by DLW but with regard to the MG Diesel they would be in a position to supply only 15 sets as against 30 required by DLW. In other words there would be a shortfall of 15 MG Diesel sets and alternative arrangements would have to be made by the Railways."

"Regarding the time required for ordering materials and processing etc., is 18 to 24 months and hence it would not be possible for the company to supply any DC EMU equipment until the latter part of 1970. No letters of intent from Jessop and ICF have as yet been received. Heavy Electricals (India) Ltd., have also promised to find out from the A.E.I. of U.K., that they would be able to make any supply of DC equipment in the meanwhile and if so what would be the delivery and foreign exchange requirements."

"With regard to DC Locos, the delivery is likely to commence with one proto-type set in July-August, 1969. However, from controlgear items may be supplied to DLW earlier to enable them to sort out mounting and wiring problems on a 'Nock-up'."

Anticipated supplies in 1970-71:

BG Diesel Loco	72 sets equivalent to	648 rotating machines
MG Diesel Loco	40 sets equivalent to	360 rotating machines
AC EMUs	27 sets equivalent to	108 rotating machines
DC EMUs	45 sets equivalent to	225 rotating machines
DC Locos	14 sets equivalent to	84 rotating machines
TOTAL		1425

"In this year also the supplies of MG Diesel sets would be only 40 against the requirement of 50 by DLW. There will thus be a cumulative shortfall of 25 complete sets of MG Locos, without taking into account another 5 sets to cater for the inprocess requirements.

AC Locomotive Transformers: During 1968-69. Heavy Electricals (India) Ltd., expected to supply the transformers at the rate of the 4 per month making a total of 48 numbers. This rate would be stepped up to 6 transformers per month during 1969-70 and maintained at that level provided there is no change in the design of transformer. Heavy Electricals (India) Ltd., have pointed out that tap changers from M/s. Hindustan Brown Boverie have been delayed and two transformers held from this account. The company have taken up the matter with the M/s. Hindustan Brown Boverie who said that ins-

pection by Director of Inspection was the main cause of delay. Railway Board also took up the matter with M/s. Hindustan Brown Boverie."

"*B.G. Diesel sets*: The deliveries in respect of BG Loco sets can be met only if existing design of traction generator is continued up to 195th set as proposed by DLW. This will enable HEIL to import 25 numbers of armatures per traction generator. Previously it had been to change the design beyond 135 numbers. The matter has been referred to DLW. Delivery also depend on immediate release of foreign exchange for 60 sets and 25 armatures."

"*MG Diesel sets*: In respect of MG Locos it is possible to achieve a target only if it is decided to continue the existing design of the generators (TG 10919 AZ) with suitable modification in the associated control-gear to derive the extra directive effort. This arrangement will be held at least up to 60th set. If it is decided to change-over a new generator design for example TG 10919 BY or 5302, it will become difficult to adhere to the target indicated. This matter has been referred to the RDSO and DLW for a decision. It is essential to arrive at an early dicision on this."

"*AC EMUs*: Considering that orders on foreign exchange in respect of 27 AC EMUs have not been released deliveries of these can be commenced only from September-October, 1970. It is essential that the order is placed immediately and the necessary foreign exchange released."

Existing Orders

"(i) *BG Diesel Loco Equipments*: At present there are two orders of 120 and 100 loco sets respectively. These orders would cover the production upto end of 1970-71."

"(ii) *MG Diesel Loco Equipment*: At present there are two orders, *viz.* first for 20 complete sets and 15 motor sets and the second for 20 complete sets. In order to cover the production upto 1970-71 a further order for 20 complete sets is required to be released on HEIL."

"(iii) 25 *KV AC EMU Equipment*: At present there are two orders of 70 and 63 sets each. Both the orders would be completed by March 1970. HEIL stated that the next order for 27 sets to be delivered during 1970-71 should be released by ICF immediately to enable HEIL to initiate procurement of material etc., well in time."

"(iv) 1500 *VDC EMU Equipment*: The present order is for 42 sets and this is expected to be completed during 1968-69. DEE/Railway Board requested M/s. HEIL to arrange the supply of at least one more set by March 1969 to replace the set diverted to ICF for building a portotype. In order to meet the commitments of 45 sets in 1970-71. M/s. HEIL indicated that orders for 58 (55 plus 3) and 47 (45 plus 2) sets should be released immediately by M/s. Jessops and ICF respectively."

"(v) 1500 *V DC Locomotives*: The present order is for 27 sets only. This order would be completed by the end of 1970-71. HEIL requested that the order for remaining 30 sets be also placed immediately by CLW."

"Summing up, the following orders require to be placed on HEIL by various production units:

DLW MG Diesel Loco Equipment	20 complete sets
ICF AC EMU Equipment	27 sets
DCEMU Equipment	47 sets
Jessops DC EMU Equipment	58 sets
CLW DC Loco Equipment	30 sets

"*Foreign Exchange*: M/s. HEIL stated that in order to meet the production targets, foreign exchange should be released along with the new orders. As regards the existing orders foreign exchange for balance 60 sets of BG Diesel Electric Locos is also required to be released early."

"*Requirements*: The anticipated requirements of crankshafts in the coming 2 or 3 years are estimated to be as under:—

BG	100 Nos. per year
M.G.	50 Nos. per year
Maintenance	20 Nos. per year
TOTAL	170 Nos.

"*Source of supply*: At present the requirements are being met entirely by imports. The number of crankshafts utilised during the past three years was as under:—

	BG.	M.G.
1966-67	55	..
1967-68	66	..
1968-69	84	(20 Estimated)"

"*Imported cost of the crankshafts*: The cost of one imported crankshaft is shown below:—

Broad Gauge	$8,800
Metre Gauge	$4,785

It may be pointed out that although Railways obtain their requirements of finished crakshafts through Overseas Diesel Corporation. U.S.A. at the price indicated above, the international price of such crankshafts is likely to be much lower. Since HEC Ranchi proposes to collaborate with CAFL which is a French and not an American firm, the price to be quoted by H.E.C. should compare favourably with the price if CAFL were to quote directly to D.L.W."

"*Indigenous development of the Crankshafts*: On the 4th July, 1962 an enquiry was received from the DLW asking whether HEC would be in a position to undertake forging and machining of crankshafts for diesel locomotives. Even though the enquiry from D.L.W. was received in July, 1962 when the plants of HEC were in the early stages of construction and the necessary forging and machining capacities were only being established, it was made clear to them as early as February, 63 that forging could not be delivered earlier than 1967."

"(2) There was protracted correspondence between HEC and DLW before mutually acceptable forging technology could be agreed upon."

"(3) Even after the R.R. process of forging was accepted in principle by DLW there was further correspondence regarding various technical aspects of the process."

"(4) Though approval to the scheme of manufacture of crankshaft in HEC in principle was given in June, 1967, the collaboration agreement could not, in any case, be finalised until there was a firm commitment by the DLW to purchase the crankshafts produced by H.E.C. by the R.R. process."

"(5) Even after the signing of the collaboration agreement with the French firm, it is estimated that it will take another 5 years (i) to import necessary forging and special purpose equipment after going through the usual formalities (ii) to erect the equipment etc. (iii) to complete the necessary civil construction works and (iv) to produce and deliver the first lot of crankshafts to DLW, Varanasi."

"(6) A team of officers along with the General Manager, Foundry Force Project of Heavy Engineering Corporation Limited had visited DLW Varanasi in September, 1968 and after mutual discussions the figures relating to quantity of annual requirement and price per piece were agreed to. It was learnt that the total annual requirement of D.L.W. Varanasi would be to a tune of 150 crankshafts per year. This includes the demand of metre gauge crankshafts also. It was also confirmed that this assessment of the annual requirement is made on the basis of next five years estimated needs."

HEC have planned the following delivery schedules:—

1972-73	66
1973-74	98
1974-75	150

"The price agreed by D.L.W. Varanasi is Rs. 75,000 per piece for first lot of 150 crankshafts. The placement of firm order from Railway is awaited pending the final approval for the same from Railway Board (at present it is only indicative). Regarding the finalisation of the terms for collaboration with CAFL France the offer submitted by

the firm has been scrutinised and certain matters regarding commercial and legal aspects are yet to be sorted out. HEC have already taken up these matters with the firm. If their team is unable to visit HEC as requested it will be necessary to send a team of company's officers to France who may not only finalise the agreement but also study the actual performance of special purpose equipment to be selected for this project. HEC are taking all steps to finalize the agreement terms with CAFL as early as possible so as to ensure delivery of crankshafts on the dates promised to Railways."

1.55. The Committee are disappointed with the performance of Heavy Electricals in the matter of supply of traction equipment to the Railways for the manufacture of diesel locomotives. 31 sets of equipment were promised in 1966-67, against which the actual deliveries were 7: in 1967-68, the supply was 24, against 35 promised. Under such circumstances, the Railways had inevitably to resort to imports on a scale larger than originally planned. The Committee note that deliveries of equipment by Heavy Electricals were affected by the delays in procurement of imported machinery and raw materials needed for the production of equipment, apart from the difficulty in getting acceptable steel castings from indigenous suppliers for frames and control gear. For the delays in import of machinery and raw materials, the Railways have their share of responsibility, as the Committee understand from the information supplied to it by the Ministry of Industrial Development, that the clearance for the requisite foreign exchange needed by Heavy Electricals was not given by the Railways in time. As regards castings, the Committee note that the Corporation "are now in a much better position to foresee the problems and take timely corrective action." The Committee hope that, with the experience now gained, it would be possible for Heavy Electricals to adhere to their promises of stepping up supplies of equipment from 44 in 1968-69 to 72 in 1970-71.

1.56. The Committee note that in regard to crankshafts required for locomotives, the scheme for progressive substitution of imports by supplies from Heavy Engineering Corporation, Ranchi, did not materialise in time due to "protracted correspondence between Heavy Engineering Corporation and Diesel Locomotive Works before a mutually acceptable forging technology could be agreed upon." The Committee note that the scheme for indigenous manufacture has been agreed to by the Railways "in principle" and that the Heavy Engineering Corporation propose to enter into foreign collaboration for this purpose and that the details are being sorted out. The Committee hope that both the Corporation and the Railways will move in the

matter with a sense of purpose and speed and that the Corporation would be able to live up to the present expectations of being able to supply the requisite crankshafts from 1972-73 onwards.

Supply of Wheels and Axles—Paragraphs 5.38 *and* 5.39—(*S. Nos.* 47 *and* 48).

1.57. In paragraphs 5.38 and 5.39, the Committee made the following observations:—

> "5.38. The Committee are distressed that the Wheel and Axles Plant which was set up at Durgapur specifically to cater to Railway requirements has not been able to supply the requisite number of wheels and axles, even though the first order was placed as long ago as December, 1963, and that it has refused to accept the second order for wheels and axles."

> "5.39. The Committee stress that every effort should be made by the Ministry of Steel, in conjunction with the Ministry of Railways to identify the shortcomings quantitative and qualitative in the existing process of manufacture of wheels and axles so that all such defects are remedied and the manufacturing programme is geared to meet in full the requirements of the Railways at a reasonable price."

1.58. In their reply, the Ministry of Railways stated:

> "The proposals of the Ministry of Steel in this respect are still awaited and the matter will be examined and finalised when received."

1.59. In their reply, the Department of Iron and Steel stated:

> "The Pande Committee which was appointed in September, 1966, to conduct an expert review of the problems of Durgapur Steel Plant had been asked specifically to look into the working of the Wheel and Axle Plant. The various recommendations made by that Committee are being implemented. Subsequently, two British Experts also studied the working of this Plant and submitted a report in December, 1967, which sets out detailed recommendations for securing quantitative and qualitative improvement in steel making for wheel and axle production and in the various manufacturing stages in the wheel and Axle Plant. Action has been initiated on these recommendations also. Among

the important steps taken to improve production may be mentioned the followings:—

(i) additional balancing equipments are being installed in order to remove the technical difficulties. These are expected to be ready for operation by December, 1968;

(ii) the capacity of the existing furnace producing wheel steel is being increased from 100 tonnes to 120 tonnes. This expansion is nearly complete.

(iii) reconditioning of some of the equipment has been taken in hand.

"However, a major difficulty in effecting improvement in quality and increase in production is the general labour situation in Durgapur. It is hoped that some settlement will be reached with labour in regard to work standards and the labour situation becomes satisfactory when it can be expected to fulfil the order of the Railways."

1.60. At the instance of the Committee, the Ministry of Railways have furnished the following further information:

"The Railways' annual requirements for the different types of Wheels and Axles are worked out long before the Budget year on the basis of anticipated traffic offerings coupled with normal wear and tear. Railways' actual requirements for each of the last seven years are indicated in the statement at Appendix VIII."

"Durgapur Steel Plant was expected (together with the capacity of M/s. TISCO) to meet the entire requirements of Wheelsets of Railways. It was originally scheduled to go into production in 1961 and to achieve the first phase rated annual output of 45,000 wheelsets by the middle of 1963. In June, 1960, Ministry of Steel advised the following anticipated output of the Wheelsets:—

100 sets per week between July and December, 1961.

250 sets a week between January and June, 1962, and

450 sets a week from July to December, 1962.

900 sets a week from 2nd quarter of 1963.

Again in January, Ministry of Steel, Mines and Heavy Engineering advised Ministry of Railways that Durgapur Steel Plant would be in a position to deliver 75,000 wheelsets per year by the middle of 1966."

"Since the forecasts furnished by the Ministry of Steel were not found to be realistic, Durgapur Steel Plant was asked to indicate more reliable figures. In December, 1962, Durgapur Steel Plant gave a forecast of 30,000 wheelsets during 1963-64. This forecast was maintained by them in the subsequent years as well. The other main source of supply is M/s. TISCO. A statement showing the extent to which the requirements of Railways were met by the Durgapur Steel Plant and M/s. TISCO (Separately) during each of the last seven years is at Appendix IX."

"A statement showing the amount of foreign exchange spent in import of Wheels and Axles during each of the last seven years is at Appendix X".

1.61. The Department of Iron and Steel have furnished the following further information:

Capacity of Wheel and Axle Plant at Durgapur since its installation

"For wheelsets, capacity at the one million tonne stage was 45,000 sets—broad gauge wheelsets 38,800 and metre gauge wheelsets 6200. The Wheel and Axle Plant has been expanded in the 1.6 million tonne expansion and its capacity becomes 75,000 sets—broad gauge 61,000 and metre gauge 14,000. The plant design has mainly been to produce B.G. and M.G. wheelsets and there is little flexibility for manufacture of other designs or sizes. However, Railway Board have suggested that since Durgapur Steel Plant is the major Wheel and Axle Plant in India, necessary flexibility to manufacture new designs should be provided for."

Number of wheels and axles turned out during 1962-63.

"Information about production of loose wheels and axles is being collected. The total number of wheel sets—20 ton, 16 ton, 12 ton and 10 ton—produced from 1962-63 to 1967-68 is 99611."

Number of wheels and axles actually suplied to Railways.

"Number of wheelsets supplied to the Railways during the same period was 99115. Number of loose wheels and axles was 7445."

Number of wheels and axles which could not be supplied to Railways against their indents.

"Information is being collected."

Progress made to improve the working of the plant in the light of the recommendations of the Pande Committee and the report of the British Experts.

"There are seven recommendations in the Report of the Pande Committee relating specially to the Wheel and Axle Plant. Considerable progress has been made in their implementation. For instance, inter-stage inspection has by and large been implemented. This is being done with the object of ensuring that defective materials are screened early in the process and not at the final stage of inspection. This will establish control over rejections. A progress planning cell with one General Foreman and one Assistant Foreman has been set up already. A team of one Chargeman and one Assistant Forman of Mechanical maintenance has been sent to U.K. for training in the reconditioning of the machines. The incentive system is being studied under the guidance of the Consultative Group of the Hyderabad Staff College. Improvements have been brought about in the system of the maintenance including preventive maintenance. Maintenance arrangements has also been partially de-centralised and the Superintendent of the Department is now responsible for day-to-day maintenance."

"The Report of the British Experts sets out detailed recommendations for securing qualitative and quantitative improvement in steel making and for wheel and axle production and in the various manufacturing stages in the Wheel and Axle Plant. The major recommendations are improvement in Labour discipline, improving of steel making quality, introduction of inter-stage inspection to control various processes, separate production planning and progress cell, maintenance to be decentralised, etc. Action has been initiated on most of these recommendations. The following will illustrate:—

(i) To control the silicon content in the hot metal input in the open-hearth furnaces, the desiliconising facilities with which the plant has been provided, have been pressed into use.

(ii) A new control chart showing melting and tapping temperatures in the open hearth furnaces has been introduced in order to control the steel making process.

(ii) The qualitative and quantitative output of the open hearth furnaces and particularly the 100 tonne furnace

now 120 tonnes, meanth for wheel-steel, was significantly affected by shortage of ingot moulds of proper quality. The position in this regard has substantially improved. Since the output of Durgapur Foundry has been continuously affected by labour troubles, the purchase of moulds from market sources has been augmented.

(iv) The quality of refractories, procured from indigenous sources, has been one of the causes for rejections. To improve the quality of these refractories, men have been posted at the works of the refractory manufactures to supervise production and provide technical guidance. Necessary trials with bricks from various Refractories are also being undertaken to find out the bricks most suitable for wheel-steel making.

"To remove imbalances in the machining capacity, a Centreless Grinding Machine, an Axle roughing lathe and two wheelset rectification lathes have been acquired and are under process of installation. It is expected that this will be completed by the end of this year."

"The capacity of the 100 tonne open hearth furnace for wheel-steel has been increased to 120 tonnes. Wheel-steel has also been procured from the Alloy Steel Plant when required.".

"The improvements that have been already effected and those in train in operational practices, systems and procedures should secure a significant increase in the output of the Wheel and Axle Plant. There would be a qualitative improvement also in performance in terms of lower rates of rejections and higher yields. The quantitative and qualitative improvements are, however, contingent on an improvement in industrial relations of which there are hardly any signs."

1.62. The Committee note that the Wheel and Axle Plant at Durgapur has the capacity to meet the requirements of the Railways for wheelsets required for wagons and coaches. However, due to "qualitative and quantitative deficiencies in production, the Plant has not been able to supply the full quantum of 30,000 wheel sets promised from 1963-64 onwards. The maximum supply effected was 23,407 in 1965-66 and since then the supplies have been progressively coming down, rendering reliance on foreign suppliers inevitable. How in-

adequate the progress has been would be evident from the fact that, in 1967-68, the foreign exchange expended on imports of wheel sets, loose wheels, tyres etc. was Rs. 4.20 crores; or nearly as much as that in 1963-64 (i.e., Rs. 5.10 crores).

1.63. The Committee note that the question of improving the performance of the Wheel and Axle Plant at Durgapur was the subject of study by the Pandey Committee as well as by a team of British experts. The Committee hope that with the implementation of the recommendations of these two teams, the Plant will be geared up to supply quality Wheels and Axles in requisite numbers.

CHAPTER II

RECOMMENDATIONS/OBSERVATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT

Recommendations (Para 1.20 & 1.21)

The Committee are surprised at the explanations given by the Ministry of Railways (Railway Board). In the note furnished to the Committee (Para 1.3), the Ministry had explained that "production estimates and plans for expansion are obtained, analysed and used for developing traffic forecasts" and that estimates are "cross checked with empirical data of past growth patterns and firm forecasts are then developed." In the course of evidence, however, the Ministry stated that they were "dependent on the forecasts given by others" *viz.*, the Planning Commission and other Ministries. The Planning Commission was responsible for the overall coordination and planning and it was not necessary on the part of the Railway Board to duplicate arrangements "for going into details." It was, therefore, contended that the Ministry of Railways were concerned with the task of building rail transport which they carried out.

Apparently, the two statements made by the Ministry of Railways are at variance with each other. The Railways have a sizeable establishment for 'planning' in the Railway Board as well as the zonal Headquarters of the Railways. The Committee are inclined to agree with the views of the Financial Commissioner that "so far as the Railways are concerned, they should take the responsibility of projections of traffic target."

(Para 1.22):

From the facts placed before them, the Committee cannot help feeling that, from the very beginning, planning in respect of goods traffic was far from realistic. As stated in the Ministry of Railways' note (para 1.4), when the first estimates were prepared in 1960, the production targets in the major industrial sectors had not taken final shape and a precise indication about financial outlay was not available. The final estimates included in the Plan were, therefore, tentative. In fact the Third Five Year Plan specifically stated:

> "Furthermore, since the overall estimates of traffic can only be treated as tentative at this stage, they will be subject to constant review in the light of the actual trends."

(Para 1.23):

The Committee regret to note that subsequent reviews as contemplated in the Plan were not made and rail programmes not coordinated with the production levels reached in the major industries. The actual materialisation of traffic from year to year was not kept in view.

(Para 1.24):

It is not businesslike for a commercial organisation like the Railways merely to accept the statements assessments of other Ministries without critically examining the position themselves. Even when estimated traffic was not forthcoming, the Ministry of Railways did not promptly reduce or revise the programmes merely because "everybody was confident" that they would produce the goods.

(Para 1.27):

The Committee note that the comparisons of traffic anticipations and actuals made in the note submitted by the Ministry of Railways are based on the revised estimates prepared in January, 1962, and November, 1963, and not on the estimates prepared for the Conventions Committee in October, 1960, and for the Third Plan in March, 1961. As indicated in the Audit Report there was a wide gap between the actual traffic and that anticipated in October, 1960. Even in the case of estimates of January, 1962, the Committee note that, while the increase in traffic estimated for the first two years of the Plan over the traffic moved in the last year of the Second Plan was only 21.9 million tonnes, an increase of 85.9 million tonnes was anticipated over the next three years. The Committee are, therefore, forced to conclude that while formulating their Plan the Ministry of Railways did not pay due regard to the actual trends of traffic. It is regrettable that heavy capital expenditure was incurred in creating traffic capacity far in excess of the requirements on the basis of mere hopes and expectations. Scarce resources which could have been utilised for more productive purposes were blocked.

(Para 1.30):

The Committee trust that the Ministry of Railways will put to better use the existing staff for planning at different levels both in the Railway Board and at Headquarters of Zonal Railways in order to avoid the recurrence of a similar situation.

(S. No. 1, 2, 3, 4, 5 & 7, Appendix XV of 22nd Report, 1967-68).

Action taken

The observations of the Committee are noted.

The Ministry of Railways would, however, venture to reiterate the process of planning for rail transport as it has existed so far and which was operative when the Third Five Year Plan was developed.

Under the present system of planning at the Central level, final pattern of economic growth to be aimed at, is laid down by the Planning Commission in consultation with various Central Ministries. This necessarily assumed an analysis of the requirements and capabilities of various sectors of the economy; from these are built up production and demand projections for the major industrial and agricultural products. The Railway plan is derived from the co-efficients of rail transport for various commodities in the past, corrected by such specific information, *e.g.*, movement of iron ore for export, and the movement of raw materials for the steel plants, as may be available for the future.

In the above process, the Railways can only exercise a broad economic judgment on the demand/production projections made by the Economic Ministries and approved of by the Planning Commission. Where the Railways can contribute special knowledge is the actual pattern of growth of rail traffic in the past. Such empirical data is used to review the anticipations of rail transport requirements and to correct them, wherever necessary. Beyond this, the ability of the Ministry of Railways to reject or re-shape the estimates developed by the other Ministries, is somewhat limited as drastic reductions would be full of risk to the economy in the event of a shortfall in rail transport capacity.

Along with the production of data relating to rail transport patterns in the past, the Ministry of Railways maintain a close watch on the actual materialisation of traffic. The targets of traffic initially adopted are subject to review so as to match its actual growth with the development of transport capacity. That six such reviews were actually carried out even for the Third Plan would be clear from the information supplied to the Committee, and reproduced at page 89 of the P.A.C. Report.

In so far as the remarks of the Financial Commissioner, Railways (quoted by the Committee), are concerned, these were made in the overall context of transport planning as outlined above; the intention

was to accept the responsibility of this Ministry for developing estimates of rail transport requirements of various commodities, based on the demand and production estimates received from the other Ministries with appropriate corrections, wherever possible, in the light of the projections of the pattern of past growth.

For the future, a closer association of the Ministry of Railways with the planning process as a whole is being ensured. This Ministry is represented in the Working Groups set up by the various Ministries in association with the Planning Commission to develop production and demand projections for various commodities. The experience of the Railways in the past is being brought to bear, along with that of the other Ministries, in making these projections; and the financial and technical status of all new projects is being critically examined before accepting their contribution as firm for the new Fourth Plan. The process of review and evaluation has also been tightened up. Regular meetings are being held with the Planning Commission every three months or so, to review the actual development of rail traffic as against anticipations, so as to adjust the rail transport plan according to requirements from time to time.

It is considered that the above two changes in the approach to rail transport planning will help to make it as realistic as possible.

Further, during the Third Five Year Plan as many as six reviews were carried out, the details of which have already been given to the Public Accounts Committee and reproduced at Annexure 'A' at page 89 of the Report. It is true that the mid term appraisal indicated a shortfall in traffic but at that stage it was envisaged that this was a temporary set back likely to be largely made good in the later years. The heavy shortfall in the last two years was a late development and at that stage only limited steps could be taken to effect economy in expenditure to the extent possible.

The need for improving the planning procedures is accepted. In the past, planning for additional transport capacity was based on production targets adopted for the various sectors of the economy, converted into rail transport requirements. It has now been decided to co-relate traffic projections more closely with the demand pattern rather than the production capacities, as done earlier. It has also been decided to increase the frequency of coordination with the Planning Commission and other Ministries and improve the Railways' own methods of evaluating transport requirements. With this end in view quarterly meetings are now being held with the Planning Commission and other Ministries concerned, when adjustments in annual plan targets are made, wherever necessary, in the light of the latest developments.

Comments of the Audit.

The Committee have recommended that Railways as a commercial organisation, should be responsible for the planning of Rail transport. While the methodology explained in the Action Taken Note that the Railway plan is evolved from the plans evolved for other sectors of economy seems unexceptionable, the determination of precise traffic forecasts and the physical requirements derived therefrom as well as the subsequent adjustments in the traffic forecasts and the corresponding physical requirements are more appropriately dealt with by the Ministry of Railways themselves. Acceptance of this position would, perhaps, meet the recommendations of the Committee.

Further comments of the Ministry of Railways (Railway Board).

The new methodology of planning has already been explained to the Public Accounts Committee. To elucidate it further, the planning process falls into two major parts. The first concerns the formulation of rail traffic estimates, based on the projections of demand production of major commodities received from various Economic Ministries. The second part consist in translating these traffic projections into their rail transport equivalents, and the investment planning needed to achieve these physical targets.

The starting point of the first part of the process is naturally the demand production estimates made out by other Ministries. An Inter-Ministerial Working Group will thereafter review these projections, examine them in the light of the past indices of rail traffic growth, and arrive at rail transport estimates. The Ministry of Railways is represented on this Group and will naturaly exercise whatever moderation is possible, and considered necessary in the light of the Railways' own experience.

The second part of the process is naturally the responsibility of the Ministry of Railways, exercised jointly with the Planning Commission in respect of the overall Plan size as well as the outlay proposed, and in respect of large, individual new projects on the Railways.

Subsequent adjustments in traffic forecasts, and the corresponding physical requirements, will be made by this Ministry in consultation with the Planning Commission and the other Ministries. A Review Group has already been set up for this purpose, and meets at intervals, under the auspices of the Planning Commission.

Further comments of the Audit

It is suggested that the Audit observations along with the Ministry's remarks thereon, on which we have no further comments, may be forwarded to the Lok Sabha Secretariat.

[*Ministry of Railways O.M. No. 68-B/(C)-PAC/IV/22(O) dated* 3-12-1968.]

Recommendation

The part played by the Planning Commission also calls for comment. The Commission, which was in overall charge of laying down the targets and for coordinating the efforts of different sectors to achieve the objectives, did not exercise any check on the Railways incurring heavy capital expenditure without corelating it to traffic requirements. Even as late as November, 1963, at the time of the Mid-term appraisal of the Plan, although it was evident that goods traffic would not come upto expectations, the Ministry of Railways were allowed to carry out the rail transport programmes.

(S. No. 6, Appendix XV, Para 1.28 of the Report).

Action taken

The observations of the Committee are noted.

It has been decided in consultation with the Railway Board that a small group in the Planning Commission, with which the Ministry of Railways, other Ministries concerned and the Divisions of the Planning Commission will be associated, will review periodically (say, every quarter) the estimates of growth of railway traffic. In making this review, the Group will take into account the targets of production of major commodities and past trends in the production and rail movement of these commodities. In the past, the traffic targets were reviewed generally at the time of formulation of annual plans or when specific requests were received from the Railway Board for adjustments in traffic targets or financial allocations. It is expected that an exercise of this nature on a quarterly basis will help in making suitable adjustments in the investments in railway programmes.

[*Planning Commission O.M. No. T & C 7(30)67 dated* 5-10-1968*].

Further Information

1.49. Consequently, the Committee desired to be furnished with the following further information:

(1) What were the quantities of raw materials and finished products, for Steel Plants moved by rail during the Second Five Year Plan?

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*See further reply of the Planning Commission at pages 117—124.

(2) What yardstick was adopted during the Second and Third Plans to estimate the traffic of raw materials and finished products to be moved by the Railways? If the yardstick was modified during the course of the Second and Third Plans, the modifications made and the reasons therefor?

(3) The quantities of raw materials and finished products actually moved by rail during the Third Plan period. How does this compare with the basis adopted for the yardstick.

(4) On what basis have the requirements for movement of raw materials and finished products for steel plants been estimated for the Fourth Five Year Plan period.

(5) What has been the actual experience in 1966-67 and 1967-68?

(6) Has the yardstick been modified in the light of experience? If so, in what respects?

1.50. The Committee regret that Government have not furnished the requisite information despite a reminder. The Committee are surprised that the Department of Iron and Steel have not been able to indicate any basis for the yardstick adopted by them to determine the traffic of raw materials and the finished products of Steel Plants required to be moved by the Railways during the Third Plan period. It appears that Government did not pay close attention to this vital matter while fixing initially or revising upward the targets for the movement of traffic by rail for the Steel Plants during the Plan period. The Committee suggest that Government should from now on review carefully yardsticks for the movement of raw materials and finished products by rail in the light of experience gathered in this behalf during the last ten years so as to have realistic targets and avoid a shortfall to the extent of more than 33 per cent which occurred due to unrealistic planning in Third Plan. (S. No. 11).

S. No. 11—Appendix XV of 22nd Report (1967-68).

Reply

1.49 (1). A statement containing information in respect of quantities of raw materials and finished products for Steel Plants moved by rail during the Second Five Year Plan and Third Five Year Plan is enclosed. (Appendix I).

(2) By the end of Second Five Year Plan, all the units of the one Million tonnes Steel Plant at Bhilai, Rourkela and Durgapur had not been commissioned. The Plants went into operation fully during the Third Plan period. The requirement of the raw materials during the Third Five Year Plan was assessed in April, 1959 on the basis that about 2.9 tonnes of raw materials (other than coal) would be required for every tonne of steel. Subsequently the Coordination Committee on Expansion of the Steel Plants of Public Sector in June, 1960 revised the requirement of the raw materials. The requirement then re-assessed for the three steel plants worked out to an average of 2.76 tonnes of raw materials excluding coal for one tonne of steel. The recommendation of the Co-ordination Committee was subsequently discussed at an inter-Ministerial meeting consisting of representatives of Department of Iron and Steel, Ministry of Commerce, Planning Commission, Ministry of Irrigation and Power, Ministry of Railways and Ministry of Finance, held in October, 1960. The Committee had observed that the sources of raw materials had changed somewhat resulting in longer leads, particularly of limestones, dolomite and manganese ore. These had resulted in higher requirements of wagons.

(3) The information is contained in the statement attached and which is referred to in reply to (1) above. The average of the ratio worked out in the statements for the three steel plants compares fairly satisfactorily with the ratio of 2:76 worked out on the basis of requirement of raw materials assessed by the Co-ordination Committee for Steel Plants referred to above

(4) A tentative estimate of requirements of raw materials for Fourth Plan has been worked out on the basis of the assessment made in the Project Report for expanded Plants. The experience gained by Hindustan Steel Ltd., during the past years has also been taken into account in assessing the requirements. This assessment will be further reviewed.

(5) The comparative figures of raw materials actually moved during the years 1966-67 and 1967-68 have also been given in the statement attached. (Appendix I).

(6) The experience gained during the past years will be taken into account while finalising the requirement for Fourth Plan and the yard-stick will also be modified suitably.

1.50. The observation made by the Committee has been noted. The past experience will be taken into account and a more realistic yardstick will be evolved to form the basis for assessment of target of the requirement of raw materials for the Fourth Plan.

[*Ministry of Steel (Deptt. of Iron and Steel) D.O. Letter No. Parl.* (9) 5/68 *dt.* 21-9-69].

Further Information

Please furnish the following information:—

(i) Minutes of the meeting of Coordination Committee on Expansion of Steel Plants held in June, 1960 when they revised the requirements of raw materials.

(ii) Minutes of the Inter-Ministerial meeting consisting of the representatives of the Planning Commission, Department of Iron and Steel, Ministries of Commerce, Irrigation and Power, Railways and Finance held in October, 1960. It should be clarified whether the Inter-Ministerial Committee laid down any yardstick for estimating the requirements of raw materials.

(iii) Whether the yardstick of 2.76 tonnes of raw material for one tonne of steel, assumed for purpose of transport requirements, was revised as a result of Inter-Ministerial meeting and if so what was the revised yardstick adopted. What is the yardstick now being adopted?

(iv) (a) the tentative estimate of requirements of raw material for Fourth Plan on the basis of the assessment made in the Project Reports for expanded plants;

(b) the experience gained by the Hindustan Steel Limited during the past years in assessing the requirements of raw materials for Steel Plants;

(c) the result of the review of the assessment.

Reply

(i) A copy of the minutes of the meeting of the Coordination Committee on Expansion of Steel Plants held on 13th June 1960 is enclosed.*

(ii) A copy of the minutes of Inter-Ministerial meeting consisting of representatives of Planning Commission, Department of Iron and Steel, Ministries of Commerce, Irrigation and Power, Railways and Finance held on 28-10-60 is enclosed.* No yardstick for estimating the requirement of raw materials was laid down at the Inter-Ministerial Meeting.

*Not printed.

(iii) It may be clarified here that no yardstick for consumption of raw materials was ever laid down or assumed. The average of Rs. 2·76 tonnes of raw materials excluding coal for one tonne of steel intimated in reply to para 1.49(2) of the Public Accounts Committee Report is the ratio that was arrived at on the basis of the total assessment of requirement of raw material made by the Coordination Committee for the three steel plants at Durgapur, Rourkela and Bhilai. Total requirements of raw materials for steel production were estimated and this as related to steel production gave the 'Ratio' of 2.76 indicated above. Therefore it is not as if, the requirement of raw materials were worked out or revised on the basis of a yardstick.

The requirement of raw materials estimated by the Coordination Committee was not revised at the Inter-Ministerial meeting. As intimated in reply to para 1.49(2), it was observed in the meeting that the sources of raw materials had also changed somewhat resulting in longer leads, particularly for limestone, dolomite and manganese ore.

The basis now adopted in calculating the requirement of raw material, is the norms of consumption of raw materials that goes into the production process. The norm would depend upon the following factors:—

(a) Quality of raw materials—Chemical and Physical.

(b) Changes in technological process like say.

(i) Use of super self fluxed sinter in the Blast Furnace Iron Making Process.

(ii) Intensive use of oxygen in Open Hearth Steel Making Process.

(c) Growth of operating skill.

Raw material requirement also depends on Base Production targets like Hot Metal and Ingot steel. These are normally fixed based on Technical capacity of the shops *vis-a-vis* Demand forecast, for the saleable products.

(iv) (a) On the basis of the estimates in the detailed project reports for the three expanded plants are the estimates for the sixth blast furnace at Bhilai, the total requirement of raw materials other than coal over the 4th Plan period would be 77 million tonnes.

(iv) (b) and (c): The experience of the past years has proved that detailed assessment of each and every raw material should be made year-wise for each plant based on the following factors:—

1. Fixation of targets for Hot Metal and ingot steel allowing for demand forecast for products and technical limitations of the plant.
2. Adoption of realistic consumption rates of major materials—giving due consideration for quality and technological improvement in the process; and
3. Total raw material requirement should not be assessed on the basis of a single overall ratio or yardstick as related to saleable production.

On the basis of the above the raw material requirements other than coal as estimated at this stage would be roughly 83 million tonnes.

[*Ministry of Steel, Mines and Metals*—(*Department of Iron & Steel*—*D.O. letter No. Parl*(9)-5/69 *dt.* 9-12-68]

Recommendation

The Committee cannot but feel unhappy at the manner in which the estimated target for the movement of general goods traffic was revised from 87.9 million tonnes, as envisaged in the original Third Plan estimates (March 1961), to 98 million tonnes in January, 1962. This was done on the assumption that the traffic which could have been carried by the Railways in 1960-61 should be assumed to be 87.5 million tonnes instead of the actual 82.5 million tonnes. The Committee consider that the Planning Commission could and should have exercised the necessary check to curb the persistent tendency of the Railway Board to overestimate traffic requirements. The Committee would like the Planning Commission and Government to exercise caution in revising the targets upwards so as to avoid the recurrence of such cases of unrealistic planning which result in over-capitalisation.

(S. No. 12, Appendix XV, Para 1.57 of the Report).

Action taken

The observations of the Committee are noted.

It has been decided in consultation with the Railway Board that a small group in the Planning Commission, with which the Ministry of Railways, other Ministries concerned and the Divisions of the Plannng Commission will be associated, will review periodically (say, every quarter) the estimates of growth of railway traffic. In

making this review, the Group will take into account the targets of production of major commodities and past trends in the production and rail movement of these commodities. In the past, the traffic targets were reviewed generally at the time of formulation of annual plans or when specific requests were received from the Railway Board for adjustments in traffic targets or financial allocations. It is expected that an exercise of this nature on a quarterly basis will help in making suitable adjustments in the investments in railway programmes.

[*Planning Commission O.M. No. T&C/7(30)67 dated* 5-10-68*].

Recommendation

The Committee regret to observe that, even in the case of material required for their own use, the estimates prepared by the Railway Board were not precise.

(S. No. 13, Appendix XV, Para 1.60 of 22nd Report).

Action taken

The observations of the Committee are noted. The Ministry of Railways would however like to add by way of clarification that the shortfall in the targets of Railways' own materials was due to reduced construction activities caused by postponement of many of the Railways' development programmes, in turn caused by reduced traffic anticipations.

[*Ministry of Railways (Rly. Board) O.M. No. 68-13(c)-PAC.IV 22(O) dated* 20-9-68].

Recommendation

The Committee are not convinced by the explanation that efforts were made by the Railways to find the cheapest means to meet the anticipated increase in traffic. They regret to find that in the case of as many as 16 works including twelve works of doubling of tracks costing Rs. 27.03 crores, the capacity actually utilised in 1965-66 was less than the capacity available before the works were undertaken. The Committee strongly deprecate the tendency of the Railways to go in for works, including doubling of track without critically examining their economics. The Committee would like the Railways to review the Works Programme particularly for works to increase the capacity and doubling of track in the light of experience gained during the Third Plan so as to minimise what would otherwise be infructuous expenditure.

(S. No. 15, Appendix XV, Para 2.16 of 22nd Report).

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*See further information furnished by the Planning Commission at pages 117—124.

Action taken

This recommendation is being acted upon. The Annual Works Programme is critically examined in the light of experience gained and a detailed examination of the economics of each item is undertaken before a work is included in the Final Works Programme. The criterion for sanctioning a capital work is whether it is financially justified on the basis of anticipated traffic. On certain occasions, however, the Railways have to undertake for operational requirements certain works which may not be justified financially. On such occasions the cost of such works is not charged to Capital but to the Development Fund.

This has been seen by Audit.

[Ministry of Railways (Rly. Board) (O.M. No. 68-B(C)-PAC/IV/22(O) dated 3-12-68)].

Recommendation

The Committee note that the Ministry have now changed the methodology of planning from a production-oriented to a demand-oriented one, and also undertaken to scrutinise in detail the demand projections for rail traffic for major commodities. The Committee hope that, with this change in methodology, the traffic forecasts of the Railways would be more realistic than hitherto. The Committee suggest that the Railways should critically review the methodology of planning in the light of experience at intervals of a year or two.

(S. No. 16, Appendix XV, Para 2.17 of 22nd Report)

Action taken

This recommendation is noted for necessary action in future.

This has been seen by Audit.

[Ministry of Railways (Rly. Board) (O.M. No. 68-B(C)-PAC/IV/22(O) dated 3-12-1968)].

Further Information

Please furnish a note indicating the action taken to review the methodology of planning.

Reply

The Committee have already noted the changes recently made in the methodology of planning. As recommended by the Committee, the Ministry of Railways will review the methodology of planning in the light of experience at intervals of a year or two.

[Ministry of Railways (Railway Board) O.M. No. 68-B(C)/IV/22(O) dated 23-11-1968].

Recommendation

At another place in this Report, dealing with paras 16 and 17 of the Audit Report, the Committee have expressed their concern over the delay in developing indigenous capacity for manufacture of diesel and electric locomotives. The Committee desire that efforts should be directed towards establishing production of diesel and electric locomotives in the country at competitive cost so that imports of these locomotives are minimised.

(S. No. 17, Appendix XV, Para 2.21 of 22nd Report).

Action taken

Adequate facilities for the production of diesel and electric locomotives in the Diesel Locomotive Works, Varanasi (D.L.W.) and the Chittaranjan Locomotive Works, Chittaranjan (C.L.W.) have been provided in the form of machinery and plant, man-power and technical 'know-how' and the full production capacity is progressively being utilised to meet the traffic requirements. The actual output of diesel and electric locomotives is, however, dependent on the simultaneous development of indigenous capacity for manufacture of certain components like electrical equipment from H.E. (I) Ltd., Bhopal, wheels and axles from Durgapur Steel Plant, crankshafts from Heavy Engineering Corporation, Ranchi, etc., the availability of adequate funds and of foreign exchange for import of components not available from indigenous sources and the receipt of timely supply of imported components, which are not always within the control of the Ministry of Railways. Sustained efforts are, however, made to obtain the components matching the production programme. It is hoped that in the next 4 to 5 years time it will be possible to meet fully the requirements of electric and diesel locomotives from the output of C.L.W. and D.L.W.

2. As complete B.G. Main Line Diesel Electric Locomotives have not been recently imported since January, 1965, a direct comparison with imported cost is not possible, and only an approximate estimate of the cost of an imported locomotive can be attempted. The

tender price of the last purchase of a complete locomotive (in 1965) was the lowest since 1961. This was presumably so because of the keen competition between two firms, one of which had entered into a Collaboration Agreement for the manufacture of diesel locomotives at Varanasi. On the basis of this rock-bottom price, the landed cost for a complete locomotive works out to Rs. 24 lakhs approximately at the post-devaluation rates, and, after suitable escalation, to about Rs. 25·5 lakhs. As against this figure of Rs. 25·5 lakhs, the cost of manufacture of similar locos in D.L.W., as per the cost Report for the locos turned out during the period October 1967 to December 1967 was Rs. 21·93 lakhs (excluding proforma charges *i.e.* charges not actually booked in the financial accounts of the Production Unit, but which can be considered as a part of the cost of production *viz.* dividend payable to the General Revenue on the capital invested on the Unit, share of the unit of the cost of Railway Board and Statutory Audit, and the deferred liability in respect of special contribution to Provident Fund payable to the staff of the Unit) and about Rs. 25·58 lakhs (including those proforma charges). It will thus be seen that the difference between the landed and production costs is of the order of only Rs. 8,000. It is possible, with gradual increase in production reaching upto the rated capacity of the production unit, that the gap between the imported and indigenous costs will narrow further and also be reversed.

3. Regarding the Electric locomotives, the last purchase price for a completely imported locomotive pertains to November 1963, for 10 locomotives only, which were supplied with silicon rectifiers for the first time. Taking into consideration the reduction in the prices on account of mass development of silicon rectifiers, it is estimated that the present day landed cost of the imported electric locomotives may be roughly Rs. 22·5 lakhs, against which the average cost of production in C.L.W. in 1967-68 was about Rs. 18 lakhs (excluding proforma charges) and about Rs. 20 lakhs (including proforma charges).

This has been seen by Audit.

[Ministry of Railways (Railway Board) O.M. No. 68-B(C)-PAC IV/22(O) dt. 3-12-1968].

Recommendation

The Railways have by now gathered sufficient experience of the working and economic returns flowing from dieselisation and electrification. The Committee would like the Railways to evolve a

suitable set of economic criteria to decide the desirability of dieselisation or electrification of particular sections on the Railways in the light of traffic offering and traffic projections, so as to ensure the best utilisation of resources.

(S. No. 18 Appendix XV of 22nd Report, 1967-68)

Action taken

Dieselisation and Electrification of traction are introduced only on high density traffic routes where steam traction is at a disadvantage. Modernisation of traction is undertaken only after establishing the economic advantages of Diesel/Electric traction over steam traction through a series of economic studies.

This has been seen by Audit.

[Ministry of Railways (Railway Board) O.M. No. 68-B(C)-PAC. IV/ 22(O) dt. 3-12-1968].

Further Information

Please furnish a comprehensive note indicating the criteria adopted for dieselisation or electrification of Sections.

Reply

It has been recognised for at least a decade now that gradual change-over to electric diesel traction is inescapable if Indian Railways are to be modernised and equipped to carry the traffic generated by planned economic development, particularly the growth of basic industries like steel, coal, cement, mining, etc. But programmes of electrification and dieselisation are tailored to meet actual requirements of traffic on various sections. They are also governed by availability of funds and diesel as well as electric locomotives.

Electrification and dieselisation are first considered for such sections where steam traction is unable to cope with the increasing traffic demands. In this connection, it may be mentioned that on the B.G. it is considered that sections having a density range of 7,500 to 20,000 net tonne kilometres and above should be covered by the dieselisation/electrification programme. Some other factors which have to be considered are whether a section is heavily graded, and if there is water shortage in the region etc.

The choice between diesel and electric traction depends on comparative costs, including foreign exchange, and also on factors like contiguity to sections already electrified, availability of ample sup-

plies of electric power at low cost, the anticipated continuous density of traffic, and the fact that diesel power can be easily transferred if the density goes down. Suburban sections where fast, frequent and smokeless passenger services are required, are considered for electrification.

Dieselisation or electrification of a section is carried out after careful and thorough study of the economics and operational advantages.

[Ministry of Railways (Railway Board) O.M. No. 68-B(C)-PAC. IV 22(O) dt. 23-11-1968].

Recommendation

The Committee note that the letter dated 2nd December, 1964, addressed by the Ministry of Railways to all wagon builders does not indicate any reduction in the programme of procurement of wagons. It only stipulates that the manufacturers should maintain their outturn during the year 1964-65 at the same level as in the previous year. The Committee are, therefore, inclined to conclude that even though it was clear to the Ministry of Railways at the time of the Mid-term Appraisal, if not earlier, that traffic would be perceptibly less than anticipated, no serious attempt was made to curtail the programme of the procurement of wagons. The Committee propose to deal with this aspect in a subsequent Chapter.

(S. No. 19, Appendix XV, Para. 2.27 of 22nd Report).

Action taken

The observations of the Committee are noted. It is, however, submitted that at the time of Mid-term Appraisal or immediately thereafter, no steps were taken to curtail the wagon building programme as it was anticipated that the slower growth in traffic would be a temporary phase and it was likely to pick up during the closing stages of the Plan. Although the wagon builders were advised in a letter issued on 27-6-64 (copy enclosed) that the requirements of wagons during 1964-65 were estimated to be above those in 1963-64, no specific indication was given to them as to what the actual requirements would be. They were told this would be advised separately. A review of the position after five months, *i.e.*, in November 1964, was followed by a preliminary warning to the wagon builders in Railway Board's letter of 2nd December, 1964 advising them to maintain their outturn during the year 1964-65 at the same level as in the previous year. It was only subsequent to January

1965, when a steep decline in the anticipation of traffic volumes had been accepted, that a reduction in the development programme of the Railways became essential and a cut back was effected in the wagon building programme.

[Ministry of Railways (Railway Board) O.M. No. 68-B(C)-PAC./IV/22(O) dt. 7-10-1968].

Express Delivery.

GOVERNMENT OF INDIA

MINISTRY OF RAILWAYS

(RAILWAY BOARD)

Rail Bhavan,

New Delhi, dated 27th June, 1964.

No. 64/RS(B)/957/12

To

16 Wagon Builders.

Dear Sirs,

From July, 1964 you would be taking up production against the wagon building year 64/65. The production requirements of wagons during 64/65 are estimated to be well above those in 63/64. It is, therefore, necessary to gear up your capacity to match the increased production for the ensuing wagon building year.

2. A separate communication on the subject of production expected from your firm will follow shortly. In the meantime certain information is required by the Board regarding components as falling in the category of Steel Castings, Forgings, Pressings, Iron-Castings, and Miscellaneous Fittings, etc., which being in short supply restricted production of wagons during the past year and are likely to restrict production during 1964-65 as well. In order to make a realistic assessment of quantitative shortage of such components in the Wagon Production field, I have been directed by the Board to request you to please communicate information as per Proforma enclosed.

3. The receipt of this letter may kindly be acknowledged and reply sent to reach the Board's office not later than 15th July, 1964.

Yours faithfully,

DA 1

Sd./- M. K. GAMKHAR

for *Secretary, Railway Board.*

PROFORMA

Components for wagon manufacture in short supply and restricting production

Name of the Wagon Builder :
Railway Workshop :

Description/ Drawing Reference of the components & weight (approx	Classification*	Type of wagon in which used	Average Nos. required per month to meet wagon production requirements	Average monthly receipts in the six months	Average shortfall per month 4-5	Supplier name	Remarks**
1	2	3	4	5	6	7	8

Viz. Steel Castings, Forgings, etc.

**Indicate if shortages from the suppliers of components are due to difficulties such as raw materials, etc., or lack of capacity.

Recommendation

The Committee would like to point out that the suburban traffic on sections served by these E.M.U. Coaches has increased greatly during the Third Plan period. The problem has been accentuated by the fact that out of 694 E.M.U. (A.C.) coaches envisaged for Third Plan for suburban lines only 477 E.M.U. (A.C.) coaches were actually manufactured, resulting in a shortfall of 217 E.M.U. (A.C.) coaches. The Committee would like Government to pay special attention to the need for stepping up the manufacturing programme of E.M.U. coaches so that these can be pressed early into service to relieve overcrowding.

(S. No. 21, Appendix XV Para No. 2.31 of 22nd Report).

Action taken

The Ministry of Railways are taking special steps to meet the demands for E.M.U. Coaches required for relieving overcrowding in the suburban trains. As far as the manufacture of A.C. E.M.U. coaches by the Railways at the Integral Coach Factory, Perambur, is concerned, the main difficulty has been the delay in the supply of electric traction equipment by HEIL/Bhopal, which is trailing behind the production plans of the Railways and also the various revised promises made by HEIL. There have also been some hold-ups in the supply of the brake equipment by M s. Saxby and Farmer, Calcutta, due to lock out in their factory and some technical difficulties which arose in the production of air-blast circuit breakers by M/s. Hindustan Brown Boveri, Baroda. Action is being taken to overcome the problems of supply of various equipment and it is expected that the full planned requirements of 763 A.C. E.M.U. coaches for the Eastern Railway and S.E. Railway for the planned level of traffic upto 1970-71 should be completed in time by the Integral Coach Factory, Perambur, Madras.

As far as the D.C. E.M.U. coaches required by the Central and Western Railways are concerned, the only manufacturer so far has been M/s. Jessop & Co., Calcutta, who have not yet been able to meet the planned requirements of the Third Plan. M/s. Jessop & Co. had agreed to step up their manufacturing rate from 6 coaches to 9 coaches per month from about the middle of 1968 but there has been some delay in their implementing this proposal and it is now expected that they will be in a position to do so from about the beginning of 1969. Action has also been initiated by the Ministry of Railways to develop additional capacity at the Integral Coach Factory, Perambur, Madras, for manufacture of the D.C. E.M.U. coaches

for Central and Western Railways and the regular poduction is expected to start by about the latter half of 1969.

With the steps that are now being taken as indicated above efforts will be made to supply the maximum possible E.M.U. coaches to the Central and Western Railways to meet their demands for replacement of old coaches and for additional services to relieve overcrowding. This will continue to receive the special attention of the Ministry of Railways.

[*Ministry of Railways (Rly. Board) O.M. No.* 68-B(C)-*PAC-IV*/22(*O*), *dated the* 20*th September*, 1968].

Further Information

Please furnish the following information:

(i) The date by which I.C.F. is expected to turn out the coaches required for S.E. and Eastern Railways.

(ii) The requirements of (DC) EMU Coaches for Western and Central Railways for the planned level of traffic upto 1970-71 and the extent to which this will be met from various sources.

Reply

(i) As anticipated at present, the planned requirement of AC EMU Stock for Eastern and South Eastern Railways are expected to be turned out by ICF by about the middle of 1971, subject to the availability of foreign exchange for import of necessary components and timely supply of equipment from indigenous sources like HEIL, Hindustan Brown Boveri etc.

(ii) The requirements of DC EMU Coaches for Western and Central Railways for the planned level of traffic upto 1970-71, including throw-forward from the 3rd Plan, yet to be supplied, are as follows:

Railway	Replacement Account	Addl. Account	Total
Central	36	320	356
Western	130	219	349
TOTAL . . .	166	539	705

The likely availability of DC EMU's from the various sources is expected to be as follows subject to the availability of foreign exchange for import of components and the programme of supplies of equipments being adhered to by the indigenous suppliers.

Year	By conversion of coaches transferred from E. Rly.	By Jessops	By ICF	Total	Running Total
1968-69	3	27	..	30	30
1969-70	51	95	30	176	206
1970-71	..	108	72	180	386
1971-72	..	108	72	180	566
1972-73	..	84	55	139	705

It will be seen from the above that the present planned requirement of 705 DC EMU coaches is expected to be met by the end of the year 1972.

[Ministry of Railways (Railway Board) O.M. No. F. 68-B(C)-PAC IV/22 dt. 23-11-1968].

Recommendation

The Committee stress that, while continuing efforts to reduce the import content of E.M.U. coaches, care should be taken to see that the cost of manufacture of these coaches in the country is competitive with imported coaches of comparable quality and performance.

(S. No. 22, Appendix XV Para 2.33 of 22nd Report.)

Action taken

The Committee's recommendations are noted and necessary action will be taken. Bulk of the imported content for the manufacture of EMU coaches is required by HEIL for the production of electrical equipments. As reproduced in para 2.32 of the Committee's 22nd Report under consideration, HEIL have gradually reduced the import content of their equipment from about 64 per cent to 26 per cent.

[Ministry of Railways (Railway Board) O.M. No. F. 68-D(C)-PAC/IV/22(O), dated the 20-9-1968].

Further Information

Please furnish a statement showing the comparative cost of imported and indigenously manufactured EMU coaches.

Reply

A strictly comparable cost of imported and indigenously manufactured EMU coaches are not available as some of the EMUs like 25 kV AC have not been fully imported and in the case of 1500 V DC EMUs the last imported consignment pertain to 1956-57, where also the composition and specifications were very much different from those being manufactured indigenously. The figures for 3000 V DC EMU stock which were obtained both fully imported and also manufactured indigenously with imported electrical equipments are available. The following available figures are furnished for having a comparative idea:

(a) *25 KV AC EMUs*: Manufactured at ICF and of 4-Coach Formation:

	Rs. in lakhs
(i) With imported electrical equipments on pre-devaluation basis in 1956-67	13·64
(ii) With imported electrical equipments on post-devaluation basis in 1956-67	15·34
(iii) With indigenously obtained electrical equipment in 1956-67	14·88

(b) *3000 V DC EMUs of 3-Coach Formation*:

(i) Completely imported from Switzerland in 1957-58	11·73
(ii) Completely imported from West Germany in 1958-59	11·54
(iii) Produced indigenously by M/s. Jessops & Co. with imported electrical equipment in 1958-59	12·00

(c) 1500 V. DC EMUs of 3-Coach Formation Produced by M/s. Jessops & Co. with indigenous electrical equipments in 1965-66	16·00
(d) 1500 V DC EMUs of 4-Coach Formation ordered from Japan in 1956-57	15·00

[Ministry of Railways (Railway Board) O.M No. 68-B(C)-PAC/IV/22(O) dated 23-11-1968].

Recommendation

3.6. The Committee find from the note furnished by the Ministry of Railways that while the capital-at-charge per billion net tonne kilometre adjusted to 1950-51 prices showed an improvement during

the First and Second Plan periods, the ratio deteriorated during the Third Plan period. In a subsequent note however, the Ministry have stated that, adjusted to 1938-39 prices, there had been no deterioration in the capital out-put ratio in 1965-66. The Committee desire that the discrepancies between the two sets of figures may be rectified and the correct position of the capital out-put ratio supplied to them.

3.7. The Committee desire to draw the pointed attention of Government to the fact that the capital assets on the Railways have increased from Rs. 1,521 crores at the commencement of the Third Plan to Rs. 2,680 crores at the end of the Plan, representing an increase of 76 per cent. The Committee would like to point out in this connection that the liability of the Railways on account of Dividend to General Revenues has increased from Rs. 55.86 crores in 1960-61 to Rs. 103.78 crores in 1965-66. It is, therefore, of the utmost importance that the Railways should clearly bear in mind the financial implications of increasing capital assets through borrowing from the general exchequer so that they apply strict financial cannons in deciding on any scheme for additional outlay.

(S. No. 23, Appendix XV, Para Nos. 3.6 and 3.7 of 22nd Report)

Action taken

Para 3.6

In the original reply to Question No. 4, the booked capital outlay which included capital investments of various price levels from year to year was taken as equated capital-at-charge in the base year 1950-51 and no attempt was made to equate the capital invested prior to 1950-51 to the price level in 1950-51, although it was 150 per cent more than in 1938-39. Had allowance for the variation of price levels prior to 1950-51 and that of 1950-51 been made in the original reply, the capital-output ratio measured in terms of capital per billion net tonne kilometres adjusted to 1950-51 prices would have shown improvement in the Third Plan period as well. This conclusion was brought out by the Ministry in the subsequent note taking 1938-39 as the base.

In consultation with Audit it has been decided to adopt the year 1950-51 as the base allowing for increase in prices and wage levels from year to year to the extent possible and also taking into account

the element of over-capitalisation. The result of this analysis is furnished below:—

(In crores of Rs.)

	Capital-at-charge adjusted to 1950-51 price/wage levels per billion net tonne kilometres taking into account the element of over-capitalisation (which has not been equated).
1950-51	39·92
1955-56	31·65
1960-61	26·47
1965-66	26·07

While noting the observations of the Committee, the Ministry of Railways would like to clarify the position further.

The dividend payable on fresh capital investment in the Railways, according to the 1965 Railway Convention, is 6 per cent. It has been laid down that in respect of outlays chargeable to capital, the earnings or the savings in working expenses expected to be realised after meeting the average annual cost of service of the asset, should yield a return of not less than 6.75 per cent on the estimated cost of the work. The margin of 0.75 per cent over the current dividend rate has been prescribed in order to cover possible variations in estimating.

Expenditure incurred by the Railways on the acquisition of new assets or on the improvement of existing assets has to be financially justified before it can be allocated to Capital and no proposal for expenditure is ordinarily considered as having been justified unless it can be shown that the net return is not less than 6.75 per cent. In computing the additional earnings or savings in working expenses expected to accrue as a result of the proposed outlay, a careful assessment is made of the past and likely future growth of traffic over a period as a result of general development in traffic and with particular reference to the area served by the Railway and any specific industrial complex being set up. To help in such additional traffic being estimated with proper care and only after due investigation,

the Board have instructed the Railways to undertake traffic surveys not only in respect of proposals for the construction of new lines but also for other major line capacity works. A copy of Board's letter No. 68/W4/CNL/0/8 dated 5-10-1968 is enclosed.

A watch on the actual return and the review of productivity of outlays is also prescribed in the rules. In respect of new lines opened for traffic, Railway Administrations submit to the Board a statement of the financial results of their working starting with the first year after they are opened to traffic and upto the end of the 11th year. In submitting this financial review, the Railways are also required to indicate, where necessary, special steps taken in the course of the year to develop the traffic earnings and/or to reduce the working expenses of the line. Open Line Works charged to capital on the ground of their remunerativeness and costing Rs. 20 lakhs and over are also subjected to a productivity test. Out of the works costing below Rs. 20 lakhs a selection for applying productivity tests is made by the General Manager in consultation with his FA & CAO. This procedure is intended to ensure not only that the outlays chargeable to capital are financially justified but also that the returns anticipated are actually realised.

This has been seen by Audit.

[*Ministry of Railways (Railway Board), O.M. No. 68-B(C)-PAC IV/Genl./22(O) dated* 4-11-1968.]

GOVERNMENT OF INDIA

MINISTRY OF RAILWAYS

(RAILWAY BOARD)

No. 68/W4/CNL/0/8. *New Delhi, dated* 5-10-1968.

To

The General Managers,

All Indian Railways.

The Board have been considering the question of strengthening the organisation for carrying out Engineering and Traffic surveys and also the desirability of carrying out detailed traffic surveys for all line capacity works costing more than Rs. 20 lakhs. Hitherto, most of the Engineering surveys for new lines, conversions, doublings etc. were being carried out by Senior Scale Officers. Similarly, Traffic surveys for new lines and conversion scheme were also being

made by Senior Scale Officers. No detailed traffic surveys were being carried out for doubling and other line capacity works.

2. In order to ensure that the most economical proposals are formulated, the Board have decided that Engineering surveys should be made by Senior and experienced Engineers in the I.A. grade so that the most economical alignment may be selected and designs and estimates may be more realistic.

3. For Traffic surveys also, the collection of data and their analysis should be in the hands of an experienced administrative officer of the Commercial or Operating Branch who will be in a position to make out a more rational assessment of Traffic prospects and the financial implications of the project. To ensure that the estimates of the anticipated traffic, capital costs and recurring expenses etc. are realistic and the financial appraisal of the project including phasing of investments and return at each stage are worked out as correctly as possible, the Board have decided that a Senior Scale Accounts Officer or, in the case of important new lines and conversion schemes, a Dy. Chief Accounts Officer, with experience of traffic costing should work in close association with the survey team.

4. In the light of the above decisions of the Board the following general instructions are issued for guidance of the Railway Administrations in the matter of surveys and composition of survey teams. Provision for the posts mentioned below should invariably be included in the estimates for surveys along with other field and office staff:—

(i) Detailed traffic surveys should be carried out not only for new lines and conversions but also for doublings and other line capacity works costing more than Rs. 20 lakhs each.

(ii) All such traffic surveys should be conducted by a Dy. C.C.S. or Dy. C.O.P.S. assisted by a Senior Accounts Officer or a Dy. Chief Accounts Officer, as the case may be, preferably with experience of traffic costing.

(iii) All Engineering surveys for new lines, gauge conversions and doublings should be under the charge of an Engineer-in-Chief in the Inter Administrative Grade. The Engineer-in-Chief should be in overall charge of the traffic survey of the project also and the traffic survey report should be prepared under his general guidance.

(iv) On those Railways where separate Construction Organisation exist under a Chief Engineer, the Engineer-in-Chief

(Survey) should work under the Chief Engineer (Construction); otherwise the Engineer-in-Chief should work directly under the General Manager.

5. The receipt of this letter may please be acknowledged.

Recommendation

The Committee note that the only Railway which has a sizeable number of indents outstanding for more than a week is the Western Railway. In view of the fact that the number of wagons, locomotives etc. on the Railways as a whole is in excess of the traffic load, the Committee consider it should be possible to take effective remedial measures to bring down the indents outstanding for more than a week on the Western Railway. The Committee would like to be informed of the measures taken to improve the position on the Western Railway.

(S. No. 26, Appendix XV, Para 3.19 of 22nd Report).

Action taken

The Western Railway's capacity to reduce the quantum of indents outstanding for more than a week is determined by the pattern of traffic offering. If the traffic offered for despatch is in excess of movement and transhipment capacities, there will always be some delay in regard to the clearance of this traffic and such delays cannot be eliminated by the deployment of additional wagons and locomotives.

2. The bulk of the traffic originating on the Broad Gauge system of the Western Railway is for destinations on the same gauge, whereas a sizeable proportion of the traffic materialising on the Metre Gauge is for destinations on the Broad Gauge involving transhipment at break-of-gauge points. This will be evident from the fact that the percentage of wagons loaded for break-of-gauge points during the period January to June 1968 varied from 6 per cent to 7 per cent on the Broad Gauge and 23 per cent to 30 per cent on the Metre Gauge. Movements *via* transhipment points are normally difficult and transhipment performance is dependent upon the contractor's ability to supply the labour required for transhipment of wagons. The availability of labour for transhipment of wagons has deteriorated in the

last few months to such an extent that all transhipment points on the Western and Northern Railways have become major bottlenecks. This unfortunate development has adversely affected the clearance of transhipment traffic as well as other traffic originating on the Metre Gauge systems of the Western and Northern Railways to the extent wagon mobility was reduced by the hold-up of transhipment wagons at terminals and intermediate points. The transhipment of Metre Gauge wagons at break-up-gauge points serving the metre gauge systems of the Western and Northern Railways deteriorated from 825 wagons per day in March 1968 to 667 and 622 wagons per day in May and June 1968 respectively. To meet this development, the loading of transhipment traffic on the Metre Gauge system of the Western Railway had to be reduced from 509 wagons per day in March 1968 to 411 and 404 wagons per day in May and June 1968 respectively.

3. This deterioration in transhipment capacities coincided with the bumper wheat crop from Punjab and Haryana which had to be moved before the monsoon broke in July 1968, as the storage accommodation in these two States was not adequate to cope with the record procurement of 15.12 lakh tonnes achieved by the Food Corporation of India from May to July, 1968. As a result of special arrangements made by the Railways to move the rabi crop on top priority basis, about 15.5 lakh tonnes of wheat and other foodgrains including 11.3 lakh tonnes on Government account were despatched by rail from Punjab and Haryana during the period May to July 1968. This performance which constitutes an all time record for loading of foodgrains from these two States was achieved without any reduction in the movement of imported foodgrains and fertilisers from ports to consuming centres in the interior. The massive movement of imported and indigenous foodgrains resulted in heavy detentions to foodgrains wagons at the unloading points which were not able to cope with this avalanche due to inadequate storage, road transport and labour arrangements. The large scale immobilisation of foodgrains wagons at terminals adversely affected wagon turn round and consequent availability of wagons for other users of rail transport on other Railways including the Western Railway both for originating and transhipment traffic.

4. The removal of civil bans on the inter-State movement of coarse grains and pulses from 1st April, 1968 also resulted in a sudden spurt in grain registrations and submission of inflated demands by grain traders. The combination of these factors resulted in registrations outstripping movement and transhipment capacities on the Western

Railway to such an extent that 1719 and 12608 indents remained outstanding for more than a week at the end of July 1968 on the Broad Gauge and Metre Gauge respectively.

5. The following emergency measures have been taken by the Western Railway to reduce the number of indents outstanding for more than a week on that Railway:—

(a) Old dated registrations are being cleared on preferential basis.

(b) Bulk supplies are being arranged at selected loading points for clearance of bulk registrations.

(c) Consignors have been permitted to arrange transhipment of their cosignments at break-of-gauge points with their own labour for which rebates equivalent to what the Railways would have otherwise spent in transhipping such cosignments, are being paid to the consignors concerned.

(d) Transhipment Inspectors have been appointed at all transhipment points for recruiting labour required for handling the full quota of transhipment traffic and entertaining labour supply offers from the trade and outside agencies.

(e) Labour contractors at transhipment points have been granted free railway passes for transport of labour from places of recruitment to places of work.

[*Ministry of Railways (Rly. Board), O.M. No.* 68-B(C)-*PAC-IV*/22-(*O*), *dated 20th September,* 1968].

Further Information

Please intimate the present position of registrations pending in Western Railway for less than a week and more than a week on broad gauge as well as metre gauge sections.

Reply

The position of outstanding registrations pending on Western Railway as on 31st October, 1968 for less than a week and more than

a week on Broad Gauge as well as Metre Gauge sections is given below:—

	Total	Registration	
		More than a week	Less than a week
BROAD GAUGE			
For free destinations	1136	130	1006
For quota destinations. . . .	145	10	135
For restricted destinations . . .	46	18	28
For special type of stock . . .	49	11	38
Grand total	1376	169	1207
METRE GAUGE			
For free destinations	1036	..	1036
For quota ,, ...	179	..	179
For restricted ,, ...	921	754	167
For special type of stock . . .	32	9	23
Grand total	2168	763	1405

2. It will be seen from the above that on the Broad Gauge out of a total outstanding registrations for 1376 wagons only 169 indents were outstanding for more than a week. The indent outstanding for free destinations were mainly on account of bulk registration of salt at Kharaghoda and Patri in excess of loading capacities, and in spite of loading 2736 wagons of salt from these points in October 1968 these indents remained pending for more than a week.

3. On the Metre Gauge, no demands for free destinations were pending for more than a week. The large number of demands pending for restricted destinations for more than a week were mainly for destinations on the N.F. Railway which had restricted the loading of traffic to destinations east of Siliguri from 5th October, 1968 on account of extensive breaches which resulted in suspension of goods and passenger services on the affected sections.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC.IV/22-(O) dated* 23-11-1968].

Recommendation

Now that the Railways have a surplus capacity and are looking for traffic, the Committee feel that it should be possible to meet the consumers' requirements of wagons in less than a week of the registration of the demand.

(S. No. 27, Appendix XV, Para 3.20 of 22nd Report).

Action taken

The Railways' capacity for clearance of traffic is determined by several factors, of which the most important is the line capacity for goods traffic. The existing surplus transport capacity relates to capacities created for movement of raw material including coal for Steel Plants, finished products of Steel Plants and export ore. The movement capacities developed for these items of traffic cannot be transferred to other sectors, and as such this surplus capacity is not available for meeting the demands of other users of rail transport.

2. It should be possible for the Railways to meet the consumers' requirements of wagons in less than a week of the registration of the demands provided the patterns of traffic offerings conform to movement capacities developed on each of the Zonal Railways, and there are not setbacks in Railway operation on account of uncontrollable factors, such as civil disturbances, labour strikes, floods, labour shortage at transhipment and unloading points, etc. Further, the overall transport capacity available on the Railway has to be seen in relation to the overall demand; it is not equally available for full application at all points of requirement at all times. In the circumstances, there will always be some delay in regard to clearance of demands submitted in excess of loading and movement capacities during the busy season.

3. The Railways accept indents from consumers regardless of the physical loading capacities available at the loading points. There is consequently scope for bulk registration of demands which may exceed the daily loading potential at certain loading points to such an extent that the demands cannot be cleared within a week of the registration despite full utilisation of the daily loading potential. Delays also occur whenever restrictions are imposed on the loading of traffic for particular destinations or routes to suit dislocations and setbacks in Railway operation caused by various factors, some of which are beyond the control of the Railways as mentioned above.

4. A special watch is being kept by the Railway Board and Zonal Railways on the clearance of outstanding registrations, and every effort is being made to meet the consumers' requirements of wagons in less than a week of the registration of the demands.

[*Ministry of Railways (Rly. Board), O.M. No. F. 68-B(C)-PAC.IV/22-(O) dated 20-9-1968*].

Recommendation

The Committee are not satisfied with this explanation. As stated in the note furnished by the Ministry, the number of M.G. oil tank wagons on the Railways on the 1st April, 1961 to 1964 were as under:

1-4-1961	2,567
1-4-1962	3,247
1-4-1963	4,086
1-4-1964	4,230

This clearly shows that about one thousand Metre Gauge wagons were added after 1st April, 1962, even though the Ministry of Railways became aware of the proposal for the construction of the pipeline between Gauhati and Siliguri. Had the Ministry curtailed their orders for oil tank wagons expenditure on the procurement of wagons in excess of requirements would have been avoided.

(Sl. No. 28, Appendix XV, Para 3.24 of 22nd Report).

Action taken

When the idea of laying a pipeline from Gauhati to Siliguri was mooted, the Railways had strongly opposed this idea. Even when a techno-economic study was undertaken the Railways had reiterated their opposition. Till October, 1962 when the final decision was taken by the Government of India to lay this pipeline, it had been anticipated that the Railways would have to meet the transport requirements of the refineries.

2. Even after a decision was taken regarding laying of the pipeline, no firm indication was available as to when the project would be completed. Actually the pipeline was completed only in October, 1964, while the Refinery had already started functioning in January, 1962.

3. The Ministry of Railways have, however, noted the recommendations of the Committee and are exercising adequate care before adding to the fleet of tank wagons.

4. This has been seen by Audit.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC-IV/22-(O), dated 3rd December, 1968*].

Recommendation

The Committee can hardly appreciate the plea that "factors beyond the control of the Railways led to deterioration" in the utilisation of oil tank wagons. In their opinion, the decrease in the ratio of loading to fleet was mainly due to the acquisition of oil tank wagons in excess of actual traffic requirements. The Committee hope that the existing oil tank wagons will be utilised to full capacity and further acquisition of these units will be made only after thorough scrutiny of the needs of traffic.

(S. No. 30 Appendix XV, Para 3.28 of 22nd Report).

Action taken

It is submitted that the deterioration in the utilisation of oil tank wagons reflected in the figures of the "ratio of loading to fleet" was due to several factors. In addition to the factors already enumerated earlier, the sharp deterioration noticeable from 1962-63 was mainly caused by the drastic change in the pattern of movement of POL traffic on the Metre Gauge section in the Eastern sector. Till the Gauhati refinery was commissioned, the petroleum products to the Metre Gauge areas in Bihar and U.P. were being routed from Budge Budge *via* Garhara transhipment point. After the commissioning of the Gauhati Refinery, a substantial quantum of POL products started moving to these areas from this refinery by all Metre Gauge route *via* Katihar. This led to an increase in the lead for this traffic. Also, the movement had to take place over the operationally difficult Metre Gauge section Gauhati-Siliguri-Katihar. The traffic over this section, particularly to Assam area, registered a sharp increase from 1962-63 onwards in the wake of the Chinese aggression in October, 1962.

The views expressed by the Committee have been noted. The existing oil tank wagons will be utilised to the maximum possible extent and a thorough scrutiny of the needs of traffic made before programming any additional tank wagons.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC-IV/22-(O), dated 7th October, 1968*].

Recommendation

The Committee feel that Government should very carefully examine the pattern of traffic which has resulted from the development of the Petroleum industry in the country. Government should delimit at the planning stage the most economic and efficient means that they want to follow for speeding up transport of POL traffic as the Railways should be given a clear picture of the pattern and extent of POL traffic that they will be required to handle so that they can gear up their operating plans including manufacture of oil tank wagons in accordance with these requirements.

(S. No. 31, Appendix XV, Para 3.29 of 22nd Report).

Action taken

The Ministry of Railways note the recommendations of the Committee. The matter will be pursued with the Ministry of Petroleum and Chemicals.

[*Ministry of Railways (Rly. Board), O.M. No.* 68-B(*C*)-*PAC-IV* '22-(*O*), *dated 7th October*, 1968].

Recommendation

The Committee feel that Government should very carefully examine the pattern of traffic which has resulted from the development of the Petroleum industry in the country. Government should delimit at the planning stage the most economic and efficient means that they want to follow for speeding up transport of POL traffic as the Railways should be given a clear picture of the pattern and extent of POL traffic that they will be required to handle so that they can gear up their operating plans including manufacture of oil tank wagons in accordance with these requirements.

[S. No. 31, Para 3.29 of Appendix XV to 22nd Report (Fourth Lok Sabha)].

Action Taken

Extensive studies have been made to make as realistic a forecast as can be made at a given time, of the product-wise requirements in the next 5 to 8 years. These estimates are further broken up region-

wise to determine the quantum of transport, road and rail, required at each of the loading bases, *i.e.* the main installations including the coastal refineries, the pipeline terminals and the break-of-gauge transhipment points. All of these studies are made by pooling the marketing intelligence of the oil companies, the information about the planning of future growth available with the Planning Commission and the concerned Ministries, the Railway Board and the Indian Institute of Petroleum. The Joint Technical Group set up by the Planning Commission published special studies on the movement of petroleum products between 1966 and 1970. In the preparation of this Report, the Joint Technical Group held consultations with the Ministry of Petroleum and Chemicals, Industry and the Railways and Inland Petroleum Movements Committee comprising of the oil companies. In connection with the planning of requirements for the Fourth Plan, another such detailed study has now been undertaken by this Ministry in collaboration with the Railways, the Indian Institute of Petroleum, the concerned Ministries, the Planning Commission and the marketing oil companies. These studies were placed before the oil Advisory Committee for consideration on 20th July, 1968.

In preparing the demand and movement estimates, note is invariably taken of the most economic and efficient means of transport of POL traffic within the framework of the available capacities. For instance, the first perference in drawing up transport plans has been given to the utilisation of the existing pipeline capacities.

The National Council of Applied Economic Research have also been entrusted with the specific study of determining more precisely the end-use consumption of major petroleum products in the hope that this study may help the Ministry in preparing the more realistic projections of future growth rate of demand.

It is also the policy of this Ministry to lay pipeline in future only after prior consultation with the Railway Board. No unilateral decision is being taken in such cases.

[*Ministry of Petroleum & Chemicals—(Department of Petroleum)—D.O. letter No.* 13|12|68-*IOC, dated 28th November*, 1968].

Recommendation

While there should be no objection to rail capacity being somewhat ahead of the demand, the Committee feel that there should be a realistic appraisal of traffic requirements from year to year

so that the programme for the manufacture of Box wagons and other rolling stock is tailored to requirements. The Committee consider that, had a more realistic appraisal been made about the requirements of box wagons in the light of traffic offering for coal and ore, it should have been possible to curtail to a larger extent the orders for the production of box wagons.

(S. No. 32 Appendix XV, Para No. 3.32 of 22nd Report)

Action taken

The observations of the Committee are noted. The Ministry of Railways would like to add that a review of requirements of wagons and other rolling stock is being made every year at the time of the preparation of annual Rolling Stock Programmes. The type-wise requirement of wagons is assessed during such reviews.

This has been seen by Audit.

[*Ministry of Railways (Rly. Board), O.M. No.* 68-B(C)-*PAC-IV*/22-(O), 2*nd December*, 1968].

Recommendation

In the opinion of the Committee, an increase of 65 per cent in the working expenses of the Railways during the Third Plan period is not a matter to be treated lightly.

The fact that the Railways have been able to meet their obligations by increasing freights and fares repeatedly during the last four years of the Third Plan should not make them oblivious to the fact that it is saddling the general economy with heavy surcharges. Besides, the Railways should clearly grasp the fact that if the rates continue to rise at the present rate, it is conceivable that an appreciable portion of traffic may get diverted to roadways which would only further aggravate the financial position of the Railways. The Committee consider that the best means of augmenting earnings is by improving the competitiveness and quality of service so as to attract more traffic. The Railways should also simultaneously take effective measures to arrest the rising expenses on working so as to take full advantage of the economies of scale and the improvements in rolling stock, track which have been effected as such heavy capital cost during the Third Plan.

(S. No. 33, Appendix XV, Para 4.9 of 23rd Report)

Action taken

The observations of the Committee are noted. Appropriate economy measures are being enforced in respect of all items of expenditure, capital, revenue and other heads. Reduction in expenditure in staff is being pursued with vigour. The ban imposed on creation of posts and filling up of posts in administrative offices at all levels is being observed.

Efforts are being made to secure more traffic for Railways by improving the quality of service offered, for instance, in the matter of adequate and timely supply of wagons, speeding up transit and ensuring safe transit. A Marketing and Sale Organisation on each Railway is making vigorous efforts to keep in closer touch with the specific needs of rail users with a view to provide better facilities not only to retain existing traffic but also capture additional tarffic.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC-IV/22-(O), dated 20th September, 1968*].

Recommendation

The Committee are not convinced by the explanation (economy in expenditure in staff). In August, 1967, the Committee had asked the Ministry of Railways to furnish the percentage of expenditure on staff employed in the Railway Board and Headquarters offices of the zonal Railways to the overall expenditure on staff over the period covered by the three Plans. They were informed that the relevant statistics were being collected. In the course of evidence (December 1967) the Committee were informed that the study would be completed in another four weeks' time. In January, 1968, it was stated:

> "No study has been made so far on the point raised by the Public Accounts Committee. However, a quick analysis has since been undertaken and a report will be submitted to the Committee as early as possible."

The Committee regret to observe that the information is still awaited. In the absence of the particulars called for, the Committee are not in a position to appreciate the economies stated to have been effected in the expenditure on staff.

Recommendation

In this connection, the Committee would also like to invite attention to the following recommendation of the Estimates Committee, made in para 11 of their 10th Report (Fourth Lok Sabha):

> "The Committee feel deeply concerned to note that roughly 63 per cent of the working expenses of the Railways is on staff cost and 37 per cent on materials and equipments. The Committee cannot too strongly stress the need for reduction of the high expenditure on administration."

While endorsing the views of the Estimates Committee, the Committee stress that the Railway Board should itself set a high example of economic and efficient running by reducing its own strength to the minimum. The Railway Board should simultaneously take up the question of fixing the strength of the Zonal and the Divisional Offices of the Railways at a level consistent with the requirements so as to achieve the utmost economy. The Committee would like to be informed of the action taken to effect economy and to absorb gainfully the staff which is rendered surplus due to reorganisation of the Railways and other economy measures.

(S. Nos. 34 & 35, Appendix XV, Paras 4.12 & 4.13 of 22nd Report.)

Action taken

The number of staff on the Indian Railways has to be viewed in relation to the out-put of the Railways in terms of Traffic Units (made up of passenger kilometres and not tonne kilometres produced), as in the table below:—

Year	Total Staff (000)	Total traffic units (Millions)	No. of staff per million traffic units
1961-62	1174	173,103	6·8
1962-63	1211	184,684	6·5
1963-64	1270	195,429	6·5
1964-65	1319	200,059	6·6
1965-66	1352	213,229	6·3
1966-67	1361	218,741	6·2

2. There has generally been a progressive reduction in the staff when viewed in relation to the traffic carried.

3. The number of staff shown above does not include the casual labour employed on the Railways. The following figures will show that the number of casual labour has also progressively come down during the recent years:—

As on	No. of casual labourer
31-3-1965	5,47,702
31-3-1966	4,89,221
31-3-1967	4,29,884
1-8-1967	3,25,822

4. It is not, however, suggested that no scope exists for further economy in staff. There has been a steady change in the last decade in the conditions of working due to progressive modernisation of the Indian Railways. The profitability of the Railways has also been adversely affected in the recent past. In view of these considerations, special efforts have been made during the last two years or so not only to control and reduce the staff strength but also to achieve economy in other ways.

5. Some of the important measures to control and bring down the staff strength are mentioned below:—

(a) A ban has been imposed on creation of posts and recruitment of staff for administrative offices. An attempt is also being made to reduce staff requirements by rationalisation and simplification of procedures and elimination of relatively infructuous work.

(b) The Efficiency Bureau has made a study of the trends of staff strength on Zonal Railways and the creation of Additional posts even for maintenance and operational purposes in certain departments where scope for economy seemed to exist has been made subject to serve restrictions.

(c) Due to the various measures taken certain staff have become surplus. A ban has, therefore, been imposed in February 1968 on the direct recruitment of Class III staff, without Railway Board's prior approval, in the operational

and maintenance categories also, with a view to absorbing the surplus staff after training when necessary.

(d) In March, 1968, the Financial Advisers & Chief Accounts Officers of the Indian Railways were asked to review the cadre strength of each department on priority basis and ensure that additions to staff strength take place only in unavoidable circumstances and reductions are made in departments where modernisation or rationalisation is being introduced and where workload is otherwise getting reduced.

(e) A yardstick has been laid down for provision of Class IV staff to offices and officers which should result in some economy.

(f) With a view to having still stricter control over the recruitment of Class IV staff in operational and maintenance categories, orders have been issued to Railways that the power to decide whether recruitment against regular posts should be made or not should be withdrawn from the lower authorities and exercised only by the General Manager and F.A. & C.A.O. personally.

(g) Railways have been asked to undertake an immediate review of the present yardsticks for determining staff strength in various categories in view of changes in working conditions during the past decade or so, consequent on provision of additional facilities, labour saving devices and improved standard of communications, improved tools and equipments etc.

(h) The Efficiency Bureau of the Railway Board has already reviewed the staff strength of the Engineering Department in the Headquarters and Divisional Offices of some of the Railways. A considerable number of posts has already been surrendered and some more surrenders are expected. A similar review of the Signal and Telecommunication Department is in hand by the Efficiency Bureau. Reviews have also been made by the Efficiency Bureau of certain other organisations like the Metric Cells, Flood Organisation and Public Relations Organisation on the Railways. These reviews have already yielded results or are expected to do so in the near future.

6. The staff rendered surplus have been employed to fill up existing vacancies due to wastage and retirement. They have been trained in alternative categories where additional requirements

existed due to maintenance and operational needs thus avoiding fresh recruitment. In certain cases they have been employed on alternative duty like Ticket Checking to increase railway revenues or replace the employment of casual staff.

7. The Ministry of Railways are fully alive to the need for setting an example to the Railways by reducing the strength of their own office to the minimum as suggested by the Public Accounts Committee. A Committee consisting of three Directors was recently appointed to go into the need for the gazetted posts in the various departments. Based on an overall review as also the recommendations of this Committee the following posts were surrendered.

1.	Joint Directors	6
2.	Deputy Director	1
3.	Assistant Directors/Os. S.D	7
4.	Asstt. Inspecting Officers	4
5.	Section Officers	13

The Non-gazetted strength of the Board's Office was also analysed in detail and the following reduction have so far been made:—

	Category	Reduction so far accepted by Directors' Committee.
1.	Assistants	17
2.	U.D.Cs.	14
3.	L.D.Cs.	18
4.	Other categories (Inspectors, Draftsman, Accountants etc.)	12

Scope for further economy is also being explored.

8. As regards the specific information desired by the Public Accounts Committee relating to percentage of expenditure on staff

employed in the Railway Board and Headquarters offices of the Zonal Railways to the overall expenditure on staff over the period covered by the three Plans, a note giving the information is attached. The submission of this information to the Committee was delayed as it was not readily available in the shape required and had to be specially compiled.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC-IV/22 (O), dated 20th September*, 1968].

Enclosure to reply to Recommendation No. 34 and 35

NOTE

on the

Percentage of expenditure on staff employed in the Railway Board and Headquarters Offices of the Zonal Railways to the overall expenditure on staff over the period covered by the three plans.

No formal study had been made of the percentage of the expenditure on the Railway Board and Headquarters office on each Zonal Railway to the overall expenditure on staff. The information has since been compiled as in the two statements, Annexures I & II attached.

2. It will be observed from the statement at Appendix III that the percentage increase in the expenditure on staff in the Railway Board's Office which showed an increasing trend during the First and Second Plan periods, has since stabilised at the end of the Third Plan periods; in fact, there is a marginal reduction. The increase during the first two Plan periods is to be viewed against the background of the workload due to the large scale increase in developmental expenditure undertaken.

3. In Appendix III, an attempt has been made to bring out the percentage of expenditure on staff in the Headquarters offices of each of the Zonal Railways to the total staff expenditure at the beginning and end of First Plan and at the end of the Second and Third Plan periods. The all-Railway position has also been shown. It may be recalled that the Indian Railways system was reorganised

and regrouped in 1951-52. The various regrouped Railways started functioning on the dates shown:—

Southern Railway*	14-4-1951
Central Railway	5-11-1951
Western Railway	5-11-1951
Eastern Railway†	14-4-1952
Northern Railway	14-4-1952
North Eastern Railway**	14-4-1952

4. It will be seen that in the year 1951-52 the Eastern, Northern and North Eastern Railways were not yet constituted while the Central and Western Railways came into being late in that financial year. Further, under the system of booking expenditure, the Headquarters staff costs were not classified separately and have had to be specially compiled for the committee. It has not been possible for all the Railways to compile this information for the years 1951-52 and 1955-56 due to the organisational changes and time-lag involved. A comparison of the expenditure on headquarters staff as a percentage of the total staff costs on Railways for 1960-61 (and of Second Plan) with that for the year 1965-66 (end of Third Plan) will show that there has been improvement uniformly on all the Railways. The headquarters expenditure in the year 1965-66 varied from 5.6 per cent on the Central Railway to 11.8 per cent on the North Eastern Railway. The North Eastern and Northeast Frontier Railways are working on the District pattern of organisation and have considerably more work done at the Railway headquarters than divisionalised Railways. The headquarters establishments, of these two Railways are, therefore, relatively heavier. The other two Railways on which the percentage of expenditure of headquarters staff to total staff expenditure is somewhat higher are the Northern and South Eastern Railways. It would, however, appear that in the case of these two Railways, the total staff expenditure is relatively low which gives a higher percentage for the headquarters expenditure. Otherwise the figures of expenditure on headquarters staff are generally under control on all Railways.

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*South Central Railway has since been carved out of Southern and Central Railways from 2nd October, 1966.

†This was bifurcated into Eastern and South Eastern Railways from 1st September, 1955.

**Bifurcated into North Eastern and Northeast Frontier Railways from 15th January, 1958.

The South Central Railway was formed on 2nd October, 1966, that is, in the later half of the financial year of 1966-67. It has been roughly estimated that the effect of the creation of this zone would be to increase the headquarters staff cost as a percentage of total staff costs by about 0.2 per cent overall for all Indian Railways. On the South Central Railway individually, it is seen from the figures for the period of 2nd October, 1966 to 31st March, 1967, that the percentage of expenditure on headquarters staff to total staff was of the order of 6.1 per cent.

Recommendation

The Committee are perturbed to find that the performance in regard to Coal consumption has deteriorated in both monetary and physical terms. The Committee feel that if the Railways had put to full use technological developments and their own expertise in fuel economy it should have been possible to reduce the coal bill. The Committee stress that the Railways should pay urgent attention to fuel economy and implement economy measures with determination and vigour to arrest the rising trend in Coal bill and to achieve maximum economy consistent with efficiency.

(S. No. 36 Appendix XV, Para 4.17 of 22nd Report).

Action taken

The observations of the Committee are noted. Further examination of the question of increase in coal consumption during the years 1960-61 to 1965-66 indicates that the following were the main reasons:

(i) reduction in the supply of superior grade coals to the Railways (This is the main reason for the increase in specific consumption on passenger services),

(ii) drop in average gross load and average speed of goods trains hauled by steam locos, consequent on introduction of diesel and electric traction on the trunk routes and high traffic density sections leaving the inferior services to the steam traction,

(iii) increase in number of vehicles dealt with per shunting engine hour in case of shunting services.

While it is not possible to alter the conditions referred to under items (i) and (iii), item (ii) is being examined in detail. Certain

technological improvements to increase fuel efficiency on steam locos are under investigation. Besides the action taken as already mentioned in the note at Appendix XI of the Report, the cooperation and the enthusiasm of loco running staff is also being secured by intensive training and suitable incentive schemes. Constant attention is being paid to achieve economy in loco coal consumption consistent with efficiency.

[*Ministry of Railways (Rly. Board) O.M. No. F. 68-B(C) PAC/IV/ 22(O), dated the 21st September, 1968*].

Recommendation

The Committee cannot help feeling that the original anticipation by the Ministry of Railways that cent per cent indigenous production could be established within a period of 5 to 6 years from the date of signing of the Agreement with the firm has proved unrealistic. While the Committee would like the Railways to accelerate the programme for the indigenous manufacture of components and parts required for electric locomotives, they stress that care should be taken to ensure their quality and price do not compare unfavourably with the imported product.

(*S. No. 41, Appendix XV, Para 5.19 of 22nd Report*).

Action taken

As already explained to the Committee in the note enclosed as Appendix XIII of the 22nd Report, the manufacture of all the 13 items covered by the Collaboration Agreement would be established by November, 1968 *i.e.* in a period of 6 years from the date of the signing of the Agreement. This would go to show that cent per cent indigenous production would have been established for all the 13 items covered by the Collaboration Agreement. It would appear that the Committee have come to the conclusion that the original anticipation of the Ministry of Railways that cent per cent indigenous production would be established within a period of 5 to 6 years from the date of signing of the Agreement with the firm has proved unrealistic, based on the statement of the Railways in the Note at Appendix XIII of the 22nd Report that the locomotives produced at the Chittaranjan Locomotive Works will still continue to have some import content consisting of basic raw materials like copper, etc. and finished products like insulating materials which are not yet available from the indigenous industry. In this connection, the Ministry of Railways would like to submit that the anticipation of the Ministry of Railways in October, 1962 that cent

per cent indigenous production can be established within a period of 5 to 6 years from the date of the signing of the agreement with the firm, only contemplated the indigenous manufacture of the items covered by the Collaboration Agreement and did not include the basic materials like copper, insulating materials, etc. which will necessarily have to be obtained from such sources as may be available. Indigenisation of these basic materials will depend upon the availability of these materials from the general trade and their importation, till such time these are available indigenously, cannot be avoided.

The Ministry of Railways note the recommendation of the Committee for accelerating the programme of indigenous manufacture of components and parts required for the electric locomotives and will also ensure that the quality and the price compares favourably with similar imported products.

[*Ministry of Railways (Rly. Board), O.M. No.* 68-B(C)-*PAC-IV* /22-(O), *dated* 20*th September*, 1968].

Further Information

Please furnish a note indicating the precise steps taken for accelerating the indigenous production of the loco components not covered by foreign collaboration.

Reply

Apart from the 13 items of major electric traction equipments for which Collaboration Agreement was entered into with M/s. Group of the Continent in November, 1962 and which have now been developed indigenously, the question of manufacturing the other components of the electric locos has also been pursued vigorously. The various items both electrical and mechanical which have been developed outside the Collaboration Agreement with M/s. Group are enclosed as Appendix IV.

In addition, action is also being taken to develop the other items and the progress in this connection is furnished as Appendix V. This matter is being further pursued.

The following figures would indicate the gradual increase in the indigenous content of the electric locomotives manufactured at CLW.

Year	Approximate value of indigenous equipment per loco (in lakhs of Rs.)
1963	Nil
1964	Nil
1965	Nil
1966	0·35 to 1·05 for various batches.
1967	3·29
1968	4·69 (anticipated)
1969	6·43 (anticipated)
1970	Over 7·00 (anticipated).

[*Ministry of Railways (Rly. Board) O.M. No. F. 68-B(C)-PAC/IV/22(O), dated the 21st September, 1968*].

Recommendation

The Committee note that it has been possible to establish capacity for the manufacture of 6 electric locomotives per month only in March, 1966 as against the original target of April, 1963 envisaged by the Railways. Now that the production of electric locomotives has been fairly well established, the Committee would like the Railways to plan the manufacturing programme to match their operational requirements.

(*S. No. 42, Appendix XV, Para No. 5.22 of 22nd Report*).

Action taken

Noted. The total requirement of electric locomotives for the period 1966-67 to 1970-71 has been estimated as 325 AC and AC/DC locomotives for the sections already electrified and expected to be electrified by March, 1971. As against this requirement the production of electric locomotives at Chittaranjan Locomotive Works was expected to be 293 locomotives leaving a shortfall of 32 locomotives. The programme of 325 locomotives included 42 locos required for Virar-

Sabarmati section. These locomotives will now be required after 1970-71. Therefore, it is expected that the planned requirement of electric locomotives will be adequately met from the production programme of Chittaranjan Locomotive Works upto the period ending March, 1971.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC/IV/22 (O), dated 20th September,* 1968].

Recommendation

The Committee desire that, in accordance with the assurance given to the Estimates Committee, the production of steam locomotives should be curtailed at the Chittaranjan Locomotive Works and they should switch over to the production of electric and diesel locomotives.

(S. No. 43, Appendix XV of 22nd Report, 1967-68).

Action taken

Steps have already been taken to taper off the production of steam locomotives and progressively increase to the maximum extent possible the production of electric locomotives at the Chittaranjan Locomotive Works. Action has also been initiated to undertake manufacture of diesel locomotives at the Chittaranjan Locomotive Works, in order to reduce further the output of steam locomotive.

Steam locomotive production at the Chittaranjan Locomotive Works has already been reduced from 14-15 locomotives per month to 7-8 locomotives per month, and this is expected to be curtailed further to 4-5 locomotives per month by 1970-71.

Commencing production of electric locomotives in 1961-62, the Chittaranjan Locomotive Works have gradually achieved a production level of 5 electric locomotives per month which will be progressively increased to the targetted level of 8 locomotives per month by the end of 1970-71. All the electric locomotives required by 1970-71 are likely to be produced in Chittaranjan Locomotive Works subject to timely delivery of supplies of electrical equipment from sub-contractors. The Chittaranjan Locomotive Works have also commenced production of diesel locomotives in December, 1967 and so far (upto end of May, 1968) have completed 4 such locomotives. During the

current year it is expected that at least 30 diesel locomotives will be manufactured. The rate of production will be progressively increased to 60 locomotives per year by the end of 1970-71.

It will thus be seen that necessary action has been taken on the lines indicated in this recommendation of the P.A.C.

This has been seen by Audit.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC/IV/22(O), dated 20th September,* 1968].

Recommendation

The Committee are not happy that the production target of the Diesel Locomotive Works should have suffered due to delays and deficiencies in the receipt of imported components, the receipt of components in mis-matched order as well as mis-despatch of consignments.

The Committee expect the Ministry to take remedial measures to ensure that the availability of components matches the production programme.

(S. No. 45, Appendix XV Para 5.36 of 22nd Report)

Action taken

While the observations of the P.A.C. have been noted, it may be reiterated that the delay caused by the docks strike in New York was entirely beyond the control of the Ministry of Railways as already accepted by P.A.C. *vide* recommendation No. 8 of the 32nd Report (1964-65) of the P.A.C. (3rd Lok Sabha). As regards delay due to mis-despatch/over carriage of components, the steps taken to avoid recurrence have already been explained in Railway Ministry's reply to recommendation No. 8 of the 32nd Report (1964-65) of the P.A.C. (3rd Lok Sabha). It may be mentioned that as a result of the steps taken there has not been recurrence of such incidents so far.

This has been seen by Audit.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC/IV/22(O), dated 20th September,* 1968].

Recommendation

In the earlier chapters of this Report, the Committee have examined and commented upon the various aspects of the Third Five Year Programme of the Railways. From the facts placed before them they are constrained to conclude that the planning of rail transport

during the Third Plan period was unrealistic in that it was not closely related to actual requirements. Against an estimated increase of 93 million tonnes, in the level of goods traffic during the Third Plan period the actual increase was only of 47 million tonnes, representing a shortfall of about 50 per cent. On the other hand, the financial outlay for the Third Plan turned out to be Rs. 1,686 crores, representing an increase of 27 per cent over the investment of Rs. 1,325 crores contemplated in the Plan.

The Committee feel that from the very outset goods traffic was over-estimated as it was not linked directly with demand but based on hopes and assumptions of production in different sectors reaching certain levels. Subsequently, even when it was evident that the traffic would not materialise to the extent anticipated, no serious effort was made to slow down the tempo of capital expenditure. All this resulted in heavy capital expenditure being incurred to create rail transport capacity far in excess of requirements. Several new lines were constructed which were not expected to be remunerative even after 11 years of their opening to traffic. In the case of 16 line capacity works, which included 12 works of doubling of tracks Rs. 27.03 crores were spent but the actual capacity utilised at the end of the Plan period was less than the capacity in existence and available before the works were undertaken. Similarly, 8,336 wagons were procured in excess of the target indicated in the Plan, even though the rail traffic generated was far less than envisaged.

The Committee need hardly point out that both the Ministry of Railways and the Planning Commission failed to take timely measures to curtail the investment programme in the light of actual traffic offering despite the clear stipulation in the Third Five Year Plan that the estimates of traffic would be subject to constant review in the light of actual trends. This underlines the need for reviewing critically the methodology as well as the machinery for planning in the Railway Board to ensure that investments in this key sector conforms to the actual trends based on requirements and that the built-in machinery for review and correction of imbalances is put to use without delay.

With all this heavy investment the capital at-charge of the Railways increased from Rs. 1,521 crores to Rs. 2,680 crores, representing an increase of 76 per cent during the Third Five Year Plan period. The over-capitalisation of the Railways during this period has not only affected their financial working but unnecessarily distorted the

budget and burdened the tax payer. It has also disturbed the entire pattern of investment and development of the economy in that scarce resources including valuable foreign exchange were blocked in rail programmes which could otherwise have been put to more productive use.

(S. Nos. 50 & 51, Appendix XV of 22nd Report, 1967-68).

Action taken

The observations of the Committee are noted.

With the adoption of new procedures for planning and the system of annual and quarterly reviews the Railway Ministry hope to make more realistic plan estimates in future.

[*Ministry of Railways (Rly. Board), O.M. No. 68-B(C)-PAC/IV/22(O), dated 20th September,* 1968].

Recommendation

The Committee need hardly point out that both the Ministry of Railways and the Planning Commission failed to take timely measure to curtail the investment programme in the light of actual traffic offering despite the clear stipulation in the Third Five Year Plan that the estimates of traffic would be subject to constant reviview in the light of actual trends. This underlines the need for reviewing critically the methodology as well as the machinery for planning in the Railway Board to censure that investment in the key sector conforms to the actual trends based on requirements and that the built-in machinery for review and correction of imbalances is put to use without delay.

(Sl. No. 51, Appendix XV, Para 6.3 of the Report).

Action taken

The observations of the Committee are noted.

It has been decided in consultation with the Railway Board that a small group in the Planning Commission, with which the Ministry of Railways, other Ministries concerned and the Divisions of the Planning Commission will be associated, will review periodically (say, every quarter) the estimates of growth of railway traffic. In making this review, the Group will take into account the targets of production of major commodities and past trends in the production and rail movement of these commodities. In the past, the traffic

targets were reviewed generally at the time of formulation of annual plans or when specific requests were received from the Railway Board for adjustments in traffic targets or financial allocations. It is expected that an exercise of this nature on a quarterly basis will help in making suitable adjustments in the investments in railway programmes.

[Planning Commission O.M. No. T&C/7(30)/67 dt. 5-10-1968.]

Further Information

1. *Please furnish a comprehensive note on the action taken by the Planning Commission in pursuance of the recommendations contained at Serial Numbers* 6,12 *and* 51 *of the* 22*nd Report.*

As indicated in the Planning Commission O.M. No. T&C/7(30)/67 dated the 5th October, 1968 to the Lok Sabha Secretariat, it has been decided, in consultation with the Railway Board, that a small group in the Planning Commission, with which the Ministry of Railways, other concerned Ministries and the Divisions of the Planning Commission will be associated, will review periodically (say, every quarter) the estimates of growth of railway traffic. In making this review, the Group will take into account the targets of production of major commodities and past trends in the production and rail movement of these commodities. In the past, the traffic targets were reveiwed generally at the time of the formulation of annual plans or when specific requests were received from the Railway Board for adjustments in traffic targets or financial allocations. It is expected that an exercise of this nature on a quarterly basis will help in making suitable adjustments in the investments in railway programme.

2. Since the beginning of this year, three meetings have already been held in the Planning Commission to consider rail traffic requirements for 1968-69. The representatives of the concerned Ministries participated in these meetings and it was possible to review the rail traffic requirements in the light of the trends of production particularly of major commodities, viz., iron and steel and their raw materials, coal, iron ore, cement, POL, foodgrains and fertilisers, which together account for 65 per cent of total rail traffic. The trends in other goods were also reviewed. For the formulation of rail traffic targets in the new Fourth Plan (1969-74), a working Group has been set up in the Ministry of Railways under the chairmanship of the Chairman, Railway Board, with which the Planning Commission, the Ministry of Transport & Shipping and

other concerned Ministries have been associated. Under this working Group, two Sub-Groups have been set up, one to formulate traffic targets for iron and steel and raw materials, coal and iron ore for export, and the other for cement, petroleum products, foodgrains, fertilisers and other goods. The Ministry of Railways are also represented on some of the working Groups which have been set up in the other Ministries for determining production targets of various major commodities.

2. *It was mentioned during the informal discussion that some correspondence had been exchanged between the Planning Commission and the Ministry of Railways about the fixation of targets for rail movement during the Third Plan on a realistic basis.*

Please furnish copies of correspondance exchanged on the subject, with particular reference to the assumption proposed by the Railways that the traffic for rail for 1960-61 should be assumed at 87.5 million tonnes, instead of the actual 82.5 million tonnes.

3. The Third Five Year Plan which was published in August, 1961 provided for a traffic target of 249 million tonnes for the railways to be achieved by 1965-66. This target included 76.8 million tonnes for general goods (excluding iron ore for export and railways' own materials). As early as March, 1961 itself, the Railway Board wrote to the Planning Commission suggesting that the target of traffic for general goods in the Third Plan should be raised by 10 million tonnes over and above the level proposed for the Third Plan (*vide* Railway Board's O.M. No. 61/PL/3/4(1), dated the 16th March 1961—copy enclosed at Annexure I). In this letter, the Railway Board stated that while the actual movement of miscellaneous traffic expected to be achieved during 1960-61 was 82 million tons (excluding ore for export), a further traffic to the extent of 5 million tons was a fair estimate of the miscellaneous traffic generated at the end of the Second Plan having due regard to the loss of traffic on account of the strike in July and the unsatisfied demands. The Railway Board further stated that the total volume of miscellanous traffic offering as a result of development in various sectors of the national Plan was, therefore, of the order of 87 million tons which showed an increase of about 26 per cent over the actual movement of 69 million tons at the end of the First Plan. In May 1961, the Prime Minister forwarded to the Planning Commission for their consideration, a letter from the Railway Minister in which the latter stressed the inadequacy of traffic targets in miscellaneous goods accepted by the Planning Commission (*vide* copy of Prime Minister's letter No. 948-PMH/61, dated the 10th May 1961, enclosed at

Annexure II). Subsequently, further references were made by the Railway Board for additional allocation of funds for general goods traffic in the Third Plan. The Planning Commission wrote to the Railway Board in July 1961 that there did not seem to be any need for any immediate modifications to be made in the Railway Plan at that stage with a view to providing for higher estimates of traffic as assessed by him. The Railway Board's attention was invited to the following statement in the Third Five Year Plan document:—"Furthermore, since the overall estimates of traffic can only be treated as tentative at this stage, they will be subjected to constant review in the light of the actual trends in traffic from year to year:" The Planning Commission further suggested to the Railway Board that they should keep them apprised of the trends in general goods traffic and the sections on which the pressure on account of traffic in these and other goods was increasing beyond expectations, not merely from year to year, but on a quarterly basis, so that the measures considered necessary to meet the increases in traffic could be planned in time. (A copy of Planning Commission U.O. No. T&C/7(19)/60, dated the 29th July 1961 is enclosed at Annexure III).

4. The Railway Board's proposals for enhancement of traffic targets in general goods was discussed at a meeting held in the Planning Commission on 27th January 1962. At this meeting, Member(I), Planning Commission, advised the Railway Board as follows:

> "Member (Industry) stated that the Planning Commission had not agreed to provide any additional funds for this purpose since they would be considering this matter only next year when a more definite picture of the industrial production in the country would be available. Since the railways required Rs. 75 crores for this purpose, they could specify the details of the line capacity works that would be necessary for this purpose as those were time-consuming processes and the Planning Commission could consider whether any additional commitment was to be made in this regard immediately. As regards rolling stock, since the delivery period was 12-18 months, the matter could justifiably be considered next year also, especially when the railway's expenditure on rolling stock would be considerably less in the last year of the Plan. Chairman, Railway Board, agreed to provide the necessary details."

5. In February 1962, the Railway Board again approached the Planning Commission reiterating that "as one year of the Plan is already over and the additional capacity will have to be created by

the beginning of the last year of the plan for handling the increased traffic target in that year, it is necessary that an immediate decision is taken in the matter because if there is any delay in the authorisation to the Railways to proceed with the works and the procurement of rolling stock, it will not be possible for the Railways to handle the additional miscellaneous goods traffic which they consider would be offering in the last year of the Plan." (A copy of the Railway Board's O.M. No. 61/PL/3/1(9), dated the 26th Feb. 1962 enclosed at Annexure IV.)

6. The Planning Commission examined the matter further and sent a communication on the subject to the Railway Board in April, 1962 (*vide* copy of Planning Commission U.O. No. T&C/7(24)/61, dated the 6th April, 1962 enclosed at Annexure V). In this note, the Planning Commission mentioned that they did not receive from the Ministry of Railways any review in general goods traffic with reference to the sections on which the pressure on account of such traffic was growing beyond that it was expected in the Second or the Third Plan. The Railway Board's attention was invited to the fact that the proportion of rail movement to total production in 1960-61 in the case of several commodities was lower than what had been assumed by the Railway Board in anticipating railway movement in these commodities for 1965-66, *i.e.* the last year of the Third Plan. The Railway Board were accordingly requested to review their estimates of general goods traffic. The Planning Commission, however, agreed to the Railway Board proceeding with the several small line capacity works, such as extension of loops and additional yard capacities which they had proposed.

7. The Railway Board sent a further detailed memorandum in June 1962 wherein they stated that "The Railway administrations are closely in touch with the users of rail transport and their judgement in respect of the likely volume of additional transport for which demands exist has to be accepted . . . . There is ample justification for increasing the provision of rail transport for commodities which are covered by the general term of 'miscellaneous goods' traffic in the Third Five Year Plan and unless this is done immediately, the complaints regarding lack of transport, both for industries and trade, will increase in volume and the resultant situation will affect the implementation of the Third Five Year Plan." (A copy of Railway Board's O.M. No. 61/PL/3/1(9), dated the 19th June 1962 is enclosed at Annexure VI).

8. The traffic targets in general goods were reviewed in the Planning Commission in August 1963 having regard to the information then available regarding the likely production of major commodities,

viz., foodgrains, jute, tea, paper, cotton, oilseeds, sugarcane, salt, fertilisers and mineral oils etc., and the proportions of total production of these commodities likely to move by rail. It was felt that the total traffic in general goods by the end of the Third Plan was likely to be somewhat more than what was provided in the Plan even though it might not be of the same order as suggested by the Railway Board. Having regard to the results of this review and the persistent demands of the Railways, it was agreed to increase the target in general goods traffic by 10 million tonnes. It may be mentioned that the traffic in general goods in 1965-66, *i.e.* the last year of the Third Plan, reached a figure of 78.1 million tones, which was somewhat higher than the traffic target of 76.7 million tonnes originally provided in the Third Plan. In 1966-67, the general goods traffic further increased to 80 million tonnes. However, the traffic increase did not materialise to the extent enticipated in August 1963 largely owing to deceleration in the growth of the economy in subsequent years.

3. (a) *Please state the estimates of rail traffic made by the Planning Commission for each of the years* 1966-67, 1967-68 *and* 1968-69 *and how these compare with the actuals.*

(b) *Please state whether the Planning Commission have analysed the reasons for the variations between the estimates and the actuals and if so, the main findings and the corrective measures taken, if any.*

9. It may be mentioned at the outset that the traffic targets for the annual plans are initially formulated by the Railway Board based on the information obtained from the Ministries concerned. The annual traffic targets are reviewed in the Planning Commission at the time of consideration of the annual Plans. During the current year, however, a small inter-Ministerial groups has been formed to review the traffic targets on a quarterly basis under the auspices of the Planning Commission. The Railway Board formulate the annual traffic targets before the presentation of the Railway Budget in the light of whatever information is then available from the concerned Ministries regarding the production programmes and demand projections for major individual commodities. The information available on production targets at the time of initial formulation of traffic targets is quite often not complete; nor is it available in sufficient detail. Further, at times there is variation between production which actually materialises during a year compared with the production and demand targets indicated to the Railway Board initially. These factors account for the variations between traffic targets formulated at the beginning of the year and actual traffic realisation.

10. The following table indicates the estimates of goods traffic on the railways for the year 1966-67, 1967-68 and 1968-69—the actuals for 1966-67 and the revised estimates for 1967-68 and 1968-69:

Freight traffic on the Railways

(Million tonnes)

	1966-67		1967-68		1968-69	
	Estimate *	Actuals	Original estimate *	Revised estimate	Original estimate (Jan. 68)*	Revised estimate (Aug. 68)
1	2	3	4	5	6	7
1. *Coal*						
(*a*) steel plant .	13·0	12·1	12·3	12·0	12·7	12·6
(*b*) railways .	18·3	19·5	19·5	18·9	19·1	18·5
(*c*) other users .	37·7	34·2	36·7	35·5	38·4	36·3
(d) total .	69·0	65·8	68·5	66·4	70·2	67·4
2. *Steel Plants*						
(*a*) raw materials	18·7	16·5	16·5	17·3	17·7	17·1
(*b*) finished products	6·8	6·3	6·5	6·4	6·6	6·6
(*c*) total . .	25·5	22·8	23·0	23·7	24·3	23·7
3. Iron ore for export .	7·2	6·3	8·3	6·7	9·5	9·0
4. Cement . .	9·9	8·9	9·6	9·3	9·8	9·7
5. Railways' own materials (excluding coal).	20·7	17·9	17·9	15·9	16·3	15·4
6. All other goods.	82·9	79·9	82·9	76·4	79·5	78·9
7. TOTAL . .	215·2	201·6	210·2	198·4	209·6	204·1

*With reference to the figures of estimates of traffic, the Audit has remarked that these figures are somewhat different from those used by the Railways for calculating goods earnings for the relevant years. It has been explained by the Railway Board that the difference in figures is due to the fact that at the time the calculation of earnings is made, figures of actual traffic originating during the previous year are not available. The total estimated traffic for the Budget year and the goods earnings are, therefore, based on the revised estimates of the previous year, plus the additional traffic anticipated during the Budget Year. Moreover, since the Budget papers are not ready some time in January every year, additional traffic anticipations are made on whatever data are available at that time and are subject to change later when more firm indications of traffic become available. The estimates for the various years indicated in the table above, on the other hand, take into account all additional information which becomes available subsequent to the presentation of Railway Budget including the previous year and hence the difference in the figures."

It will be noticed that there have been shortfalls in traffic both in 1966-67 and 1967-68. The shortfall in traffic in 1966-67 was considered due mainly to the fact that production of steel, coal and cement did not come to the expected levels. Due to the slackening of works on several railway projects, the movement of railway materials also went down. The decline in general goods traffic also reflected the recessionary trends in certain industrial sectors. During 1967-68 also, the decline in goods traffic has been considered to be due to recessionary trends in the economy. In 1968-69 also, the estimate of traffic as revised in August 1968 indicates a lower level of likely realisation than anticipated in January 1968. At the meeting of the Group which has been set up to review the estimates of railway traffic, held in the Planning Commission on 12.8.1968, it was indicated on behalf of the Railway Board that the trends in actual traffic during 1968-69 would be kept in view in formulating investment requirements for the next year.

4. (a) What measures do the Planning Commission propose to take to ensure that the traffic forecasts for the new Fourth Plan for goods particularly, coal, raw materials for finished products of Steel Plants, cement and Iron Ore for exports are made on a realistic basis?

11. As stated earlier, for the formulation of rail traffic targets in the new Fourth Plan, a Working Group has been set up in the Ministry of Railways with which the Planning Commission, the Ministry of Transport and Shipping and other concerned Ministries are associated. The Working Group has already held a few meetings and the report of the Group is expected to be finalised shortly. Railways are also represented on some of Working Groups which have been set up in the other Ministries for determining production targets of various major commodities.

4. (b) Please also indicate how the Planning Commission would ensure that the excessive investment does not take place on the rail capacity which is not called for in the context of developmental activities.

12. In regard to the question as to how the Planning Commission would ensure that excessive investment does not take place on increasing rail capacity, it may be stated that it is initially for the Railway Board to fully establish the justification for new works for increasing rail capacity before these are included in the Plan and to ensure that their phasing is coordinated with the requirements of traffic. It may be added that the Railway Board have set up a special Economic Cell for conducting economic analysis on matters concerning railway traffic forecasts and investment

plans in consultation with other Ministries and agencies, as may be required for coordination between Railways and other modes of transport, in the framework of traffic growth in the country. A mention about the Cell has been made in the report of the Railway Board for 1966-67 (Vol. I, page 5). The Planning Commission, however, attempts to bring about coordination between traffic forecasts and production targets which are approved for inclusion in the Plan. The Planning Commission also reviews the broad economic justification for major programmes and projects such as projects for construction of new railway lines. Both at the time of the formulation of the Five Year Plans and annual Plans, the Planning Commission attempts to ensure that investment proposed by the Ministry of Railways is in accordance with the anticipated growth of traffic.

[*Planning Commission O.M. No. T&E 7(30)/67 dated* 24-12-1968].

ANNEXURE I

GOVERNMENT OF INDIA

MINISTRY OF RAILWAYS

No. 61|PL|3|4(1) New Delhi, 16 March, 1961.

OFFICE MEMORANDUM

SUB:—*Provision for increased movement of miscellaneous traffic in the Third Five Year Plan.*

The Planning Commission is aware that the total provision for originating tonnage of miscellaneous traffic included in the Railways' Third Five Year Plan proposals is 98 million tons, excluding 10 million tons for export ore. This Ministry had pointed out that it would be necessary to provide for a minimum annual increase of 5 per cent in miscellaneous goods traffic and the provision which could be actually made within the targets indicated by the Planning Commission would not be adequate. The question of provision required for miscellaneous traffic has now been reviewed in the light of actual experience in the Second Plan. During the current year, the total movement of miscellaneous traffic is expected to reach 82 million tons excluding about 3 million tons for export ore, for which a specific provision has been made in the Third Plan on the basis of targets indicated by the Planning Commission. While the actual movement expected to be achieved during the current year is 82 million tons (excluding ore for export), a further traffic to the extent of 5 million tons is a fair estimate of the miscellaneous traffic generated at the end of the Second Plan having due regard to the loss of traffic on account of strike in July and the unsatisfied demands. The total volume of miscellaneous

traffic offering as a result of development in various sectors of the National Plan is, therefore, of the order of 87 million tons, which shows an increase of about 26 per cent over the actual movement of 69 million tons at the end of the First Plan. This Ministry considers that on the basis of actual experience in the Second Five Year Plan, a provision for an increase of 5 per cent in miscellaneous goods traffic is the minimum that should be made in the Third Five Year Plan in order to avoid shortage of transport capacity during the Third Five Year Plan. The additional originating tonnage which should be provided for in the Third Plan will, therefore, be 21.75 million tons, which would indicate a total originating tonnage of 108.75 million tons against the actual provision of 98 million tons which has been allowed for the Draft Third Five Year Plan. This Ministry considers that the gap of 10.75 million tons between the requirements and the actual provision made should be catered for by making adequate provision in the Third Plan so that the requisite capacity can be created by advance planning for rolling stock, line capacity works, etc. The additional financial allocation required for the Railways' Plan to cater for this increase in traffic has been assessed at Rs. 75 crores, a breakdown of which is given below:

Wagons	No. in terms of 4 wheelers	Cost
		Rs. crores
Broad Guage	16856	36·25
Metre Gauge	8464	10·88
	TOTAL	47·13
Locos :		
B. G.	91 Diesel mainline 11 Diesel shunting	13·69
M.G.	39 Diesel mainline 6 Steam shunting	3·75
	TOTAL	17·44
	TOTAL ROLLING STOCK:	64·57

2. As regards line capacity works, the additional traffic will result in increased movements on all sections of the Indian Railways. Besides provision for increased line capacity, terminal and tranship-

ment facilities at loading and unloading and break of gauge points will have to be provided. To cover these factors, a conservative provision at the rate of Rs. 1 crore per million tons, or a total additional provision of Rs. 10.75 crores is to be made. Considering that almost all the trunk routes on the BG. and MG. sections will be working to saturation in the Third Plan period, a minimum provision as indicated above is considered necessary. The total additional allocation for the Railways' Plan, which will be required for the increased target of miscellaneous goods traffic as indicated above, will, therefore, be Rs. 75 crores.

3. Attention is also invited in this connection to this Ministry's U.O. No. 61|PL|3|4(1) dated 9.2.61, addressed to the Planning Commission in regard to the provision for coal transport in the Railways' Third Five Year Plan. It is requested that a revised target for the tonnage of coal required to be moved by rail during the Third Plan be fixed early by the Planing Commission in consultation with the Ministry of Steel, Mines & Fuel, so that the additional allocation of funds necessary to move the enhanced target may be assessed and provided.

Sd|- O. S. MURTHY.

Director, Railway Planning

Railway Board.

To

The Planning Commission.

New Delhi

ANNEXURE II

Prime Minister's House,

New Delhi.

No. 948-PMH/61

May 10, 1961.

My dear Gulzarilal,

I enclose a letter from Jagjivan Ram, which merits full consideration.

Yours sincerely,

Sd|- J. NEHRU

Shri Gulzarilal Nanda,
Deputy Chairman,
Planning Commission,
New Delhi.

Minister for Railways
India.

D.O. No. 61|PL|3|4(1) *New Delhi*, 10-5-1961.

My dear Jawaharlalji,

As you are aware, the Railways have been under strain in the recent past and there is a large unsatisfied demand for goods transport. This has been the case in spite of the fact that the Railways have undertaken more workload than originally envisaged and lifted more miscellaneous goods than was provided for when the Second Five Year Plan was formulated.

Against this background, I wish to draw your kind attention to an important aspect of the Third Five Year Plan, *viz.* the inadequacy of transportation targets so far acceptable to the Planning Commission. Apart from the specific needs of industries like steel, coal and cement, the Planning Commission have indicated that a povision of 98 million tons be made for the originating traffic of miscellaneous goods, excluding iron-ore for export. The Railway Ministry which had made a study of this question, has been pressing the Planning Commission to accept the view that this would be totally inadequate at the end of the Third Plan and to include a minimum additional 10 to 11 million tons in the traffic targets under this category, with a corresponding additional financial allocation of Rs. 75 crores. In this connection. I enclose a copy of Office Memorandum No. 61|PL|3|4(1) dated 16th March, 1961.

With the experience we have had during the Second Plan, I am convinced that if we are to avoid at the end of the Third Plan a situation similar to what we are faced today of inadequate transport and obviate a transport bottleneck which might have serious repercussions on the economic development of the country, the traffic targets under miscellaneous goods would have to be increased by a minimum of 10 to 11 million tons with an increased financial allocation of Rs. 75 crores for the Railway Plan. I would request that this aspect may be given serious consideration before the Plan is finalised.

Yours sincerely,

Sd/- JAGJIWAN RAM

Shri Jawaharlal Nehru,
Prime Minister of India,
New Delhi.

ANNEXURE III

PLANNING COMMISSION

Will the Ministry of Railways kindly refer to the correspondence resting with their U.O. note No. 61|PL|3|1(2) dated the 27th June, 1961 regarding the estimate of increase in miscellaneous goods traffic during the Third Plan period? The Planning Commission have carefully considered all the points made in the Ministry's note. As the Ministry are aware, the Commission have been always anxious to show the estimates of increases in miscellaneous goods traffic separately for iron ore for export, railways' stores and other general goods and have had no desire to lump these estimates together. So far as the estimate of rail movement in respect of iron ore for export is concerned, the figure of 11.0 million tons for 1965-66 has already been accepted by the Railway Board. As regards the estimate of traffic for railways' own stores, the Planning Commission have already agreed to show it as 22.5 million tons for 1965-66 in the report on the Third Five Year Plan. The Ministry will recall that this estimate was shown by them as 21 million tons at the time the traffic on account of steel and raw materials was shown as 36 million tons for 1965-66. Whereas the estimate on account of railways' stores has been increased by 1.5 million tons, that for steel and raw materials has been reduced by 2.0 million tons. (The reduction of 1.5 million tons is on account of raw materials of steel and 0.5 million tons on account of finished steel). The average lead of traffic in raw materials for steel is 130 miles as against the lead of 63 miles for the railways' own stores. Thus, the rolling stock capacity made available on account of the shortfall in raw materials for steel should be enough to take care of the additional traffic on account of the railways' stores.

As regards the point that the tempo of construction in the Third Five Year Plan would be considerably higher than in 1960-61, the Planning Commission wish to point out that if works relating to new lines, bridges, line capacity works, track renewal, electrification and staff quarters are taken together, the average annual expenditure on such works during the Third Plan period is likely, if anything, to be lower than the expenditure on such works in 1960-61. Since several of the line capacity works are to be so phased that they may be completed in the first few years of the Plan, the expenditure on construction work in the last year of the Third Plan may, in fact, be somewhat lower than the average expenditure over the five years of the Plan. The Commission have doubts, therefore, whether the traffic in railways' stores will actually increase from less than 18 million tons in 1960-61 to 22.5 million tons in 1965-66 as assumed by the Railway Board. However, since the Railway Board

so desired, this estimate of 22.5 million tons has been shown in the Report on the Third Plan.

2. As regards traffic in other general goods, the estimate that the Planning Commission have shown in the Third Plan is 75.5 million tons as against 75.0 million tons which they had indicated in the first draft of the Chapter. The addition of 0.5 million tons is matched by an equivalent reduction in the estimated traffic of finished steel; the average lead in both cases being almost the same.

3. As regards the point that the estimate of miscellaneous goods traffic requires to be revised upwards, the Planning Commission wish only to point out that after discussions with the Railway Board, the Commission has included the following statement in the Report of the Third Five Year Plan:—

> "Furthermore, since the overall estimates of traffic can only be treated as tentative at this stage, they will be subject to constant review in the light of the actual trends in traffic from year to year."

It will be appreciated that if on a review of the position later during the Third Plan period, it is found necessary to provide for additional facilities for general goods traffic, this will be considered by the Planning Commission. As explained in this office U.O. No. T&C 7 (19)/60 dated the 5th June, 1961, it is difficult at present to indicate precisely the additional investments required for line capacity works for every little increase in miscellaneous goods traffic. Surely, the Railway Board are not planning additional capacity on various sections exactly according to the estimated requirements by the end of the Third Plan period and some spare capacity is being planned by them with a view to providing for future increases. Therefore, except for a few sections which may be working to saturation point, the main problem in the event of traffic in general goods exceeding the present expectation, will be to provide for additional rolling stock. The Ministry will appreciate that there is sufficient capacity available for manufacturing wagons within the country; the present capacity being assessed at 26,000 wagons, the actual production of wagons is only about 50 per cent of the capacity. It should not, therefore, be necessary to increase the capacity of manufacture of wagons on account of increases in estimates of miscellaneous goods traffic. All that will be necessary is to regulate the orders for wagons to be placed by the railways in a manner so as to provide sufficiently for the estimated increases in such traffic. The Ministry of Railways had indicated in their U.O. No. 58|PL|2|P|6 dated the 4th May, 1959 that "the placing of orders for wagons had to be on the basis of an assessment usually 18 months before the date of delivery in order

to enable the manufacturers to collect materials and arrange production schedules etc." It should be possible, therefore, to make adjustments in the wagon procurement programme later depending upon the review of the position every year.

4. The Planning Commission, would, in fact suggest that the Ministry of Railways should kindly keep them apprised of the trends in general goods traffic and the sections on which the pressure on account of traffic in these and other goods is increasing beyond expectations, not merely from year to year but on a quarterly basis so that the measures considered necessary to meet the increases in traffic could be planned in time. The Commission trust that with this assurance the Ministry of Railways will not insist on any immediate modifications being made in the Railways' plan at this stage with a view to providing for higher estimates of traffic as assessed by them.

Sd/- K. L. LUTHRA,
Director (Transport).

Ministry of Railways (Railway Board)—Shri O. S. Murthy, Director (Railway Planning)

Planning Commission U.O. No. T&C/7(19) 60 dated the 29th July, 1961.

ANNEXURE IV

GOVERNMENT OF INDIA

MINISTRY OF RAILWAYS

No. 61/PL/3/1 (9) *New Delhi, 26th Feb.* 1962.

OFFICE MEMORANDUM

In para 14 of the Summary Record of the Meeting held on 27th January 1962 in the Planning Commission, it was indicated that the Railway Board would furnish details of the line capacity works required in connection with the movement of 10 million tons of additional general goods traffic during the Third Five Year Plan. It was also mentioned in this para that since the delivery period of additional rolling stock required for this traffic was 12 to 18 months the matter could justifiably be considered next year especially in view of the fact that the Railways' expenditure on rolling stock would be considerably less in the last year of the Plan.

2. The Railway Board have given careful consideration to the question of providing the necessary rolling stock and developing the line capacity for the movement of this additional traffic in the Third

Plan particularly with regard to the time factor necessary for implementing the programme by the last year of the Plan.

3. Out of the total additional allocation of Rs. 75 crores required for this purpose, Rs. 65 crores are required for rolling stock and Rs 10 crores for line capacity work. It would be necessary to procure about 25000 additional wagons (in terms of four-wheelers) and 120 B.G. diesel locomotives. In regard to the time required for the procurement of this rolling stock involving both imports as well as indigenous production, it is necessary to explain, in some detail, the steps that are essential for their procurement.

4. In the case of diesel locomotives which will have to be imported, the time required between the placement of orders and the actual deliveries in the country would be about 12 to 18 months. In addition, nearly a year is required for processing the orders upto the stage of finalisation of the contract with the supplying firm. This is because after the clearance of the foreign exchange for import is obtained, tenders have to be invited allowing a period of at least three months for the tenderers and a further period of three months for scrutiny of the offers. Often, it is found that a reduction in price could be achieved through negotiation with the tenderers with the result that not less than a year is required before the order can be finalised. The total time required for the procurement of imported locomotives, is, therefore, of the order of 2 to 2-1|2 years. This is also confirmed by the experience we have so far had in the procurement of such locomotives by import.

5. As regards wagons, the manufacturing programme for 1962-63 which is the second year of the Plan has already been finalised in all respects. This programme takes into account the manufacturing capacity available in the country including in the Railway workshops. It is not possible to increase this programme. At the present moment, the Railway Board is finalising the rolling stock programme of 1963-64, *i.e.*, a year and a half in advance of the actual commencement of the delivery of the wagons included in this programme. This period is essential because the available capacity with wagon manufacturers has to be discussed individually so that the entire requirements of different types of wagons are covered between the different manufacturers after taking into account the installed equipment and the capacity for manufacture of different types of wagons of each manufacturer. After the allocation of the programme is settled the manufacturers have to prepare lists of material and components which have to be procured. They have also to arrange, in time, with their sub-contractors for the procurement of some of the components. The Railway Ministry has to arrange, if necessary by import, the required sheets and plates, wheel-sets and other com-

ponents for supply to the manufacturers. Import of components again involves invitation of global tenders. It would thus be seen that between the commencement of delivery and the finalisation of the Rolling Stock Programme, a minimum period of about 1½ years is required; the period till completion of the delivery being 2½ years. Under these circumstances the procurement of a sizeable number of additional wagons of the order of 25000 wagons to be dovetailed into an augmented indigenous capacity would need action being initiated immediately. Since all the additional 25000 wagons cannot be procured in one year over and above the present programme, it will be necessary to spread it over a minimum of two years *viz.* 1963-64 and 1964-65. It will, therefore, be appreciated that it would not be feasible to delay a final decision on the procurement of additional rolling stock in this case by another year as suggested at the Meeting

6. As regards line capacity works, the existing capacity and the capacity planned for the movement of 255 million tons (inclusive of 10 million tons of short lead for coal) at present approved (subject to the additional allocation of funds required being made), has been examined on the various routes. There are, however, certain sections which will require additional works to be carried out for the movement of 10 million tons of additional traffic of general goods under reference. These are indicated in the Annexure. A breakdown of the requirements of works is given below:

Crossing stations	Rs. 2·6 crores
Additional facilities in station yards	Rs. 2·2 crores
Additional loops	Rs. 2·0 crores
Extension of loops	Rs. 1·2 crores
Goods shed and transhipment shed facilities	Rs. 2·0 crores
TOTAL :	Rs. 10·0 crores

7. Having regard to the fact that these works which are spread over a large number of stations will have to be undertaken on busy sections, the time required for undertaking the works under increasing pressure of traffic will be considerable. The authorisation to carry out these works is also therefore required to be given immediately.

8. In conclusion, the Ministry of Railways would like to reiterate that as one year of the Plan is already over and the additional capacity will have to be created by the beginning of the last year of the

Plan for handling the increased target traffic in that year, it is necessary that an immediate decision is taken in the matter, because if there is any delay in the authorisation to the Railways to proceed with the works and the procurement of rolling stock, it will not be possible for the Railways to handle the additional miscellaneous goods traffic which they consider would be offering in the last year of the Plan.

Sd/- O. S. MURTHY,

Director, Railway Planning.

The Planning Commission (Shri N. C. Shrivastava),

New Delhi.

Copy to Shri V. S. Mishra, O.S.D. (Transport)

Planning Commission, New Delhi.

Works required in connection with additional movement of 10 million tons of miscellaneous Goods traffic in Third Plan.

(*a*) *Crossing Stations*—(Cost Rs. 2·6 crores) (*b*) *Yard facilities*—(Cost Rs. 2·2 crores).

Sections		
Ambala	Nagpur	Balharshah
Wardha	Balharshah	Kacheguda
Bina	Jhansi	Purna
Dhond	Manmad	Pakur
Bandel	Azizganj	Azimganj
Ludhiana	Jakkal	Hissar
Ghaziabad	Saharanpur	Nangal Dam
Delhi	Ambala	Delhi-Sarai Rohilla
Sarhind	Nangal Dam	Hassangarh
Gonda	Gorakhpur	Bhatinda
Kasganj	Fatehgarh	Sirhind
Fatehgarh	Kanpur	Gonda
Bangalore	Dharmavaram	Chhupra
Bangalore	Mysore	
Arsikere	Bangalore	Tirchy
Birur	Arsikere	Gonda
Pakala	Katpadi	Hooti
Ajmer	Khandwa	Mangalore
Phulera	Rewari	Itarsi
Surendranagar	Rajkot	Cuttack
Rajkot	Jamnagar	Jamnagar
Delhi	Bhatinda	Neemuch

(c) *Additional Loops*—(Cost Rs. 2·00 crores).

		Surendranagar
		Rajkot
Ghaziabad	Sharanpur	Botad
Delhi	Bhatinda	Broach

		(d) *Extension of Loops*—(Cost Rs. 1·2 crores).	
Achnera	Kanpur		
Belgaum	Hubli		
Harihar	Arsikere	Bina	Jhansi
Arsikere	Bangalore	Jhansi	Agra
Bandra	Surat	Bandel	Azimganj
Surat	Baroda	Delhi	Bhatinda
Rewari	Phulera	Achera	Kanpur
Jamagar	Okha	Podanur	Cochin
Ajmer	Ratlam	Dharmavaram	Pakala
Pandu	Tinsukia	Hubli	Harihar
Jhansi	Manikpur	Dharmavaram	Bangalore
Erode	Podanur	Sheranur	Calicut
Shoranur	Cochin	Botad	Bhavnagar
Rajkot	Veraval	Jetalsar	Porbunder

e) *Goods Shed & Transhipement Shed Facilities*—(Rs. 2 crores).

ANNEXURE V

PLANNING COMMISSION

Will the Ministry of Railways kindly refer to their O.M. No. 61/PL/3/1(9) dated the 26th February, 1962 regarding the additional provision for rail traffic in general goods in the Third Plan period. The Ministry will recall that the Planning Commission in their U.O. of even number dated 29th July, 1961 had requested them to keep the Commission apprised of the trends in general goods traffic and the sections on which the pressure on account of traffic in these and other goods was increasing beyond expectations, not merely from year to year but on a quarterly basis so that the measures considered necessary to meet the increases in traffic could be planned in time. Planning Commission have not received from the Ministry any review in general goods traffic on these lines, namely, with reference to the sections on which the pressure on account of such traffic is growing beyond what it was expected in the Second or the Third Plan. From such figures as are available from the published

reports of the Ministry it seems that the total traffic in general goods including railway stores in the year 1960-61 was of the order of 83.5 million tons as against the anticipated figure of 85 million tons for the year in the Second Plan. The estimated traffic for general goods for the year 1960-61 was shown as 85 million tons even in the report on the Third Five Year Plan *vide* table 5 on page 542 of the report. The Planning Commission, therefore, feel that the reasons for the shortfall in general goods traffic need to be studied in some detail. The estimated increases in general goods traffic for the Third Plan period may need to be reviewed in the light of the results of these studies. In this connection, the Commission would like to invite the attention of the Railway Board to the fact that the proportion of rail movement to total production in 1960-61 in the case of several commodities which are grouped under the general goods, was lower than what has been assumed by the Railway Board in anticipating rail movement in these commodities for 1965-66 i.e. the last year of the Third Plan. The figures in the following table will illustrate the point:—

	Proportion of rail movement to total production	
	As assumed by the Railway Board for the year 1965-66	Actual for 1960-61
	(Percent)	
Foodgrains	16·0	14·8
Oilseeds	29·0	22·9
Sugarcane	4·5	3·75
Sugar	60·0	49·2
Cotton raw	70·0	45·12
Jute raw	90·0	77·4
Tea	90·0	79·1

2. At the meeting of the Planning Commission with the Ministry of Railways on 27th January, 1962, the Ministry was advised that as regards the additional provision for rolling stock required to meet

any increases in general goods traffic beyond what were expected in the Third Plan report, this could justifiably be considered a year later. In the Ministry of Railways' O.M. under reference, the additional 25,000 wagons required for this purpose are planned over two years, namely, 1963-64 and 1964-65. As the increase in general goods traffic is expected to materialise only gradually over the entire Plan period, it is not understandable why all the additional wagons required to cater for this increase should be procured before the end of the fourth year of the Plan, namely, 1964-65. A substantial part of the increase in wagons and locomotives could obviously be planned in the last year of the Third Plan—the deliveries being spread suitably over all the 12 months of the year. In connection with the additional locomotives required for this purpose, a point that might merit consideration is whether an increase in the production of steam locomotives could not be planned at Chittaranjan Locomotive Works, if necessary, by introducing an additional shift at these Works. The Planning Commission feel that this is a point which might merit consideration in the Railway Board in the light of their studies of the trends in traffic.

3. After the Railway Board have reviewed their estimates of traffic and considered the above suggestion in regard to phasing of procurement of additional stock that may be required, the matter would be considered further by the Commission in the light of results of these studies.

4. As regards the additional line capacity works, these, as now proposed, consist of numerous small works such as extension of loops and additional yard facilities at a large number of stations some of which are quite important stations. The Ministry of Railways had earlier made a large provision for such works all over the railway system. The Commission is not aware as to what provisions were then made for these stations. However, to the extent that additional works are considered necessary at these stations, the Planning Commission would have no objection to the Railway Board proceeding with them. The additional financial provisions required for such works could, however, be considered later depending upon the progress of the works from year to year. It will be appreciated that the total provision for line capacity works in the Third Plan was Rs. 183 crores and subsequently the Planning Commission, in fact, has agreed to this being exceeded with a view to enabling the Ministry of Railways to accommodate additional doubling over 275 miles required largely in connection with coal movement. It should be possible

within this very large provision to make small adjustments and accommodate such small works as may be estimated to be required in connection with any increase in general goods.

Sd/- (K. L. LUTHRA),
Director (Transport),
Tele: No. 38278.

Ministry of Railways (Railway Board)—Shri P. R. Pusalkar

Planning Commission U.O. No. T&C/7(24)/61 dated 6-4-1962.

ANNEXURE VI

GOVERNMENT OF INDIA

MINISTRY OF RAILWAYS

No. 61/*PL*/3/1(9) *New Delhi, 18th June*, 1962.

19

OFFICE MEMORANDUM

Re: Provision in the Railway Plan for increased movement of miscellaneous traffic.

Will the Planning Commission kindly refer to their U.O. No. T&C/7(24)/61 dated 6th April, 1962. This letter deals with the additional provision for rail traffic in miscellaneous goods of 10 million tons involving an investment of Rs. 75 crores—Rs. 65 crores for rolling stock and Rs. 10 crores for line capacity works—the clearance for which has been urged by this Ministry *vide* their O.M. No. 61/PL/3/1(9) dated 26th February, 1962.

2. In order that there may be no over-lapping of issues, it is clarified that the Railway Board are proceeding with all additional works such as doublings, electrification, signalling, etc., and the acquisition of rolling stock involving an additional investment of Rs. 120 crores for meeting the pattern of traffic on the various sections and routes comprehensively dealt with in Railway Board's U.O. No. 61/PL/3/1(9) dated 27th December, 1961.

3. In the U.O. now under reference the Planning Commission, in effect, say that with regard to the further demand of Rs. 75 crores required for handling 10 million tons of additional miscellaneous goods traffic, there is yet time to take a decision on the matter. In their view, it is not yet certain whether miscellaneous goods traffic needs additional provision at all, and even if there is need, it may be considered after further studies of the trends of traffic both in regard to increase in quantum and in regard to the proportion of rail

movement in relation to total production are completed; the rolling stock required could be ordered some time later. It is also the view of the Planning Commission that as regards additional line capacity works required for this miscellaneous traffic, there may be sufficient room for accommodating these works within the enhanced provision for the Railway Plan. They further consider that if some of the works listed in this office memorandum of 26th February, 1962 are necessary, there would be no objection to the Railway Board proceeding with the works; but additional financial provision required for these works would be considered later depending upon the progress of the work from year to year.

4. This approach both in regard to line capacity works, and with regard to rolling stock in respect of the additional miscellaneous traffic is not, in the view of this Ministry, practicable. These issues are examined in greater details in the following paragraphs.

4.1. The Planning Commission have desired that the estimate of traffic in miscellaneous goods expected to materialise in the Third Plan should be reviewed in the light of the actual materialisation of such traffic in the last year of the Second Plan and the present demands for transport of such traffic.

4.2. The Planning Commission have observed that the actual traffic during 1960-61 was 83.5 million tons against the estimate of 85 million tons. It is clarified that the shortfall was not on account of miscellaneous traffic for the public but on account of less movement of iron ore for export on Railways' own account, some of the works having suffered due to shortage of rails etc. Moreover, it cannot be the contention of the Planning Commission that there were no unsatisfied demands for transport, which if they could be met, would have increased the figures for miscellaneous traffic still further to an appreciable extent.

4.3. The Planning Commission have referred to figures of proportion of rail movement to total production in respect of certain commodities during the year 1960-61 and have observed that these were lower than the proportions adopted in making the estimate for rail transport in 1965-66. It has to be clarified that the lower proportions of rail movement to total production in respect of certain commodities in this particular year do not indicate the total demand for rail transport in respect of these commodities in this year. The figures for the year 1960-61 merely show the relationship between the total production and the *actual* transport by rail *provided* during the year,

which does not necessarily indicate that the full demands of transport of these commodities were met by the quantities actually carried by rail during this year. It is this marginal gap that it is now intended to cover by making an additional provision under this traffic.

4.4. This Ministry desire to reiterate that the commodities listed under the term "miscellaneous goods" traffic include raw materials and finished products of *all* industries except the steel, coal and cement industries. Even in respect of the cement industry, rail transport is required for raw materials in the case of certain factories and this movement is included under "Miscellaneous goods" traffic. Therefore, inadequate provision for rail transport of miscellaneous goods traffic in the Third Plan would inevitably result in a shortfall in meeting the transport requirements of such industries the production programmes of which are an integral part of the Third Five Year Plan. The consequences of such a shortfall will no doubt be serious on the implementation of the Plan as a whole and this Ministry, therefore, considers that the additional provision for miscellaneous goods traffic as proposed should be provided for in the Railway Plan. Besides raw materials and finished products of industries as mentioned above, the category of "miscellaneous goods" traffic also includes commodities essential for the life of the community such as foodgrains, fertilisers, vegetable and mineral oils, paper, cotton, textiles, jute, oil seeds, sugar, sugarcane; tea; salt; etc. In addition, all construction material required in connection with the setting up of new industries and expansion of existing industries *including* the steel plants, cement factories, multi-purpose projects, housing etc. are also included under the category of "Miscellaneous Goods" traffic. A shortfall in meeting the transport requirements of these commodities many of which cannot be transported by means other than rail will have adverse repercussions on the industrial development programme as well as on the plan assumptions of meeting the needs of the community in essential commodities and consumer goods. This Ministry would, therefore, reiterate that additional provision should be made in the Railways' plan for meeting the transport requirements of commodities falling under the category of "miscellaneous goods" traffic, a major portion of which cannot be denied transport on the plea of non-essential character of the commodities concerned.

4.5. The Planning Commission have suggested that they may be apprised of the trends in general goods traffic and the sections on

which the pressure of movement of such traffic is increasing beyond expectations on a quarterly basis so that the measures considered necessary to meet the increase in traffic could be planned in time. It has to be clarified in this connection that there are no statistics in the accepted sense of the term which are compiled or can be compiled as a regular measure to reflect the actual demands for transport of "miscellaneous goods" traffic from and to different areas. The Railway administrations are in close touch with the users of rail transport and their judgement in respect of the likely volume of additional transport for which demands exist has to be accepted. The figures of outstanding registrations for wagons which are available, cannot be taken to reflect accurately the outstanding demands for transport, as for obvious reasons when supply of transport is limited over certain routes, the registration of demands is somewhat exaggerated and on the other hand, the permissible maximum registrations for loading of wagons being related to the handling and transport capacity available at each station, results in a depression of the actual demand. During the last two years non-availability of rail transport for meeting the *full* demands of industries and other users of the Railways has been a common feature and the Planning Commission is aware of the position, as some of the parties have taken up their complaints of lack of transport to the Planning Commission. This Ministry, therefore, considers that there is ample justification for increasing the provision for rail transport for commodities which are covered by the general term of "miscellaneous goods" traffic in the Third Five Year Plan and unless this is done immediately, the complaints regarding lack of transport both for industries and trade will increase in volume and the resultant situation will affect the implementation of the Third Five Year Plan.

4.6. The Planning Commission have observed that as the increase in general goods traffic is expected to materialise only gradually over the plan period as a whole, they are unable to understand why the additional wagons required for the increased provision for such traffic should be procured before the last year of the Plan. They also consider that a substantial part of the increase in wagons and locomotives could be procured in the last year of the Plan, the deliveries being spread suitably over all the 12 months of a year. For this very reason (*i.e.* that the additional traffic will materialise gradually in every year of the Plan and not only in the last year of the Plan), additional rolling stock should be procured, in the opinion of this Ministry, gradually in every year of the Plan and not only in the last one or two years of the Plan. This gradual procurement can be done only if adequate orders for the rolling stock manufacture are placed and action taken for the placing and procurement of the material with

indigenous and imported. The manufacturers can also go ahead with their production schedules. The manufacture of wagons is not on top and cannot be increased or suddenly decreased at will.

5. The Planning Commission is aware of the numerous difficulties in production of wagons and import of diesel and electric locomotives which have to be overcome before the planned quantity of rolling stock can be commissioned into service. In this connection attention is invited to paras 4 & 5 of this Ministry's O.M. of 26th February, 1962 referred to earlier. It will be unrealistic to assume that all these difficulties, many of which are the result of unforeseen developments, would be overcome completely and planning for procurement of rolling stock subjected to a fine adjustment. Even if the decision to provide increased capacity for transport is taken right now, no increased capacity can be provided in the next two years of the Plan. If clearance to the Railways is given at a late stage and the Railways are called upon to handle the increased traffic, it would be impossible to do so.

6. The Planning Commission have suggested that the question of production of additional steam locomotives at Chittaranjan Locomotive Works should be considered, presumably to reduce the import of diesel locomotives for the additional traffic. It is pointed out in this connection that the future policy regarding motive power on the Indian Railways was gone into in detail when the Third Five Year Plan was prepared, and it was decided that the procurement of steam locomotives should be stabilised at the existing level. Apart from the question of policy, the Commission is also aware that capacity is being developed at Chittaranjan Locomotive Works for progressively increasing the manufacture of Electric Locomotives. It will not, therefore, be feasible to provide the increase in motive power required, both on B.G. and M.G. by production of additional steam locomotives over and above what is envisaged in the Plan.

7. In regard to the line capacity works required for the increased target of miscellaneous goods traffic, this Ministry had proposed an additional provision of Rs. 10 crores. Attention is invited in this connection to this Ministry's U.O. No. 61/PL/3/1(9) dated 27th December, 1961 in which it was clarified that the total cost of line capacity works programmed in the first two years of the Plan period for handling the traffic more particularly of coal, the pattern of movement of which was made available to the Railways after the initial plans were formulated and short lead movement of coal, including the forward expenditure from the Second Plan, was Rs. 230 crores.

Almost all of these works which are essential high priority works would be completed during the Plan period and, therefore, the full expenditure of Rs. 230 crores would also be incurred during the Plan. The Planning Commission also agreed at the meeting held on 16th January, 1962 that further doubling to the extent of 275 miles required to cater for the pattern of coal movements on various routes could be taken up by the Railways. This Ministry had proposed in their U.O. referred to above that a total allocation of Rs. 249 crores would be required for line capacity works excluding the cost of the additional doubling of 275 miles which are not included in the programmes of the first two years of the Plan. The total cost of works approved so far (*i.e.* at the beginning of the Second year of the Plan) including the additional doubling of 275 miles is, therefore, already in excess of the total allocation of Rs. 249 crores asked for and, therefore, there is no scope for accommodating the additional works required for the increased target of "miscellaneous goods" traffic within this provision. The works proposed in connection with the increased target of "miscellaneous goods" traffic have not yet been programmed; once the additional works are taken up as suggested by the Planning Commission they would have to be completed and additional expenditure increased.

8. The Ministry of Railways, therefore, urge that a firm decision on the question of miscellaneous traffic should be taken, and the Railways may be given the necessary clearance immediately for making provision in respect of additional miscellaneous goods traffic.

9. This subject was also discussed at the meeting of the Planning Commission held on 25th May, 1962 and the Planning Commission will no doubt take necessary action.

Sd/- O. S. MURTHY,

Director, Railway Planning.

The Planning Commission,

NEW DELHI.

CHAPTER III

RECOMMENDATIONS/OBSERVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE REPLIES BY GOVERNMENT

Recommendation

1.40. The Committee note from para 15 of the First Report of the Working Group on Coal Production and Transport that the original target of 91.4 million tonnes of Coal Traffic took into account 13.78 million tonnes of Washed Coal to be moved from the washeries. The Mid-term Plan Appraisal specifically stated that clean coal to be supplied by the Washeries in 1965-66 would 9.5 million tonnes. It is thus clear that the estimate of the Working Group of the 13.78 million tonnes of washed coal exceeded the actual requirements by more than 4 million tonnes and this margin should have been taken into account by the Railways while determining the net quantities of coal to be moved.

1.43. The Committee are constrained to observe that the suggestions of the Working Group on Coal Production and Transport were not properly followed and the actual trend of movement of coal from year to year was not kept in view while fixing the traffic targets.

(S. No. 8 & 9 Appendix XV Para Nos. 1.40 and 1.43 of 22nd Report.)

Action taken

The original plan provided for a production of 98.6 million tonnes of coal against which a rail movement of 91.4 million tonnes was anticipated. Subsequently it was known that more coal than was originally anticipated would move to the washeries by rail, and an additional movement of 5 million tonnes was, therefore, provided for with the approval of the Planning Commission. This raised the requirement to a total rail movement of 96.4 million tonnes of coal (91.4×5) against the accepted production target of 98.6 million tonnes. Thus the difference in production and rail movement of coal was only 2.2 million tonnes. At the time of the mid-plan appraisal, however, it was noticed that the ratio of duplicate movement had actually exceeded the original estimate. The gap between the revised production and rail movement targets was therefore reduced to 0.9 million tonnes (Production 89.9 million tonnes—rail movement

89 million tonnes). It may be mentioned that the quantum of duplicate movement is related to washery output to the extent that more washed coal is supplied to the steel plants, the quantum of the duplicate movement goes up and the gap between production and movement is correspondingly reduced.

The Third Five Year Plan was finalised in March, 1961, whereas the first report of the Working Group on Coal was submitted in April, 1962. Hence the original Plan could not take into account the recommendation of the Working Group. Further it will be seen from para 15 of the first report of the working group, that the movement of coal to washeries not requiring rail transport was assumed at 11.54 million tonnes. This was subsequently reduced to 7.84 million tonnes, in Annexure I of the 2nd report (August, 1962) and as a consequence, the rail transport requirement for this short-lead movement went up by 3.70 million tonnes (11.54—7.84=3.70).

It will be seen from the table below that, during the Third Plan, the actual rail movement of coal was quite close to the actual production. In 1962-63, when the above projections were made, the rail movement was as high as 99.8 per cent of the actual production.

(million tonnes)

	1961-62	1962-63	1963-64	1964-65	1965-66
Production	56·1	61·5	66·9	64·0	69·5
Rail movement	53·9	61·4	64·1	62·7	66·7
Percentage of rail movement to production	96·1	99·8	95·8	98·0	96·1

The new methods of planning now adopted, *i.e.*, demand orientation in the fixation of targets and annual and quarterly plan reviews, etc. are expected to enable the Railways to arrive at a more realistic estimate in future.

Comments of the Audit

The observations of the Committee related to the non-adjustment of traffic forecast for movement of washed coal when the output of washed coal was brought down by 4 million tonnes in the Mid-term Appraisal. Since the shortfall in output affects the movement in two directions, the non-inclusion of movement in one direction in the earlier estimates does not affect the observations made by the Committee.

Further Comments of the Ministry of Railways (Railway Board)

The Committee's observation was that the margin of 4 million tonnes in the estimated output of washed coal should have been taken into account at the time of the Mid-term Appraisal while determining the net quantities of coal to be moved. In the Action Taken Note the Ministry of Railways have explained how the original Third Plan target was not based on the estimate of the Working Group on Coal Production and Transport of the movement of coal to and from washeries, and as such there was no occasion for a corresponding reduction when the anticipated movement from the washeries was reduced by 4 million tonnes. The Mid-term Appraisal was carried out on the basis of the empirical ratio between total production and total rail movement of coal. In 1962-63, the year before the Mid-term Appraisal, the percentage of rail movement to production had reached 99.8 per cent. In view of this, against the production of 89.9 million tonnes, rail movement of 89 million tonnes was assumed. Since the Mid-term Appraisal was not based on output of washed coal, the question of shortfall in output affecting movement in two directions and not only in one direction, would not appear to arise.

Further comments of the Audit

It is suggested that the Audit observations along with the Ministry's remarks thereon, on which we have no further comments, may be forwarded to the Lok Sabha Secretariat.

[Ministry of Rlys. (Rly. Board) O.M. No. 68-B (C)-PAC/IV 22(9) dated 3-12-1968].

Recommendation

The Committee regret the delay that has occurred in arranging the supply of electric traction equipment from Heavy Electricals. The Committee stress that Heavy Electricals should gear up their manufacturing and supply programme for electric traction equipment so that the programmes for the manufacture of E.M.U. coaches does not suffer.

(S. No. 20, Appendix XV Para 2.30 of 22nd Report).

Action taken

As far as the Ministry of Railways are concerned, the importance of timely and adequate supply of electric traction equipment from

Heavy Electricals, Bhopal, to suit the manufacturing programme of EMU coaches, electric locomotives and diesel-electric locomotives has been pursued at the highest level and is being followed up continuously through correspondence, coordination meetings, personal visits etc. The Senior Inspecting Engineer of the Railways posted at Bhopal also follows up the manufacture and supply of the electric traction equipment by HEIL to the Railways. It is hoped that HEIL will be able to gear up their production programme to suit the manufacturing programme of the Railways in the near future.

[Ministry of Rlys. (Rly. Board) O.M. No. 68-B(C)-PAC IV 22(O), dated 20-9-68].

Recommendation

The Committee regret the delay that has occurred in arranging the supply of electric traction equipment from Heavy Electricals. The Committee stress that Heavy Electricals should gear up their manufacturing and supply programme for electric traction equipment so that the programme for the manufacture of E.M.U. coaches does not suffer.

(S. No. 20 Appendix XV, Para 2.30 of 22nd Report).

Action taken

Noted. Timely delivery of equipment depends amongst other things upon factors such as timely receipt of orders, clearance of foreign exchange and proper product-mix. All these are controlled by the Railways. In this particular case, Heavy Electricals (India) Limited have orders for 63 more sets only which will be completed within the first few months of the year 1969-70.

The committee on Public Undertakings (Fourth Lok Sabha) examined this aspect and have recorded as follows in their final report:

> "It appears to the Committee that had the designs and the specifications been given to HEIL in time perhaps, they would have manufactured and supplied the equipment to the Railways in time. It seems that the indecision on the part of Railways delayed the timely action being taken by the Undertaking to Manufacture these equipments."

[Ministry of Industrial Development & Company Affiairs (Deptt. of Industrial Development) DO No. 25 23 68 HECHE, dated 24-9-1968].

Recommendation

The Committee are not able to appreciate why the Railways did not curtail the capital outlay or at least stabilise it at the level of

invesetment reached in 1962-63 (namely Rs. 215 crores) for the remaining three years of the Plan when it was abundantly clear that the traffic for Railways would be markedly less than was originally envisaged. The Committee cannot help pointing out that if the Railways had been more realistic and critical in the matter of capital expenditure in 1963-64, it should have been possible not only to save heavy capital investment but also to avoid adverse repercussions on the general economy which have resulted from a steep curtailment in the level of capital outlay of Railways from Rs. 275 crores in 1964-65 to Rs. 150 crores in 1967-68.

(S. No. 24, Appendix XV, Para 3.10 of 22nd Report).

Action taken

1. The mid-term Plan appraisal was made in November, 1963 The traffic targets for 1965-66 was set them at 245 million originating tons in place of 264 million assessed in January 1962. In the Planning Commission's Publication entitled "The Third Plan Mid-term Appraisal" it was stated "Trends in traffic—The development programme for railways in the Third Plan was drawn up in relation to a total traffic of 245 million tons estimated to materialise in 1965-66. The present programme provides for capacities adequate for carrying 260 million tons. Owing to shortfalls anticipated in the production of steel, coal and cement industries, originating traffic in the last year of the Third Plan is now reckoned at about 241 million tons. However, since the traffic will be growing steadily over the remaining period of the Plan, originating traffic on the railways during the last quarter of the year 1965-66 is expected to correspond to a higher annual rate than the estimate of 241 million tons for the year as a whole. It is proposed to carry out the rail transport programmes as enlarged so that transport capacities should be adequate and even a little ahead of actual need at the beginning of the Fourth Plan".

2. The expenditure during 1964-65 and 1965-66 was based on annual reviews, reductions being effected in the development programme of Railways by slowing down or deferring to the Fourth Plan schemes linked with specific projects and cutting back the procurement programme for Rolling Stock. The outlay on new schemes taken up during each of the last three years of the Plan was brought down from about 13 per cent in 1963-64 to 10 per cent in 1964-65 and to only 6 per cent in 1965-66. The bulk of the investment in each of these years was in respect of works already commenced in the earlier years of the Plan or for the Rolling Stock received in those years against orders which had been placed earlier. Curtailment of the outlays could be made only in respect of new

schemes under consideration but not in respect of the works already commenced and in progress.

3. The lower level of capital outlay in 1967-68 was rendered possible due to completion in the earlier years of a number of works already in progress and curtailment of outlay on new works and schemes.

4. For judging the repercussions on the general economy, one should look at the total outlay including expenditure from Depreciation Reserve Fund, Development Fund etc. rather than merely the outlay charged to capital. The reduction in total outlay was more gradual—than on capital outlay alone—from 389.62 crores in 1964-65 to 363.56 crores in 1965-66 and 286.05 crores in the Revised Estimates for 1967-68.

[Ministry of Rlys. (Rly. Board) O.M. No. 68-B(C)-PAC/IV/22(2), Dated 20-9-68].

Recommendation

The Committee may be informed of the final settlement reached with the foreign firm regarding recovery of liquidated damages on account of delayed supply of main equipment.

(S. No. 39, Appendix XV Para 5.3 of 22nd Report)

Action taken

It was stated in the written note on the subject earlier submitted to the Committee, as has also been referred to in para 5.2 of the Report, that an amount of DM 675,000 had already been recovered from the firm as liquidated damages on account of delayed supply of the main equipment and that the amount of liquidated damages on account of delay in supply of spares was yet to be advised by the D.G./I.S.M. London.

The I.S.M London, who were the contracting authority and who were also therefore the authority to decide the question of levy of liquidated damages have since advised this Ministry as under:—

> "Maximum liquidated damages recoverable in respect of delay in delivery of spares DM 45,084. After making due allowance for reasons for delay outside suppliers control like Fire, Strikes, building of Berlin Wall in 1961 etc., liquidated damages reduced to DM 24,321. As we have previously recovered liquidated damages of DM 675,000 by way of an *ad hoc* settlement against a total claim of

1.25 million Deutche Mark on account of delay on locomotives and equipments it was not considered to be in best public interest to mar our good relations with the GROUP who is sole supplier of this type of equipment to Indian Railways by recovering such a small additional amount."

It is further advised that the Railways suffered no loss or inconvenience due to the delay in receipt of spares, as they were available for use by the time the locomotives were put into service, which itself was delayed and for which DM. 675,000 had already been recovered.

[*Ministry of Railways (Rly. Board) OM No. 68-B(c)—PAC-IV/22 (O) Dt.*, 20-9-68].

Recommendation

The Committee are concerned to note that although agreement with the firm for technical assistance was executed more than two years after the offer was made no attempt seems to have been made during this period to tap indigenous sources and capacity for the manufacture of the equipment. It is surprising that soon after the agreement was signed it became known that the seven items could be produced by the trade independently.

(*S. No.* 40, *Appendix XV, Para No.* 5.12 *of* 22*nd Report*)

Action taken

Negotiations for the manufacture of some of the electrical equipment required for the electrical locomotives were started with M s. GROUP in January, 1961 but a firm agreement could only be entered into with them in November, 1962. The 13 items to be manufactured under the Collaboration Agreement were decided taking into account the recommendations made by the collaborators and also the possibility of obtaining such equipment in the country from other sources. At the time the Collaboration Agreement was finalised and signed, the development of the other industries in the country was also such that there was no definite possibility of meeting the Railways' requirements of equipment on the sophisticated electric locomotives. However, with the general spurt in the industry it was observed that some of the manufacturers in the country could meet the requirements of the Railways more economically than if the Railways undertook to set up special facilities for manufacture of these equipments, provided they could get detailed specifications which were not then available with the Railways.

On this basis it was decided to obtain the 7 items out of a total of 13 items from the trade independently. As mentioned earlier these items which could be manufactured by the trade were such that they could be produced only with the help of specifications framed by the Railways based on the data supplied by the collaborators after the agreement was signed. With this Mangement, the development of additional facilities by the Railways in their own workshops or with the Heavy Electricals has been avoided, and the facilities available with the trade for manufacture of these equipments alongwith other similar equipments for the general purpose has been taken advantage of.

[Ministry of Railways (Rly. Board) OM. No. 68—B(c)—PAC-IV/22 (O) Dt. 20-9-68].

Recommendation

The Committee are disappointed to find that only 54 locomotives were produced during the Third Plan besides the assembly of 12 knocked down locomotives against the Plan target of 95 locomotives.

(*S. No.* 44, *Appendix XV Para* 5.35 *of* 22*nd Report*)

Action taken

While the observations of the P.A.C. have been noted, it may be reiterated that in terms of the Project Report submitted by M/s. Alco (the Collaborators) in May 1962, the anticipated production during the Third Plan was 83 locomotives which included the assembly of 12 knocked down locomotives. This Plan target of 95 as previously indicated was arrived at by adding the figure of 12 locomotives to be assembled from knocked down condition to 83 which was an error. It is regretted that this error went un-detected.

Therefore, against the actual target of 63 locomotives including the assembly of 12 knocked down locomotives, actual production was 66 locomotives of which 61 were physically turned out from the factory and 5 were detained beyond 31-3-66 for final inspection and despatch. The reason for not having achieved this target of 83 locomotives has already been explained in Railway Ministry's written reply to Point 16 of the Points arising out of the evidence tendered before the P.A.C. on 11-12-1967 in connection with the Audit Report (Railways) 1967—paras 1 to 5, 16 and 17.

[*Ministry of Railways* (*Rly. Board*) *OM No.* 68-*B*(c)—*PAC-IV*/22(*O*) *Dt.* 20-9-68].

CHAPTER IV

RECOMMENDATIONS/OBSERVATIONS REPLIES TO WHICH HAVE NOT BEEN ACCEPTED BY THE COMMITTEE WHICH REQUIRE REITERATION.

In this connection to the Committee would also invite reference to the recommendations of the Estimates Committee made in para. 56 of their Thirty-Third Report (Third Lok Sabha).

They would like to be informed as to whether the procedure mentioned at page 23 of the Eighty-eighth Report of Estimates Committee (Third Lok Sabha) is since being strictly followed by the Coal Controller and whether the Railways take into account in planning for coal traffic the direction-wise transport requirements.

[*Sr. No.* 10 *of Appendix XV of 22nd Report (Fourth Lok Sabha)*].

Action taken

The factual information in regard to direction-wise requirements was duly collected and a realistic assessment of direction-wise movement of coal was furnished to the Railways for 1964-65 and 1965-66.

The transport requirements from each coal field to various categories of coal consumers during each half year of 1967-68 and 1968-69 were worked out and furnished to the Railways. In respect of all the major consumers, the details related to the individual consuming units while in respect of small consumers, the information was given state-wise. The transport requirements for the new Fourth Plan starting on 1st April 1969 will be worked out after the report of the Planning Group on coal is finalised.

One important development which has taken place recently is the removal of control over the distribution of coal (other than coking coal required for the metallurgical industries) with effect from 24th July 1967. After decontrol the Coal Controller no longer drawn up the programmes of the non-coking coal consumers. Hence, the collection of factual information on a continuing basis may not be easy. The forecasts of transport requirements have to be based on the estimated demands for coal as assessed by the Planning Group on coal. The Coal Controller is, however, taking steps to collect as much statistical information as possible with the available

staff and facilities and such information will be made use of in making the estimates and in reviewing them periodically.

[*Ministry of Steel Mines & Metals (Department of Mines & Metals) D.O. No. 9/14/68-CI, dated 9th October, 1968*].

Recommendation

In this connection the Committee would also invite reference to the recommendations of the Estimates Committee made in para 56 of their Thirty-Third Report (Third Lok Sabha).

> "The Committee observe that although the year-wise targets of coal production as worked out by the Working Group in its Second Report have been agreed to by the Railways and they are broadly committed to move the quantity indicated therein, the fieldwise target of production and direction-wise movement thereof during each of the remaining three years of the Third Five Year Plan, have still not been furnished to them by the Ministry of Mines and Fuel. It is unfortunate that the lessons of the Second Plan when production was deliberately stepped up regardless of the fact that corresponding transport facilities were not available, have yet to be learnt.
>
> Now that a coal production target of 98·3 million tons has been agreed to by all concerned, the Committee would stress upon the Ministry of Mines and Fuel the need to work out the fieldwise targets of production and directionwise movement thereof for each of the remaining three years of the Third Five Year Plan so that the Ministry of Railways get timely notice to gear up their transport arrangements to meet in full the requirements."

In reply (page 23 of Eighty-eighth Report of Estimates Committee, Third Lok Sabha) the then Ministry of Mines and Fuel stated that the direction-wise transport requirements for movement of Coal during the final year of the Plan had been furnished but information for the intervening years could not be made available as the sponsoring authorities were not able to furnish detailed destination-wise requirements from year to year. It has been added—

> "For the purpose of future planning, however, it has been decided that the Coal Controller will organise, on a continuing basis, the collection of factual information in regard to direction-wise requirements, so that a realistic assessment of directionwise movement of coal can be made from year to year."

The Committee would like to be informed as to whether the above procedure is since being strictly followed by the Coal Controller and whether the Railways take into account in planning for Coal traffic the direction-wise transport requirements.

[*S. No.* 10, *Appendix XV, Para* 1.44 *of* 22*nd Report*]

Action taken

In regard to the Third Plan, the Working Group on Coal Production and Transport, under the Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) had developed detailed rail transport requirments for the movement of coal for all the major routes on the Railways. The detailed requirements of wagons in different fields for different destinational routes were given.

For the old Fourth Plan ending in 1970-71, the Ministry of Steel, Mines & Metals furnished information concerning the anticipated field-wise production of coal and its consumption requirements for each of the major industries. The rail movement pattern, on the lines of that developed for the Third Plan, was. however, not indicated in detail.

For the present Fourth Plan (1969-70 to 1973-74) the Ministry of Mines & Metals has been requested to furnish a direction-wise breakdown of the rail transport requirements. This is awaited and the Ministry of Mines & Metals is being reminded to expedite supply of the information. The rail transport capacity will be determined on receipt of this information, as desired by the Election Committee and the Public Accounts Committee. It is proposed to keep the information under constant review in consultation with the Ministry of Mines & Metals and the Planning Commission to modify the rail transport plan from time to time to the extent necessary.

[*M. of Rlys. (Rly. Bd.) O.M. No.* 68-*B*(*C*)-*PAC IV* 22(*O*) *dated* 21*st September*, 1968].

Recommendation

In this connection the Committee would like to invite the attention of the Ministry of Railways to the following observations made by the Committee on Transport Policy and Co-ordination in January, 1966 on which the Chairman of the Railway Board was represented:

> "....there are several instances of decisions on new railway lines being taken on considerations other than commercial, such as, administrative need or general regional development. It is necessary to reconsider the approach to be

followed in the construction of new railway lines in future. We are of the view that, generally, the Railway should provide for only those lines which are expected to yield, over a period of time, normal return on the investment involved in their construction. The lines which are expected to be unremunerative even after a few years of their opening should be taken up only in exceptional circumstances and in all such cases provision should be made to compensate the Railways for the losses involved."

The Committee endorse the above recommendations made by the Committee on Transport Policy and Co-ordination and suggest that the Railway should not provide for any new lines unless it is expected to yield over a period of time a normal return on the investment involved in its construction. Where, in exceptional circumstances, the construction of an unremunerative line has to be taken up by the Railways, there should be specific provision for compensating the Railways against losses by whosoever sponsors the proposal, so that the general user of the Railways is not burdened with avoidable surcharge which results from such unremunerative capitalisation.

[*S. No.* 14, *Appendix XV, Para. No.* 2.10 *of* 22*nd Report*].

Action taken

The observations of the Committee are noted.

2. The Ministry of Railways would, however, like to clarify that, except in the case of strategic lines required for defence purposes, the construction of new lines is ordinarily undertaken only if their financial viability is accepted. Where any non-strategic line which is not expected to be financially remunerative is nevertheless to be taken up on other important considerations, the liability is taken to be that of the Railways in terms of the arrangement, decided upon at the time of the 1949 Convention (which arrangement is still continuing).

The question whether the resultant loss should not be passed on to the sponsoring authorities will be reconsidered at the time of the next review of the Separation Convention.

[*M. of Rlys. (Rly. Bd.) O.M. No.* 68-*B*(*C*)-*PAC IV* 22(*O*) *dated* 21*st September*, 1968].

Recommendation

The Committee are disturbed to find that although the Railways procured 8336 wagons more than the number provided in the Plan

to create a capacity of 249 million tonnes, the actual capacity generated at the end of the Plan period in terms of wagons was stated to be only 225 million tonnes *i.e.* 24 million tonnes less than that anticipated. This shows that either the assessment of capacity at the end of the Plan is incorrect or the estimation of physical requirements to achieve the envisaged Third Plan target of rail capacity was defective. As far the plea regarding the turn-round of wagons, the Committee find that the Third Plan envisaged that the turnround of wagons would come down to 9.5 days for B.G. wagons and 6.5 days for M.G. wagons. From the statistic published in the Railway Board's Annual Reports, it is, however, seen that the turnround *i.e.* intervening period between two loadings had actually increased. The figures are as follows:—

	B.G.	M.G.
	Days	Days
1960-61	11·2	7·2
1965-66	11·8	8·4

The average of lead of traffic (the distance over which the wagons move) in these two years was as follows:—

	B.G.	M.G.
	Kms.	Kms.
1960-61	572	316
1965-66	556	365

Thus, on Broad Gauge (which accounts for 80 per cent of the originating goods traffic) the turnround of wagons had increased despite the reduction in the average lead of traffic.

Apparently, the turn-round of wagons has increased because of an increase in their number. Being surplus to requirements a large number of wagons are lying idle or are under-used and the intervening period between two loadings has increased. The Committee desire that the Ministry of Railways should make a reappraisal of their wagon requirements in the light of these facts.

[*S. No. 25 Appendix XV Para 3.15 of 22nd Report*].

Action taken

The observations of the Committee are noted.

It is, however, submitted that when the Third Five-Year Plan was prepared in the beginning of 1961, detailed information concerning the direction-wise movement and distribution of coal was not available. This information was not supplied by the Ministry of Steel, Mines and Fuel (Department of Mines & Fuel) till the end of January, 1962, after the Plan had been finalised. The estimate of wagon requirements for the initial target of 248.9 million tonnes thus suffered from want of this vital information. In regard to the iron ore traffic programme, similar uncertainties existed. The total wagon acquisition planned at that time was 117,144 of which 90,447 was on additional account. The rail transport crisis of 1960-61, which had its maximum impact on the movement of coal, underlined the necessity for a complete review of the assumptions on which rail transport capacity had been planned. The Coal Transport Study Team of the World Bank which had gone into the Coal transport problem in detail, came to the conclusion that there was a heavy shortage of locomotives and wagons throughout the First and Second Plans. The Third Plan had to make sufficient provision for these.

These factors were duly taken into account at the time of the Mid-term Appraisal of the Third Plan in November, 1963. For the revised traffic target of 245 million tonnes, therefore, the total requirement of wagons was re-assessed at 157,227, of which 136,283 were on additional account.

Against the revised estimates mentioned above, the actual procurement of wagons was only 144,789 including 116,410 on additional account. In other words the effective procurement on additional account was 19,873 wagons less than the anticipated requirement against 245 million tonnes of traffic.

It may be added that the entire 144,789 wagons were not available for use during the final year of the Third Plan, as many as 7,300 being added only in the last quarter of the last year of the Third Plan period. The effective availability, except in the last quarter of that year, was thus around 137,000 wagons.

It was on account of all these factors that a peak level capacity of 225 million tonnes (in terms of wagons holdings) was estimated to have existed at the end of the Third Five Year Plan.

As regards wagon turnround, it will not be correct to say that the turnround of wagons had increased entirely because of an increase in their number. A number of factors go into wagon turnround, namely, increased leads of traffic, unplanned and changed patterns of movement specially that of foodgrains as in this case, interruption to movement of traffic due to agitations, bundhs, and squatting on railway track, etc.

As to the railways' not having achieved the turnround of 9.5 days on the broad gauge and 6.5 days on the metre gauge during the Third Plan, these figures were never visualised as targets for full achievement. They were necessarily calculated as factors towards greater efficiency, built into the Railways' Plans for expansion. By themselves, they were affected by longer leads in commodities like coal and raw materials for steel plants, coal for Railways, cement, mineral oils, foodgrains, etc. The changed patterns of traffic, particularly the emergency movement of foodgrains from ports and other distant areas to scarcity affected places in U.P. and Bihar, not only increased the turnround period of wagons but required long empty hauls in the interest of quick movement of foodgrains.

A re-appraisal for the wagon requirement is now being made in connection with the preparation of the new Fourth Five Year Plan

[M. of Rlys. (Rly. Bd.) O.M. No. 68-B(C)-PAC/IV/22(O), dated 8th October, 1968].

Further reply

The observations of the Committee are noted. The original Third Plan figure of 90,447 wagons (excluding 18,509 throw-forward from Second Plan) on additional account for a traffic target of 249 million tonnes was based upon an exercise conducted in 1961. When the traffic target was revised to 264 million tonnes in January, 1962, an extra 21,000 wagons on additional account were added based on the traffic trends at that time, without detailed calculations. Due to changed pattern of movement and increased leads of certain major commodities which had developed during the Third Plan and which also affected the turnround adversely, the basis adopted for assessing wagon requirements was found to be inadequate in relation to actual demand for traffic.

The figures of average lead as mentioned in the recommendation are derived from the movement of a large number of classification of commodities (149). The figures relating to major commodities are, however, indicated below:—

	(In Kms.) B.G.	
	1960-61	1965-66
1. Public Coal	645	546
2. Coal for Railways	708	765
3. Raw material for Steel Plants	N.A.	191
4. Cement	345	418
5. Mineral Oils	516	536
6. Foodgrains	718	746
7. Iron & Steel	681	811

It will be noted that although the average lead for all commodities has gone down, there has been an increase in the lead of some of the major commodities except in the case of public coal.

Taking note of the traffic trends during the Third Plan, it is proposed to further refine the method for working out the wagon requirements during the Fourth Plan. The wagon requirement for each major commodity will be worked out in detail in relation to its lead, empty haulage, lead per wagon, speed of goods train, etc.

This has been seen by Audit.

[Ministry of Railway (Rly. Board) O.M. No. 68-B(C)-PAC/IV/22 (O) dated 14th February, 1969].

Recommendation

The Committee would like Government to examine the question of relative economics of hauling POL by the longer route on Metre Gauge *vis-a-vis* the shorter route on Broad Gauge so as to adopt the most economic path consistent with operational requirements.

[S. No. 29, Appendix XV, Para. 3.26 of 22nd Report].

Action taken

In 1966-67 about 31,000 tonnes of POL products loaded in 1218 bogies tank wagons (or 2436 four-wheeler tank wagons) moved from Barauni and New Jalpaiguri to Shakurbasti by the all metre gauge route. As indicated earlier in this Ministry's reply, the B.G. tank wagon fleet was inadequate to meet the entire demand for movement of POL on the broad gauge including this movement, while there was enough capacity for this movement along the all metre gauge route. Had this traffic not been carried by the metre gauge route of the Railways, it would have been diverted to the road, and this would have meant a higher cost to the economy, as the quotations below will indicate:—

(i) 'The figures demonstrate that trucks of even higher capacity on good roads show a higher cost than rail except when the haul is less than 200 kilometres. However, the favourable trucking costs below 200 kilometres cannot be attained until there is a vast improvement in the condition of the highways near the collieries and on the main routes and until trucks of far greater capacity than those now in use in India are produced. Moreover, the trucking costs do not include any capital charges for improvements in highways. For the foreseeable future, therefore, it is

indicated that the costs of the rail movement of coal will be well below those by highways."

"....If the ultimate destination of the coal is a local station served only by shunting goods trains, the cost would be somewhat higher and, if the coal were delivered at a station served only by metre gauge, the cost would be further increased. Nevertheless, there is no indication that even these costs, except for short distances, would be higher for the rail movement than those by the most efficient type of truck conditions."

(Report of World Bank Study Team on Coal Transport)

(ii) "It will be seen that road transport costs for a 13 tonne tractors-trailer are higher than rail costs for bulk movement at and above 100 kilometres on both, broad and metre gauges. For light merchandise, costs of road transport in 8 tonne trucks are lower than cost of haulage of light merchandise by rail up to a distance of about 50 kilometres on the broad gauge and up to about 100 kilometres on the metre gauge."

(Report of the Committee on Transport Policy and Co-ordination)

The all-in cost of rail transport, whether on the metre gauge or on the broad gauge, depends upon a variety of factors, which include type of wagon, loadability, empty return ratio, type of traction, density of traffic, extent of their capacity available and other operating conditions. These factors, particularly the last, do not operate identically on all sections even on the same gauge and sometimes not even at all times the same gauge and sometimes not even at all times on the same section. With reference to this particular recommendation of the P.A.C., however, direct costs of the movement of 31,000 tonnes of POL by the Broad gauge route and by the Metre Gauge-*cum*-Broad Gauge route have been worked out, which include terminal costs at both ends, marshalling and engine changing cost en route, the cost of fuel and lubricants, the cost of loco crew and train staff, the cost of repairs and maintenance of engines and wagons, and interest and depreciation on locomotives and tank wagons, but exclude the cost of provision of track and signalling, which latter are a 'Sunk' cost so far as this particular movement is concerned. It is estimated that direct costs of the broad gauge and metre-*cum*-broad gauge movement would have been about 81 per cent of the all-metre gauge direct costs. But the revenue earned by the longer all metre gauge route was higher even after allowing for the concession on

this traffic. If this element also is taken into account as a deduction from the all Metre Gauge route costs, the Broad Gauge cost would be about 5 per cent lower than the all Metre Gauge costs.

The rates actually charged by the all Metre Gauge route not only fully covered the direct costs but left a substantial contribution towards overheads and profit.

[M. of Rlys. (Rly. Bd.) F. 68-B(C)-PAC/IV/22(O), dated 28th September, 1968].

Recommendation

The Committee desire that special attention should be directed towards improving the financial position of the Southern Railway by effecting economy, improving efficiency and by attracting more traffic. They would watch the result of the working of this Railway in subsequent Audit Reports.

[S. No. 37, Appendix XV, Para. 4.20 of 22nd Report].

Action taken

Noted. Efforts are continuously being made to improve the financial position of the Southern Railway (as well as other Railways) by various measures of economy in expenditure and by attracting additional traffic.

[M. of Rly. (Rly. Board) O.M. No. 68-B(C)-PAC/IV/22(O), dated 20-10-1968].

Further Information

Question 6: "Please furnish the following information:

(i) The details of concrete measures taken in effecting economy in expenditure and attracting additional traffic in Southern Railway;

(ii) The results of measures taken and the current overall financial position of the Southern Railway.

Reply

(i) Economy measures are being enforced on Southern (as well as other Railways) in respect of all items of expenditure (capital, revenue and other heads). Reduction in expenditure on staff is being pursued with vigour. The ban imposed on creation of posts and filling up of posts in administrative offices at all levels is being observed.

Efforts are being made to secure more traffic by improving the quality of service offered, for instance, in the matter of adequate and timely supply of wagons, speeding up transit and ensuring safe transit. A Marketing and Sales Organisation is making vigorous efforts to keep in closer touch with and meet as far as possible the specific needs of rail users, in order to retain existing traffic and also capture additional traffic.

Some of the specific steps taken during the last two years to make rail transport more attractive are indicated below:

(1) Quotation of special station to station rates for the movement of cotton yarn from Madurai, Coimbatore, Salem and Bangalore to Wadi Bunder (Bombay) and from Madurai to Tuticorin.

(2) A special rate for turmeric from Cuddapah to Shalimar is being quoted.

(3) Reduction of the tariff minimum weight from 90 quintals to 80 quintals for coconuts moving in four-wheeled wagons on Metre Gauge.

(4) The minimum weight condition for motor tyres was lowered from W/100 B.G. to W/85 B.G. from 16-6-1968. With effect from 20-8-1968, it has been altered to W/90 B.G.

(5) Introduction of a tri-weekly Super-Express Goods Train service between Madras and Shalimar (Calcutta) reaching the destination on the fifth day. Groundnut Oil traffic moving in large quantities by sea was canvassed for movement by this services and considerable success has been achieved. Similar Super-Express Trains have been introduced between Madras and Bombay and Madras and New Delhi, reaching their destination in five and seven days respectively.

(6) A scheme for 'Overnight' delivery of non-perishable parcels has been introduced between 11 pairs of points on the Southern Railway.

(7) New City Booking Offices have been opened in newly developed industrial estates.

(8) In order to attract tea traffic, an Out-Agency has been opened at Coonoor.

(9) To cater for traffic in motor-cars/chassis between Madras and Calcutta, coaching specials are being run at regular

intervals and frequent contracts maintained with the manufacturers of motor cars and chassis.

(10) 18 Quick Transit Services have been introduced to various destinations to capture additional traffic.

(11) A Quick Transit Service has been introduced for the traffic in groundnuts moving to Bombay from Guntakal Division.

(12) Special arrangements have been made to move vegetable traffic from Bangalore to Madras by putting a parcel van on the Brindavan Express, by which parcels booked up to 13 hours at Bangalore are made available for delivery at Madras on the same day.

(ii) The current financial position is as under:

	(1967-68 : Approximate Actuals)
	(In thousands of rupees)
Gross Traffic Receipts . . .	76,61,55
Ordinary Working Expenses . . .	63,92,71
Appropriation to Depreciation Reserve Fund .	9,94,90
Appropriation to Pension Fund . . .	94,73
Net Miscellaneous Expenditure . . .	1,07,62
Net Revenue	71,59
Dividend to General Revenues .	15,16,25
Net Loss	(— 14,44,66
Ratio of Ordinary Working Expenses to Gross Traffic Receipts	83·44%

[Min. of Railways (Rly. Bd.) O.M. No. 68-B(C)—PAC-IV/22 (O), dt. 29.10.68].

Recommendation

The Committee agree that the sound principle of providing transport at the lowest cost and to the maximum advantage of the economy should outweigh all other considerations in deciding upon the retention of unremunerative lines. In view of the growing difficult financial position of the Railways it is desirable that an early decision

should be taken about the operation of those lines on which the Railways have been persistently losing heavily. The Committee also consider that in the case of marginal lines the Railways should intensify their efforts to attract more traffic so that these can be made to pay their way.

(S. No. 38, Appendix XV, Para 4.24 of 22nd Report).

Action taken

As already stated in the note submitted to the Public Accounts Committee, out of the forty unremunerative branch lines reviewed, it was found in respect of fourteen that road transport could without difficulty and without detriment to the economy of the area replace rail transport. The concerned State Government were, therefore, requested to confirm that there would be no difficulty in making arrangements for such additions to road transport as might be necessary to fill the gap in road transport capacity likely to be created by the closure of those branch lines.

Replies have so far been received from the State Governments in respect of ten lines as mentioned below:—

Name of branch line	Name of State	Reaction of the State Government
(1)	(2)	(3)
(i) Madhosingh—Mirzapur ghat. (ii) Mathura-Vrindaban (iii) Akbarpur-Tanda (iv) Barhan-Etah	Uttar Pradesh	Not agreeable to the closure of the lines.
(v) Gwalior-Shivpuri	Madhya Pradesh	Agreeable to the closure of the line subject to the Railways providing funds for the improvement of the Gwalior - Shivpuri section of the National Highway No. 3.

(1)	(2)	(3)
(vi) Mettupalaiyam—Ootacamund)	Madras	Not agreeable to the closure of the line.
(vii) Peralam-Karaikkal	Pondicherry	Not agreeable to the closure of the line.
(viii) Rohtak-Gohana	Haryana	Not agreeable to the closure of the line.
(ix) Batala-Qadian	Punjab	Not agreeable to the closure of the line.
(x) Bhagalpur-Mandar Hill	Bihar	Not agreeable to the closure of the line.

Replies from the following States Governments are still awaited:—

Name of State	Name of branch lines
Madras	(i) Mayuram-Tranquebar
	(ii) Nidamangalam-Mannargudi
Punjab	(iii) Nawa Shahr-Doba Rahon.
Mysore	(iv) Bangalore-Bangarapet (NG).

The Committee will appreciate that the review of unremunerative lines has to be a continuing affair and that in considering the closure of any line, regional and political sentiments, and the deep rooted conviction that rail transport is necessary for the development of under-developed areas have to be reckoned with.

The recommendation of the Committee that in the case of marginal lines railways should intensify their efforts to attract more traffic so that those lines can be made to pay their way, has been accepted and instructions have been issued to the railways to keep a close watch on the working of the marginal lines and to take steps for attracting more traffic and to reduce the working expenses.

[Min. of Railways (Rly. Bd.) O.M. No. 68—B(C)—PAC-IV 22(O), dt. 20-9-68].

Recommendation

The Committee are not impressed with the leisurely manner in which the Public Undertakings, particularly the Heavy Electricals, Bhopal and the Heavy Engineering Corporation have proceeded in developing indigenous manufacture of traction motors and crank shafts respectively.

The Committee consider that the Heavy Electricals and the Heavy Engineering Corporation should accelerate their programme for indigenous manufacture of these vital components and parts so as fully to meet the production requirements of the Diesel Locomotive Works.

(S. No. 46, Appendix XV, Para. 5.37 of 22nd Report).

Action taken

The rate of production of electric traction equipment by Heavy Electricals India Ltd. for Diesel Electric Locos still falls short of actual requirement and further action is being taken to increase the rate and also to improve the quality of the equipment.

It was as far as July, 1962 that Heavy Engineering Corporation, Ranchi was contacted to undertake manufacture of crank shafts for the diesel locomotives. As desired by the Corporation, an educational order for ten crank shafts has been placed in January, 1966. Supplies have not yet commenced. The price to be paid will be finalised at a high level meeting as soon as Heavy Engineering Corporation finalise their collaboration with a suitable party.

[Min. of Rlys. (Rly. Board) O.M. No. 68-B(C)-PAC-IV/22(O). dt. 29-10-68.]

Further Information

Please indicate when the manufacture of diesel locomotives was taken up indigenously.

Reply

The manufacture of diesel electric locomotives was taken up indigenously at Diesel Locomotive Works, Varanasi during the year 1963-64. This first locomotive which was assembled from knocked down assemblies received from U.S.A. was turned out on 3rd January, 1964. The indigenous manufacture of diesel locomotives was concurrently commenced and the first locomotive with indigenously built chassis, super structures and piping system was turned out in July, 1964.

8(b) Please indicate the requirements of electrical traction equipment for diesel locomotives as per manufacturing programme of Railways and the extent to which these were to be supplied by Heavy Electricals Ltd. The actual supplies made by Heavy Electricals Ltd. may also be indicated, together with the reasons for variations.

(c) Please indicate how the balance requirements for electrical traction equipment were met. If by imports, the outgo of foreign exchange on this account may be indicated.

Reply

In the initial stages of production of diesel electric locomotives at DLW, consideration was given to obtaining the electric traction equipments from HEIL|Bhopal and a letter of intent was placed on HEIL for 120 sets of complete traction equipment as far back as September, 1962.

However, for several reasons *viz.* the time required for finalising the design for the electrical equipment, considerable delay in the procurement of imported machinery and raw-materials and delays on the part of HEIL suppliers in supplying tools and components according to schedule, the final programme of manufacture of traction equipment for diesel electric locos by HEIL could only be finalised by March, '65. In view of this the Railways had made arrangements for meeting their requirements of electric traction equipment for their anticipated production of diesel electric locos upto March, '67 by importation. On this basis 121 sets of electric traction equipment were ordered by import in various batches depending on the availability of foreign exchange, including the 12 Nos. in the knocked-down locomotives.

The production programme of the Railways, the supplies proposed to be made by HEIL as indicated in March, '65 and the actual deliveries during the various periods from 1966-67 onwards are indicated in (Appendix VI).

These anticipation were, however, changed on a number of occasions based on the progress made by HEIL, Bhopal and these are indicated in (Appendix VII).

In August, 1966, the Railway Board when considering the import of various components for production of 100 locos beyond March, '67 were advised by HEIL|Bhopal that the following supplies of traction equipment were expected to be made by them in 1966-67 and 1967-68:

1966-67 . . .	21 sets (supplies commencing from Sept., '66)
1967-68 . . .	50 ,,
	71 ,,

Taking into account the fact that HEIL had not yet supplied the equipment and the likely teething troubles in developing the production in the initial stages, it was considered necessary to import additional sets to keep up the production programme of diesel locos. It was also observed that as per the schedule of supplies promised in March, '65, HEIL would only be able to supply 116 sets by

March, '69 subject to the development progressing satisfactorily, whereas the requirements for production upto March, '69 and for in-process requirements of 6 months would be as under:

1967-68	66
1968-69	68
In Process requirements . .	36
	170
Less No. of sets available from earlier orders . . .	5
TOTAL .	165

On this basis it was decided to import 60 sets of equipments to match the production programme upto March, 1969.

Again in a subsequent review in December, '66, taking into account the progress made by HEIL Bhopal it was considered necessary to import 30 more sets. This course of action proved to be prudent as confirmed later on because the actual deliveries materialised by HEIL during 1966-67 and 1967-68 were only 7 and 24 respectively. Against the total promise of 71 sets by March, '68, the actual delivery was only 31 sets.

For the diesel loco production in 1968-69, DLW has to depend on the supply of electrical equipments from HEIL which have become the major constraint to determine the out-turn from DLW. Taking into account the capacity of HEIL for the manufacture of the various equipments for Railways, the following supplies have been promised in the years 1968-69 to 1970-71:

1968-69	44
1969-70	72
1970-71	72

The above delivery of equipments will generally meet the production programme of the Railways but based on the past experience of supply, it may be necessary to import a few more sets to keep up the production programme. The position is being watched carefully and necessary action will be taken as considered justified.

It can be said that based on the production programme of the Railways and the anticipations of supply by HEIL/Bhopal, the import of 30 sets at a cost of 0.25 million U.S. Dollars is attributable

to the shortfall of supplies from HEIL/Bhopal and for keeping the out-turn from DLW.

The reasons for the shortfalls in the supplies from HEIL are as follows:—

(i) Traction equipment is a very sophisticated product made for the first time in India and the skills and techniques take a long time to develop;

(ii) Before the Diesel Loco orders were received, HEIL had already committed to supply AC & DC EMU equipment for the railways. This additional load at the initial stage had put some pressure on the available manufacturing capacity.

(iii) In the initial stages substantial quantities of components had to be imported from the Consultants' firm in U.K. and their deliveries were often delayed.

(iv) As indigenous substitutes were introduced, the establishment of proper quality control caused certain delays due to inferior standards and subsequent rejection.

(v) Timely availability of foreign exchange to meet the production plans of HEIL.

(vi) Situations like Suez incident etc. have interrupted the flow of components and raw materials during such periods and reduced production.

2. The above difficulties are gradually being overcome but they exist to some extent in one form or other. There has been a set back in the promised delivery in the first eight months of this year due to failure of supplies from indigenous sources for special types of castings on account of strikes and shut down in some of the concerned firms in Calcutta, Madras and Delhi areas. Actually over 90 per cent of the manufacture of the equipment are completed and lying in the shops awaiting such residual items for which alternative arrangements are being made. The following further steps are being taken to ensure regular delivery of equipment in future:—

(i) Some of the components have been redesigned to suit indigenous suppliers and two or three suppliers for each item are being developed and orders placed on them. For example Heavy Steel Castings are being ordered on four firms and small control-gear castings on two firms as well as on foreign suppliers as measure of ensurance until Indian suppliers are fully established.

It is hoped that substantial improvement in the delivery of completed equipment, would be made in the remaining four months.

[Min. of Railways (Rly. Bd.) O.M. No. 68-B(C)—PAC-IV|22 (O), dt. 26-12-1968]

Recommendation

The Committee are not impressed with the leisurely manner in which the Public Undertakings, particularly Heavy Electricals, Bhopal and the Heavy Engineering Corporation have proceeded in developing indigenous manufacture of traction motors and crank shafts respectively.

(S. No. 46, Appendix XV Para 5.37 of 22nd Report.)

Action taken

The rate of production agreed with the Railways for Diesel Loco Traction equipment has, by and large, been established by Heavy Electricals (India) Limited excepting for control gear. Indigenous sources for certain castings for this controlgear were developed but the supply is very inadequate and irregular.

The main reasons for delay in developing the capacity to produce crankshafts by Heavy Engineering Corporation Ltd. were as under:—

(1) Even though enquiry from D.L.W. was received in July, 1962, the Heavy Engineering Corporation Limited were in the early stage of construction and the necessary forging and machining capacities were only being established. In response to the enquiry it was made clear as early as February, 1963 that forging could not be delivered earlier than 1967.

(2) There were protracted correspondence between the company and D.L.W. before a mutually acceptable forging technology could be agreed upon.

(3) Even after a particular process of forging was accepted in principle by D.L.W. there was further correspondence regarding various technical aspects of the process.

(4) The collaboration agreement could not, in any case, be finalised until there was a firm commitment by the D.L.W. to purchase the crankshafts produced by Heavy Engineering Corporation Limited by the particular process.

(5) Even after the signing of the Collaboration Agreement with the foreign firm, it is estimated it will take another five years to (i) import necessary forging and special purpose equipment after going through the usual formalities (ii) to erect the equipment etc. (iii) to complete the necessary civil construction works and (iv) to produce and deliver the first lot of crankshafts to D.L.W. Waranasi.

[Ministry of Industrial Development & Company Affairs (Deptt. of Industrial Development) D.O. No. 25|23|68'HECHE dt. 24-9-68.]

"1. The supply position in respect of castings and forgings has been very unsatisfactory and the production in Heavy Electricals (India) Ltd., has been seriously dislocated on this account in the past. The following steps have been taken to improve the supplies:

1.1 In the case of AC EMU motors, the forgings required for the commutator hub and end plate were not available indigenously of the required quality. Hence the components were redesigned as a casting and orders have been placed on more than one casting supplier.

1.2 In the case of machines for both AC EMU and Diesel Loco, the steel castings for the frames have been ordered on three or four indigenous suppliers so that, in the event of failure, either in respect of quality or quantity, of one supplier, there is a reasonable chance of some supply from the other suppliers.

1.3 For certain controlgear castings, orders have been placed on 3 or 4 indigenous firms, and parallel action has also been taken to import them in order to offset the setback in production due to failure of Indian suppliers experienced in the past. H.E.(I).L. are also redesigning some components as a fabrication, though this design will be more expensive.

"2. With greater experience in respect of procurement and production problems, the Corporation are now in a much better position to foresee the problems and take timely corrective action.

"3. Besides, the production capacity is being augmented in respect of motors and generators through an expansion scheme sanctioned by the Government in May, 1967. The scheme is being implemented in phases and the first phase has been sanctioned for Rs. 90 lakhs capital expenditure. Against the first phase, 60 per cent of the factory buildings have been completed and 25 per cent in terms of value, of plant and machinery has been ordered and the rest are being processed.

"4. It should be mentioned here that certain delays have been experienced by H.E. (I). L. Bhopal in the placement of firm order and release of the required foreign exchange by the Railways. It is obvious that the Company's capacity to effect timely delivery of equipment will be affected by such delays and it is hoped that Railways would take steps to obviate this.

"5. The prospects of supply of electrical equipment required by production units of Indian Railways were discussed at a meeting in

Bhopal attended by the representatives of H.E. (I.) L., Bhopal, Railways and the Ministry of I.D.&C.A., and the following position emerged:—

Rotating Machine.—Rate of manufacture of the Rotating Machines would be the governing factor for the output of Traction Equipment for AC-DC and Diesel and Electric Locomotives. The following is the yearly planning for build up of capacity of the Rotating Machines Division of Heavy Electricals (India) Ltd.

1968-69	750 machines
1969-70	1050 machines
1970-71	1400 machines

The maximum capacity as planned at present would be 1400 and Heavy Electricals (India) Ltd. have no further plans of expansion at present. If the Railway Board require this capacity to be increased further, the long term assessments of Railways' requirements are to be indicated. The Railways have expressed that the Fourth Plan (1969-70 to 1973-74) was under finalisation and as soon as this is done, Heavy Electricals India Ltd. will be advised the extent of future requirements beyond 1970-71. Heavy Electricals (India) Ltd. are of the opinion that if any reasonable assessment can be made even beyond this period, it would help them to ensure that the manufacturing load are sustained.

Expected delivery from the Heavy Electricals (India) Ltd. would be as under:—

Anticipated supplies in 1968-69:

BG Diesel Loco	44 sets equivalent to 396 rotating machines.
MG Diesel Loco	5 sets equivalent to 45 rotating machines. 10 traction motors sets equivalent to 60 rotating machines.
AC EMUs	30 sets equivalent to 120 rotating machines
DC EMUs	30 sets equivalent to 150 rotating machines.
TOTAL	771

With regard to the BG diesel sets, Heavy Electricals (India) Ltd. stated that the shortfalls in supplies had been due to certain difficulties experienced in regard to the higher temperature rise obtained during testing of traction generator and failure of supplies of malleable iron castings for the control gear equipment.

With regard to the AC EMUs, Heavy Electricals (India) Ltd. was not able to exceed the rate of 2.5 sets per month in view of the limitation of the overall capacity of the Rotating Machines Section. Besides, Heavy Electricals (India) Ltd. have also experienced difficulties in procuring traction magnet frame castings of suitable quality. Another items on which the supply is not satisfactory are tinned, Phosphor, Bronze Bearings. These have been ordered on Bhopal and Indian Standard Metals, Bombay. With regard to supply of Electrical equipment for MG Diesel Locomotives, 21 traction motors are ready but test on the proto-type have shown the need to modify the air gaps to obtain the design performance characteristics.

Heavy Electricals (India) Ltd., will be able to complete the order for during the year 1968-69. Heavy Electricals (India) Ltd. is also ahead of schedule as M/s. Jessops did not lift the equipment due to a hold up in production at their works.

Anticipated supplies in 1969-70:

BG Diesel Loco	72 sets equivalent to 648 rotating machines.	
MG Diesel Loco	15 sets equivalent to 35 rotating machines.	
	5 traction motor seats equivalent to 30 rotating machines.	
AC EMUs	44 sets equivalent to 176 rotating machines.	
DC Locos	13 sets equivalent to 78 rotating machines.	
	TOTAL	1067

For the BG Diesels, Heavy Electricals (India) Ltd. are likely to supply 72 sets as required by DLW but with regard to the MG Diesel they would be in a position to supply only 15 sets as against 30 required by DLW. In other words there would be a shortfall of 15 MG Diesel sets and alternatives arrangements would have to be made by the Railways.

Regarding the time required for ordering materials and processing etc., is 18 to 24 months and hence it would not be possible for the company to supply any DC EMU equipment until the latter part of 1970. No letters of intent from Jessop and ICF have as yet been received. Heavy Electricals (India) Ltd. have also promised to find out from the A.E.I. of U.K., that they would be able to make any supply of DC equipment in the meanwhile and if so what would be the delivery and foreign exchange requirements.

With regard to DC Locos, the delivery is likely to commence with one proto-type set in July-August, 1969. However, from control gear items may be supplied to DLW earlier to enable them to sort out mounting and wiring problems on a 'Nock-up'.

Anticipated supplies in 1970-71:

BG Diesel Loco	72 sets equivalent to 648 rotating machines.
MG Diesel Loco	40 sets equivalent to 360 rotating machines.
AC EMUS	27 sets equivalent to 108 rotating machines.
DC EMU's	45 sets equivalent to 225 rotating machines.
DC Locos	14 sets equivalent to 84 rotating machines.
TOTAL	1425

In this year also the supplies of MG Diesel sets would be only 40 against the requirement of 50 by DLW. There will thus be a cumulative shortfall of 25 complete sets of MG Locos, without taking into account another 5 sets to cater for the inprocess requirements.

AC Locomotive Transformers.—During 1968-69, Heavy Electricals (India) Ltd. expected to supply the transformers at the rate of the 4 per month making a total of 48 numbers. This rate would be stepped up to 6 transformers per month during 1969-70 and maintained at that level provided there is no change in the design of transformer. Heavy Electricals (India) Ltd. have pointed out that tap changers from M/s. Hindustan Brown Boveri have been delayed and two transformers held from this account. The company have taken up the matter with M/s. Hindustan Brown Boveri who said that inspection by Director of Inspection was the main cause of delay. Railway Board also took up the matter with M/s. Hindustan Brown Boveri.

B. G. Diesel sets.—The deliveries in respect of BG Loco sets can be met only if existing design of traction generator is continued up to 195th set as proposed by DLW. This will enable HEIL to import 25 numbers of armatures per traction generator. Previously it had been to change the design beyond 135 numbers. The matter has been referred to DLW. Delivery also depend on immediate lease of foreign exchange for 60 sets and 25 armatures.

MG Diesel sets.—In respect of MG Locos it is possible to achieve a target only if it is decided to continue the existing design of the generators (TG 10919 AZ) with suitable modification in the associated control-gear to derive the extra directive effort. This arrangement will be held at least up to 60th set. If it is decided to change-over a new generator design for example TG10910BY or 5302, it

will become difficult to adhere to the target indicated. This matter has been referred to the RDSO and DLW for a decision. It is essential to arrive at an early decision on this.

AC EMUs.—Considering that orders on foreign exchange in respect of 27 AC EMUs have not been released deliveries of these can be commended only from September-October, 1970. It is essential that the order is placed immediately and the necessary foreign exchange released.

Existing Orders:

(i) *BG Diesel Loco Equipment:*

At present there are two orders of 120 and 100 loco sets respectively. These orders would cover the production upto end of 1970-71.

(ii) *MG Diesel Loco Equipment:*

At present there are two orders, viz., first for 20 complete sets. In order to cover the production upto 1970-71 a further order for 20 complete sets is required to be released on HEIL.

(iii) *25KV AC EMU Equipment:*

At present there are two orders of 70 and 63 sets each. Both the orders would be completed by March, 70. HEIL stated that the next order for 27 sets to be delivered during 1970-71 should be released by ICF immediately to enable HEIL to initiate procurement of material etc., well in time.

(iv) *1500 V DC EMU Equipment:*

The present order is for 42 sets and this is expected to be completed during 1968-69. DEE Railway Board requested M/s. HEIL to arrange the supply the supply of at least one more set by March '69 to replace the set diverted to ICF for building a prototype. In order to meet the commitments of 45 sets in 1970-71. M/s. HEIL indicated that orders for 58 (55 plus 3) and 47 (45 plus 2) sets should be released immediately by M/s. Jessops and ICF respectively.

(v) *1500 V DC Locomotives:*

The present order is for 27 sets only. This order would be completed by the end of 1970-71. HEIL requested that the order for remaining 30 sets be also placed immediately by CLW.

Summing up, the following orders require to be placed on HEIL by various production units:—

DLM MG Diesel Loco Equipment	20 complete sets
ICF AC EMU Equipment	27 sets
DCEMU Equipment	47 sets
Jessops DC EMU Equipment	58 sets
CLW DC Loco Equipment	80 sets

Foreign Exchange:

M/s. HEIL stated that in order to meet the production targets, foreign exchange should be released along with the new orders. As regards the existing orders foreign exchange for balance 60 sets of BG Diesel Electric Locos is also required to be released early.

Requirements.—The anticipated requirements of crankshafts in the coming 2 or 3 years are estimated to be as under:—

B.G.	100 Nos. per year
M.G.	50 Nos. per year
Maintenance	20 Nos. per year
TOTAL	170 Nos.

Source of supply.—At present the requirements are being met entirely by imports. The number of crankshafts utilised during the past three years was as under:—

	B.G.	M.G
1966-67	55	..
1967-68	66	..
1968-69	84	20 (Estimated)

Imported cost of the crankshafts.—The cost of one imported crankshaft is shown below:—

Broad Gauge	$ 8,800
Metre Gauge	$ 4,785

It may be pointed out that although Railways obtain their requirements of finished crankshafts through Overseas Diesel Corporation, U.S.A. at the price indicated above, the international price

of such crankshafts is likely to be much lower. Since HEC Ranchi proposes to collaborate with CAFL which is a French and not an American firm, the price to be quoted by H.E.C. should compare favourably with the price if CAFL were to quote directly to D.L.W.

Indigenous development of the Crankshafts.—On the 4th July, 1962 an enquiry was received from the DLW asking whether HEC would be in a position to undertake forging and machining of crankshafts for diesel locomotives. Even though the enquiry from D.L.W. was received in July, 1962 when the plants of HEC were in the early stages of construction and the necessary forging and machining capacities were only being established, it was made clear to them as early as February, 63 that forgings could not be delivered earlier than 1967.

(2) There was protracted correspondence between HEC and DLW before mutually acceptable forging technology could be agreed upon.

(3) Even after the R.R. process of forging was accepted in principle by DLW there was further correspondence regarding various technical aspects of the process.

(4) Though approval to the scheme of manufacture of crankshaft in HEC in principle was given in June, 1967, the collaboration agreement could not, in any case, be finalised until there was a firm commitment by the DLW to purchase the crankshafts produced by HEC by the R.R. Process.

(5) Even after the signing of the collaboration agreement with the French firm, it is estimated that it will take another 5 years (i) to import necessary forging and special purpose equipment after going through the usual formalities (ii) to erect the equipment etc (iii) to complete the necessary civil construction works and (iv) to produce and deliver the first lot of crankshafts to DLW, Varanasi.

(6) A team of officers along with the General Manager, Foundry Forge Project of Heavy Engineering Corporation Limited had visited DLW Varanasi in September, 1968 and after mutual discussions the figures relating to quantity of annual requirement and price per piece were agreed to. It was learnt that the total annual requirement of D.L.W. Varanasi would be to a tune of 150 crankshaft per year. This includes the demand of metre gauge crankshafts also. It was also confirmed that this assessment of the annual requirement is made on the basis of next five years estimated needs.

HEC have planned the following delivery schedules:—

1972-73	66
1973-74	98
1974-75	150

The price agreed by D.L.W. Varanasi is Rs. 75,000/- per piece for first lot of 150 crankshafts. The placement of firm order from Railway is awaited pending the final approval for the same from Railway Board (at present it is only indicative). Regarding the finalisation of the terms for collaboration with CAFL France the offer submitted by the firm has been scrutinised and certain matters regarding commercial and legal aspects are yet to be sorted out. HEC have already taken up these matters with the firm. If their team is unable to visit HEC as requested it will be necessary to send a team of company's officers to France who may not only finalise the agreement but also study the actual performance of special purpose equipment to be selected for this project. HEC are taking all steps to finalize the agreement terms with CAFL as early as possible so as to ensure delivery of crankshafts on the dates promised to Railways.

[Ministry of Industrial Development & Company Affairs (Deptt. of Industrial Development) O.M. No. 25/23/68 HECHE of 17-12-69].

Recommendation

The Committee stress that every effort should be made by the Ministry of Steel, in conjunction with the Ministry of Railways to identify the short-comings quantitative and qualitative in the existing process of manufacture of wheels and axles so that all such defects are remedied and the manufacturing programme is geared to meet in full the requirements of the Railways at a reasonable price.

(S. No. 48, Appendix XV, Para 5.39 of 22nd Report).

Action taken

The proposals of the Ministry of Steel in this respect are still awaited and the matter will be examined and finalised when received.

[Ministry of Railways (Rly. Board) O.M. No. 68-B(C)-PAC/IV/22(O) dt. 21-9-68].

Further Information

(a) Please indicate the Railways' requirements for Wheels and Axles for different types of rolling stocks, for each of the last seven years.

Reply

The Railways' annual requirements for the different types of Wheels and Axles are worked out long before the Budget year on

the basis of anticipated traffic offerings coupled with normal wear and tear. Railways' actual requirements for each of the last seven years are indicated in the statement at Appendix VIII.

(b) Please state the extent to which the requiremens of Railways were met by the Durgapur Steel Plant and other indigenous sources (separately) during each of the last seven years.

Reply

Durgapur Steel Plant was expected (together with the capacity of M/s. TISCO) to meet the entire requirements of Wheelsets of Railways. It was originally scheduled to go into production in 1961 and to achieve the first phase rated annual output of 45,000 wheelsets by the middle of 1963. In June, 1960, Ministry of Steel advised the following anticipated output of the Wheelsets:—

100 sets per week between July and December, 1961.

250 sets a week between January and June, 1962, and

450 sets a week from July to December, 1962.

900 sets a week from 2nd quarter of 1963.

Again in January, Ministry of Steel, Mines an Heavy Engineering advised Ministry of Railways that Durgapur Steel Plant would be in a position to deliver 75,000 wheelsets per year by the middle of 1966.

Since the forecasts furnished by the Ministry of Steel were not found to be realistic, Durgapur Steel Plant was asked to indicate more reliable figures. In December, 1962, Durgapur Steel Plant gave a forecast of 30,000 wheelsets during 1963-64. This forecast was maintained by them in the subsequent years as well. The other main source of supply is M/s. TISCO. A statement showing the extent to which the requirements of Railways were met by the Durgapur Steel Plant and M/s. TISCO (separately) during each of the last seven years is at Appendix IX.

(c) Please state the amount of foreign exchange spent on import of Wheels and Axles for different types of rolling stock (separately) during each of the last seven years.

Reply

A statement showing the amount of foreign exchange spent in import of Wheels and Axles during each of the last seven years is at Appendix X.

[Ministry of Railways (Rly. Board) O.M. No. 68-B(C)-PAC/IV/22(O) dated 4-12-1968].

Recommendation

5.38. The Committee are distressed that the Wheel and Axles Plant which was set up at Durgapur specifically to cater to Railway requirements has not been able to supply the requisite number of wheels and axles, even though the first order was placed as long ago as December, 1963, and that it has refused to accept the second order for wheels and axles. (Sl No. 47).

5.39. The Committee stress that every effort should be made by the Ministry of Steel, in conjunction with the Ministry of Railways to identify the shortcomings quantitative and qualitative in the existing process of manufacture of Wheels and Axles so that all such defects are remedied and the manufacturing programme is geared to meet in full the requirements of the Railways at a reasonable price (Sl No. 48).

Action taken

The Pande Committee which was appointed is September, 1966 to conduct an expert review of the problems of Durgapur Steel Plant had been asked specifically to look into the working of the Wheel and Axle Plant. The various recommendations made by that Committee are being implemented. Subsequently, two British Experts also studied the working of this Plant and submitted a report in December, 1967, which sets out detailed recommendations for securing quantitative and qualitative improvement in steel making for wheel and axle production and in the various manufacturing stages in the Wheel and Axle Plant. Action has been initiated on these recommendations also. Among the important steps taken to improve production may be mentioned the following :—

(i) additional balancing equipments are being installed in order to remove the technical difficulties. These are expected to be ready for operation by December, 1968.

(ii) the capacity of the existing furnace producing wheel steel is being increased from 100 tonnes to 120 tonnes. This expansion is nearly complete.

(iii) reconditioning of some of the equipment has been taken in hand.

However, a major difficulty in effecting improvement in quality and increase in production is the general labour situation in Durgapur. It is hoped that some settlement will be reached with labour

in regard to work standards and the labour situation becomes satisfactory when it can be expected to fulfill the order of the Railways.

[Ministry of Steel Mines and Metals (Department of Iron and Steel) D.O. Letter No. Par (9)-5|68 dated 21-9-1969].

Further Information

Capacity of Wheel and Axle Plant at Durgapur since its installation.

Answer: For wheel sets, capacity at the one million tonne stage was 45,000 sets—broadgauge wheel sets 38,800 and metre-gauge wheel sets 6200. The Wheel and Axle Plant has been expanded in the 1.6 million tonne expansion and its capacity becomes 75,000 sets—broadgauge 61,000 and metre gauge 14,000. The plant design has mainly been to produce B.G. and M.G. wheel sets and there is little flexibility for manufacture of other designs or sizes. However, Railway Board have suggested that since Durgapur Steel Plant is the major Wheel and Axle Plant in India, necessary flexibility to manufacture new designs should be provided for.

12(b) *Number of wheels and axles turned out during* 1962-63:

Answer: Information about production of loose wheels and axles is being collected. The total number of wheel sets—20 tons, 16 ton, 12 ton and 10 ton—produced from 1962-63 to 1967-68 is 99611.

12(c) *Number of wheels and axles actually supplied to Railways*:

Answer: Number of wheel sets supplied to the Railways during the same period was 99115. Number of loose wheel and axles was 7445.

(d) **Number of wheels and axles which could not be supplied to Railways against their indents.**

Information is being collected.

13. *Please state the precise progress made to improve the working of the plant in the light of the recommendations of the Pande Committee and the report of the British Experts.*

There are seven recommendations in the Report of the Pande Committee relating specially to the Wheel and Axle Plant. Considerable progress has been made in their implementation. For instance inter-stage inspection has by and large been implemented. This is being done with the object of ensuring that defective materials are screened early in the process and not at the final stage of inspection. This will establish control over rejections. A progress

planning cell with one General Foreman and one Assistant Foreman has been set up already. A team of one Chargeman and one Assistant Foreman of Mechanical Maintenance has been sent to U.K. for training in the reconditioning of the machines. The incentive system is being studied under the guidance of the Consultative Group of the Hyderabad Staff College. Improvements have been brought about in the system of the maintenance including preventive maintenance. Maintenance arrangements has also been partially de-centralised and the Superintendent of the Department is now responsible for day-to-day maintenance.

The Report of the British Experts sets out detailed recommendations for securing qualitative and quantitative improvement in steel making and for wheel and axle production and in the various manufacturing stages in the Wheel and Axle Plant. The major recommendations are improvement in labour discipline, improving of steel making quality, introduction of inter-stage inspection to control various processes, separate production planning and progress cell, maintenance to be decentralised etc. Action has been initiated on most of these recommendations. The Following will illustrate :-

(i) To control the silicon content in the hot metal input in the open-hearth furnaces, the desiliconising facilities with which the plant has been provided, have been pressed into use.

(ii) A new control chart showing melting and tapping temperatures in the open hearth furnaces has been introduced in order to control the steel making process.

(iii) The qualitative and quantitative output of the open hearth furnaces and particularly the 100 tonne furnace now 120 tonnes, meanth for wheel-steel, was significantly affected by shortage of ingot moulds of proper quality. The position in this regard has substantially improved. Since the output of Durgapur Foundry has been continuously affected by labour troubles the purchase of moulds from market sources has been augmented.

(iv) The quality of refractories, procured from indigenous sources, has been one of the causes for rejections. To improve the quality of these refractories, men have been posted at the works of the refractory manufacturers to supervise production and provide technical guidance. Necessary trials with bricks from various Refractories are

also being undertaken to find out the bricks most suitable for wheel steel making.

To remove imbalances in the machining capacity, a Centreless Grinding Machine, an Axle roughing lathe and two wheel-set rectification lathes have been acquired and are under process of installation. It is expected that this will be completed by the end of this year.

The capacity of the 100 tonne open hearth furnace for wheel steel has been increased to 120 tonnes. Wheel steel has also been procured from the Alloy Steel Plant when required.

14. *Please indicate how for the improvements in the Plant would meet the future requirements of Railways both quantitatively and qualitatively for different types of rolling stock.*

The improvements that have been already effected and those in train in operational practices, systems and procedures should secure a significant increase in the output of the wheel and Axle Plant. There would be a qualitative improvement also in performance in terms of lower rates of rejections and higher yields. The quantitative and qualitative improvements are, however, contigent on an improvement in industrial relations of which there are hardly any signs.

[Ministry of Steel Mines and Metals (Department of Iron and Steel) D.O. No. Dur-18(3)/68, dated 7-12-1968.]

NEW DELHI;
February 24, 1969.
Phalguna 5, 1890 *(Saka)*

M. R. MASANI.
Chairman,
Public Accounts Committee.

APPENDIX I

Comparative Statement

(Para 1·21 of the Report)

(All figures corrected to nearest '000 Tonnes)

Particulars of freight	2nd Plan Period					3rd Plan Period				As per Project Report		Remarks
	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1 MTP Stage-I	2·5 MT Stage-II	
1	2	3	4	5	6	7	8	9	10	11	12		
I. *Bhilai Steel Plant (Actual figures)*													
Incoming Raw Materials Total	1860	3023	4230	5072	5193	5281	6889	7992	8556	4830	10131		
Coal	676	1115	1593	1680	1711	1714	2280	2935	3177	1834	3622		
A. Raw Materials excluding Coal	1184	1908	2637	3392	3482	3567	4609	5067	5379	2996	6509		
B. Outgoing products . .	434	751	962	1248	1406	1370	1619	1983	2133	1200	2615		
Ratio A to B in Nos. . .	2·7	2·5	2·7	2·7	2·5	2·6	2·8	2·5	2·5	2·5	2·5		
II. *Durgapur Steel Plant (Actual figures).*													
Incoming Raw Materials Total	421	2043	3289	4746	5252	5002	5182	3404	3724	5250	7358		
Coal	192	917	1470	1917	2160	1980	2102	1374	1587	2150	3460		

1	2	3	4	5	6	7	8	9	10	11	12	
A. Raw Materials Excluding Coal	229	1126	1819	2829	3092	3022	3080	2030	2137	3100	3898	
B. Outgoing products . ..	46	397	704	1005	1395	1349	1278	967	958	1161	1539	
Ratio A to B in Nos.. ..	5	2·8	2·7	2·8	2·3	2·3	2·4	2·1	2·2	2·7	2·6	
III. *Rourkela Steel Plant (Actual figures).*												
Incoming Raw Materials Total	953	1753	2243	3271	3557	3655	1395	4014	4242	3597	6620	
Coal	.	731	1018	1394	1547	1527	1750	1934	1953	1348	2492	
A. Raw Materials excluding Coal	..	1022	1225	1970	2010	2128	2645	2080	2289	2249	4128	
B. Outgoing products . ..	190	379	493	658	955	984	1042	896	905	804	1348	
Ratio A to B in Nos. . ..	..	2·7	2·5	2·9	2·1	2·2	2·5	2·3	2·5	2·8	2·8	
Average for all the three plants . .			2·6	2·8	2·3	2·4	2·56					(2·53 average)

APPENDIX II

(Reply to Recommendation No. 34-35—Chapter II)

Statement showing the expenditure on staff in Railway Board and the overall staff expenditure on Railways and the percentage between the two during the First, Second and Third Five Year Plan periods.

(Figures in thousands of rupees)

Five year Plans	Staff expenditure in Railway Board	Overall staff expenditure on Railways	Percentage of (1) to (2)
FIRST			
(1951-52)	19,89	1,21,70,88	0·16%
(1955-56)	32,18	1,48,21,92	0·21%
SECOND			
(1960-61)	64,48	2,05,23,90	0·31%
THIRD			
(1965-66)	95,65	3,13,36,19	[illegible]

APPENDIX III

(Reply to Recommendation No. 34-35 Chapter II)

Statement showing the expenditure on staff in the Headquarters and the overall staff expenditure on each zonal Railway and the percentage between the two during the first, second and third Five Year Plan periods.

(Ref. Page 151)

(Figures in thousands of rupees)

Five Year Plans	Units	Southern Railway	Western Railway	South Eastern Railway	Northeast Frontier Railway	Central Railway	Northern Railway	North Eastern Railway	Eastern Railway	South Central Railway	All Railways
1	2	3	4	5	6	7	8	9	10	11	12
FIRST	1. *Whole Rly.* (1951-52)	18,88,09	Figures not available for First Five Year Plan perio	13,23,63	N.F. Rly. was formed from 15-1-58	21,71,10	15,41,06	13,03,98	Not available		
	(1955-56)	22,87,33		15,78,13		26-31-95	22,06,83	16,69,53	22,94,91		
	2. *Headquarters* (1951-52)	Not available.		1,12,35			Not available.	1,23,26	Not available.		
	(1955-56)			1,32,68			1,86,55	1,49,28	1,29,02		
	3. *Percentage of* (2) *to* (1) (1951-52)	..		8·49%				9·4%	..		
	(1955-56)	..		8·41%	..	..	8·00%	8·8%	5·6%		

SECOND	1. *Whole Rly.* (1960-61)	29,57,75	[27,25,92	[21,39,63	10,26,66	33,73,94	30,16,78	14,27,81	[32,61,82			1,99,30,31
	2. *Headquarters* (1960-61)	90,99	1,83,24	[2,11,37	1,00,58	2,10,86	2,44,52	[1,72,93	2,14,21			15,25,21
	3. *Percentage of* (2) *to* (1) (1960-61)	6·42%	6·7%	9·88%	9·8%	6·24%	8·00%	12·1%	6·6%			7·7%
THIRD	1. *Whole Rly.* (1965-66)	[43,72,11	[40,63,41	[35,73,84	[16,09,41	52,81,30	[41,30,87	[20,98,63	[46,32,47	12,44,17 (1966-67) for the period from 2-10-66 to 31-3-67		2,97,04,04
	2. *Headquarters* (1965-66)	[2,61,76	[2,54,02	2,82,82	1,55,37	[2,89,63	[3,63,72	2,48,15	2,77,01	76,49		21,32,48
	3. *Percentage of* (2) *to* (1) (1965-66)	5·99%	6·2%	7·91%	9·7%	8·55%	8%	11·8%	6%	6·1%		7·2%

N.B.—South Central Railway was formed with effect from 2-10-1966. Hence, figures for that Railway in respect of the three Plan Periods are not available.

APPENDIX IV

(Reference reply to Recommendation 41—Chapter II)

List of Elec. Loco components which have already been indigenously developed. (Outside Collaboration Agreement with M/s. Group).

MECHANICAL

S. No.	Description
1	Wheels and wheel sets including cardan rings.
2	Bogie frame
3	Athermos Axle box
4	Reversible type gear box for speedometer.
5	Helical springs.
6	Underframes including buffers, couplers.
7	Cabs
8	Doors and window assembly
9	Side Panels
10	Roof
11	Body Side Filter
12	Rubber items
13	Brake Equipment
14	After Cooler
15	Oil and Water Separator
16	Wiper
17	Speed Recorder/Indicator
18	Sun Visor

ELECTRICAL

1	Battery
2	Earthing shunts
3	Cable of sizes
4	Cable lugs and plugs
5	Oil pump
6	Pantograph
7	Panto Mounting Insulators
8	Roof line Insulators
9	Roof fittings for above
10	Roof connections
11	Air Blast circuit breaker
12	Current Transformer
13	Earthing switch
14	Auxiliary compressor

1	2
15	Measuring Instruments
16	Signal Horns
17	Junction diode
18	HRC fuse
19	Blocking diode
20	Cab fans
21	Cab heater
22	Voltage regulator
23	Head light
24	Marker Light
25	Lamps (Misc)
26	Earthing pole
27	Internal couplers
28	External coupler
29	Auxiliary terminal
30	Insulating materials
31	Slotted channels and accessories
32	Push Buttons
33	Electrolytic copper flats.

APPENDIX V

(Reference reply to recommendation 41—Chapter II)

List of items being Developed indigenously

(a) *MECHANICAL :*	
(1) Traction Gears	Initially 6 loco sets were ordered on M/s. Heavy Machine Building Plant, Ranchi, but this has not materilised. Action has subsequently been taken to develop this item with M/s Heavy Machine Tool Plant at Ranchi. A developmental order for 40 loco sets was placed in 1966. After considerable delay, M/s HMTP have now imported the blanks and are likely to take up the work shortly.
(2) Elastic Articulation . . .	Attempts are now underway by M/s. Gresham & Craven and M/s National Rubber Manufacturers, Calcutta to develop prototypes.
(b) *ELECTRICAL ITEMS:*	
(1) Braking Resistance . . .	This item is under development with M/s. Beni, Calcutta who have made a prototype recently.
(2) Braking Excitation Control .	This is under development with M/s Beni Ltd., Calcutta.
(3) Protective Relays . . .	This item is under development with M/s. Universal Electric, Calcutta.
(4) Sequence Relays . . .	These are under development with M/s. English Electric Co., Madras.
(5) Time Lag Relays . . .	This is under development with M/s. Universal Electric, Calcutta and M/s. Cutler Hammer, Delhi.

APPENDIX VI

(Para 1.62 of the Report)

Production Programme vis-a-vis supplies from HEIL Bhopal

	1966-67	1967-68	1968-69	1969-70	1970-71
1. Production of Plans of DLW	55*	66	68	72	72
2. Supplies from HEIL as promised in March, 1965 . .	31 (including 10 sets of motors from 1965-66)	35	50	72	72
3. Actual Deliveries of complete sets	7	24	5 Upto Oct., 68	..	..
4. Shortage in delivery . .	24	11	20 On pro-rata supply of 25 upto Oct. 1968.	..	..

*Requirements of this production met by imported electrical equipments.

APPENDIX VII

(Para 1·52 of the Report)

Statement regarding various commitments made by HEIL for supply of B.G. Traction Equipment to D.L.W.

S. No.	Date of commitment	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	Remarks
1.	5-3-65	10 sets of motors.	21 sets of motors. 31 sets of other equipment.	35	50	72	..	
2.	5-3-66 (Accelerated programme).	..	21	63	120	120	120	
3.	10-8-66	..	21 sets	50	..	..	..	
4.	15-6-67	..	15 sets	56	66	83	..	
5.	4-10-67	..	15	50	55	..	..	
6.	6-2-68	..	15	26	66	..	..	
7.	20-3-68	..	..	31 (cumulative)	57	52	..	
8.	13-8-63	..	..	31	44	72	72	
9.	18-9-68	..	..	31	44	72	72	

APPENDIX-VIII

Statement showing Indian Railways requirements of wheelsets, wheels, tyres & Axles during 1961-62 to 1967-68.

(Para 1.60 of the Report)

S. No.	Type	1961-62 1	1962-63 2	1963-64 3	1964-65 4	1965-66 5	1966-67 6	1967-68 7
I.	*FOR WAGONS:*							
1.	22½ ton wheelsets	208	1424	2632	1308	3076	492	256
2.	20 ,, ,,	14928	20508	23424	28336	22392	16586	15028
3.	16 ,, ,,	15046	19316	18392	19752	22944	16018	8854
4.	12 ,, ,,	3762	5926	12010	11930	10768	4700	7226
5.	8 ,, ,,	632	416	..	..	..	..	..
	TOTAL . .	34576	46590	56458	61386	59530	37796	31364
II.	*FOR COACHES:* .							
1.	20 ton wheelsets .		144	156	188	242	88	..
2.	16 ,, ,, .	1484	1552	1246	1100	1104	1080	1016
3.	10 ,, ,, .	1808	920	788	832	828	572	860
	TOTAL . .	3292	2616	2180	2120	2184	1740	1876
	TOTAL WHEELSETS FOR WAGONS & COACHES .	37868	49206	58638	63506	61864	39536	33240
III.	*LOOSE WHEELS, TYRES & AXLES FOR LOCOS COACHES AND WAGONS*							
1.	Wheel/Tyres	Not Avail-able.	105516	114227	61472	64649	47815	65183
2.	Axles		8331	9567	17904	6261	13279	15939

APPENDIX-IX

(Para 1.60 of the Report)

Statement showing the supplies of wheelsets, wheels/tyres and axles received from indigenous sources during 1961-62 to 1967-68.

S. No.	Type	1961-62 1	1962-63 2	1962-63 3	1964-65 4	1965-66 5	1966-67 6	1967-68 7
I.	*WHEELSETS*							
	(*i*) 20-ton							
	(*a*) M/s. HSL .	..	1,078	8,404	14,466	15,567	9,852	7,834
	(*b*) M/s Tisco .	802	1,070	1,361	2,489	2,168	2,716	1,884
	TOTAL	803	2,148	9,765	16,955	17,735	12,568	9,718
	(*ii*) 16-ton							
	(*a*) M/s. HSL .	..	3,670	9,894	7,949	7,840	4,256	5,956
	(*b*) M/s. Tisco .	3,991	3,684	2,315	3,463	4,032	2,309	1,936
	TOTAL	3,991	7,354	12,209	11,412	11,872	6,565	7,892
	(*iii*) 12-ton M/s HSL	..	..	..	..	..	..	915
	(*iv*) 10-ton M/s. HSL	..	..	225	..	..	1,035	174
	TOTAL SUPPLIES BY EACH SOURCE.							
	(*i*) M/s. HSL .	..	4,748	18,523	22,415	23,407	15,143	14,879
	(*ii*) M/s. Tisco .	4,794	4,754	3,676	5,952	6,200	5,025	3,820
	GRAND TOTAL . .	4,794	9,502	22,199	28,367	29,607	20,168	18,699
II.	*LOOSE WHEELS, TYES AND AXLES.*							
	(*i*) M/s Tisco							
	(*a*) wheels/tyres .	25,790	40,516	35,538	36,699	31,358	33,800	35,205
	(*b*) Axles . .	7,088	7,331	7,110	7,309	6,379	6,335	6,142
	(*ii*) M/s. HSL							
	(*a*) Wheels .	..	394	491	251	946	83	400
	(*b*) Axles .	..	3952	..	601	136	..	191
	Total Supplies form indigenous sources:							
	Wheels/Tyres .	2,7950	40,910	36,029	36,950	32,304	33,883	35,605
	Axles . . .	7,088	11,238	7,110	7,910	6,515	6,335	6,333

APPENDIX-X

Statement showing Foreign Exchange spent on the reports of wheelsets wheels, tyres and Axles during 1961-62 to 1967-68.

(Para 1·60 of the Report)

(Figures in Crores of Rupees)

Type	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
	1	2	3	4	5	6	7
I. *Wheelsets:*							
(*a*) for wagons	4·51	7·49	2·67	0·85	1·66	2·19	2·27
(*b*) for coaches	..	0·61	..	..	..	0·19	..
II. Loose wheels/Tyres & Axles for all stocks (including locos)	Not Available	1·79	2·43	0·93	0·30	1·55	1·93
TOTAL	4·51 (for wheelsets only)	985	5·10	1·78	1·96	3·93	4·20

APPENDIX XI

Summary of Main Conclusions/Recommendations

Sr. No.	Para No. of Report	Ministry/Deptt. concerned	Conclusions/Recommendations
1	2	3	4
1	1.11	Railways Planning Commission	The Committee cannot resist the impression that the Railways persistently over-estimate traffic requirements while planning for rail capacity. An illustration of this is available in the manner in which the estimates for general goods traffic were framed for the Third Plan. The target for general goods fixed in the Third Five Year Plan as published in August, 1961 was 76·8 million tonnes, out of 249 million tonnes of originating goods traffic anticipated in the last year of the Plan. This target was fixed when the development programmes for certain important industries had "not yet all been worked out in detail." However, after this target was fixed, the Railways initiated and systematically built up pressure on the Planning Commission for its enhancement by 10 million tonnes, which was ultimately agreed to. It is significant that this revision of targets was not based on a review of the trends in general goods traffic repeatedly suggested by the Planning Commission to the Railways. The Railways themselves had in fact stated that "there are no statistics in the accepted sense of the term which are compiled or can be compiled as a regular measure to reflect the actual demands for transport of miscellaneous goods traffic from and to different areas." It is also significant that this upward revision of target

occurred despite the fact, specifically brought to the notice of the Railways, that the proportion of rail movement to total production was going down. The actual general goods traffic that materialised against the target of 86·8 million tonnes, was only 78·1 million tonnes, while, in respect of the total goods traffic, against an anticipation of 249 million tonnes, to which the entire planning was geared, the traffic moved was only 203 million tonnes.

2 I 12 do

The Committee are emphatically of the view that planning for rail capacity should be done on a more realistic basis in future, so that scarce resources, which could be deployed for more productive purposes, do not get unnecessarily blocked. The Committee note that the Railways themselves have accepted "the need for improving planning procedures" and the responsibility for ensuring "whatever moderation is possible" in framing rail transport estimates and are tightening up the process of review and evaluation of production and demand projections for various commodities. The Committee would like the Planning Commission and Government to ensure that while draw up the Fourth Plan planning for rail capacity is done on a more realistic basis and the persistent tendency to over-estimate traffic requirements and push up investment is firmly curbed. In particular, the Committee would like the Planning Commission and Government to take note of the significant trend the world over for goods to move increasingly by road. This vital development should be kept constantly in view in estimating the share of total traffic to be moved by rail and road

1	2	3	4
			and in determining the allocation of scarce plan resources for their respective development.
3	1.16	Railways Mines & Metals	The Committee note that with the removal of control over distribution of coal (other than coaking coal required for metallurgical industries) with effect from 24th July, 1967, the Coal Controller will no longer be in a position to furnish a detailed programme of rail transport requirements for non-coking consumers. This, coupled with the experience in the Third Plan Period where there was a shortfall in traffic of 24·7 million tonnes against the Plan estimates of 91·4 million tonnes, suggests the need for extreme circumspection in planning for movement of coal traffic. The Committee would also suggest that, by way of abundant caution, any projection of traffic assumed in planning for extra capacity during the Fourth Plan should be subject to careful annual review in the light of empirical data.
4	1·19	Mines & Metals	The Committee regret that the Department of Mines & Metals have still not furnished the information called for. They would like to emphasise the necessity to have the requisite data speedily collected and reviewed. Based on such a review it may be examined whether the estimates of coal traffic drawn up for the Fourth Plan would need revision. The Committee would like particularly to stress that the estimates should be built up, on

realistic field-wise targets for production and for direction-wise movements of coal.

5 1·23 Railways — Iron & Steel

The Committee cannot help feeling that the traffic for Steel Plants estimated as 34·5 million tonnes in the last year of the Third Plan was not based on any precise assessment of raw materials for the plants to be moved by rail. As pointed out in para 1.48 of their 22nd Report, the estimate was apparently based on a formula which assessed that 3 to 3·2 tonnes of raw materials would be required per tonne of finished product. However, the information furnished to the Committee does not show on what basis this formula was worked out. The average raw material requirement as worked out in the project reports of the Steel Plants, prepared by the Collaborators was 2·53 tonnes per tonne of finished product. A Coordination Committee for expansion of Steel Plants had assessed the requirements of raw materials for the Plants in June, 1960 and, on the basis of their calculations, the formula worked out was that 2·76 tonnes of raw materials would be needed per tonne of finished product. At an Inter-Ministerial meeting held subsequently in October, 1960, it was pointed out that the leads required for raw materials would be longer, but the papers relating to the meeting which have been furnished to the Committee do not show that any formula as such was worked out. The Committee are, therefore, unable to understand on what basis the traffic was assessed as 34·5 million tonnes, including 26.1 million tonnes on account of raw materials. The actual traffic that materialised was 10.8 million tonnes less.

1	2	3	4
			The above resume clearly indicates that Government did not carefully assess the requirements for the movement of raw materials by rail for steel plants either on the basis of their past experience or on the basis of figures estimated by the foreign collaborators but fixed them arbitrarily at 3 to 3.2 tonnes of raw materials for one tonne of finished steel. This resulted not only in creating rail capacity far in excess of requirements but also in burdening the Railways with heavy capital investment on which a fixed dividend has to be paid to the general exchequer and diverting scarce resources which could have been better utilised in building roads or otherwise.
6	1.24	Railways Iron & Steel	The Committee would like Government to draw the benefit from this costly experience and ensure that in future the requirements for the movement of raw materials for steel plants are realistically worked out on the basis of experience gathered during the last decade.
7	1.28	Railways	The Committee note that the question whether the loss on the working of new lines should not be passed on to the sponsoring authorities is proposed to be considered at the time of the next review of the Separation Convention. Now that the Railway Convention Committee (1968) has been appointed, the Committee hope that this matter will be placed before them.
8	1.29	Railways	The Committee also note that some of the State Governments are not agreeable to the closure of certain branch lines on

			which the Railways have been consistently losing. According to the Railways own estimate, the total annual loss of uneconomic branch lines works out to Rs. 6.69 crores. The Committee recommend that Railways should examine what effective measures, if any, could be taken to reduce the losses on these lines by introducing optimum number of services, speeding up of trains, ensuring safe handling of goods and, in general, improving customer's satisfaction. Where rail development justifies it, the question of conversion of these existing narrow guage lines into metre gauge/broad gauge lines in the interest of reducing the losses may also be considered. The Committee suggest that, in a case where a State Government is not agreeable to the closure of unremunerative lines, the question of passing the losses on to the concerned State Government should be considered. The Committee suggest that this matter may also be placed before the Railway Convention Committee (1968) for their consideration.
9	1.35	Railways	The Committee are not happy to learn that wagons were purchased by Railways during the Third Plan "without detailed calculations". The estimation of wagon requirements 'on additional account' included in the Third Plan was 108,956 wagons, based on a traffic target of 249 million tonnes. In January, 1962, when the traffic target was revised to 264 million tonnes, provision was made for the purchase of 21,000 more wagons, 'on additional account' The actual number of wagons procured on 'additional account' was 116,410 or 13,546 wagons less than the estimated requirement for a traffic target of 264 million tonnes. Even if, as stated by the Railway

1	2	3	4
			Board, this estimate was not based on detailed calculations, it would appear that the additional procurement should have created a capacity more than the peak level capacity of 225 million tonnes estimated by Railways as having existed at the end of the Third Five Year Plan. Considering, moreover, that the originating goods traffic moved in the last year of the Third Plan was only 203 million tonnes, it is evident that there was ample surplus wagon capacity with the Railways at the end of the Third Plan. Now that an appraisal of wagon requirements is being made for the Fourth Plan, the Committee would like to impress on the Railways and the Planning Commission the need to arrive at a reliable assessment of wagon capacity created, taking into account the change in pattern of movements and in the leads mentioned by the Railways, so that the acquisition of wagons on additional account is based on dependable estimates of surplus wagon capacity already existing.
10	1·36	Railways	The Committee are surprised by the explanation of the Railways that the 'turn-round of 9·5 days on Broad Gauge and 6·5 days on Metre Gauge envisaged in the Third Plan "were never visualised as targets for full achievement". If, as stated by the Railways, they were "built into the Railways' plan for expansion", they were necessarily visualised as goals capable of realisation. While planning the acquisition of extra wagons during the Fourth Plan, the Committee would like both the Railways and the Planning Commission to examine how far the existing 'turn-round' leaves scope for

			improvement, so that fuller use is made of the existing wagon stock before making further capital investment.
11	1·39	Railways	While the Committee appreciate that some times there might be delay in the allotment of wagons due to unavoidable circumstances, they feel that with the surplus capacity available with the Railways, it should be possible to meet the consumers' requirements of wagons in less than a week of the registration of the demand. The Committee suggest that the Ministry of Railways should make a public declaration that wagons would be made available, save in exceptional circumstances, within a prescribed period. This would not only dispel any lingering suspicion that there are still some malpractices in the matter of allotment of wagons but also help to build an image of Railways as a consumer oriented service.
12	1·44	Railways	The Committee see force in the view of Audit that return of empties from broad gauge to base stations requires considerably fewer of goods trains than the return of empty bogies on metre gauge. The Committee desire that the relative economics of hauling POL by the longer route on Metre Gauge *vis-a-vis* the shorter route on Broad Gauge may be re-examined, so that the more economic course consistant with operational requirements is adopted.
13	1·48	Railways	The Committee are distressed to note that in spite of various measures taken during the last two years to make rail transport more attractive on the Southern Railway, the loss during the year 1967-68 has increased to Rs. 15.66 crores from Rs. 10.32 crores in

1	2	3	4
			1966-67. The Committee desire that the Ministry of Railways should examine what further steps should be taken to improve the financial working of the Southern Railways by attracting additional traffic and by effecting appropriate economies in expenditure. The Committee would like to watch the working of this Railway through future Audit Reports.
14	1.5	Industrial Development	The Committee are disappointed with the performance of Heavy Electricals in the matter of supply of traction equipment to the Rai ways for the manufacture of diesel locomotives. 31 sets of equipment were promised in 1966-67, against which the actual deliveries were 7; in 1967-68, the supply was 24, against 35 promised. Under such circumstances, the Railways had inevitably to resort to imports on a scale larger than originally planned. The Committee note that deliveries of equipment by Heavy Electricals were affected by the delays in procurement of imported machinery and raw materials needed for the production of equipment, apart from the difficulty in getting acceptable steel castings from indigenous suppliers for frames and control gear. For the delays in import of machinery and raw materials, the Railways have their share of responsibility. as the Committee understand from the information supplied to it by the Ministry of Industrial Development, that the clearance for the requisite foreign exchange needed by Heavy Electricals was not

			given by the Railways in time. As regards castings the Committee note that the Corporation "are now in a much better position to foresee the problems and take timely corrective action." The Committee hope that, with the experience now gained, it would be possib'e for Heavy Electricals to adhere to their promises of stepping up supplies of equipment from 44 in 1968-69 to 72 in 1970-71.
15	1.56	Railways — Industrial Development	The Committee note that in regard to crank shafts required for locomotives, the scheme for progressive substitution of imports by supplies from Heavy Engineering Corporation, Ranchi, did not materialise in time due to "protracted correspondence between Heavy Engineering Corporation and Diesel Locomotive Works before a mutually acceptable forging technology could be agreed upon." The Committee note that the scheme for indigenous manufacture has been agreed to by the Railways in principle and that the Heavy Engineering Corporation propose to enter into foreign collaboration for this purpose and that the details are being sorted out. The Committee hope that both the Corporation and the Railways will move in the matter with a sense of purpose and speed and that the Corporation would be able to live up to the present expectations of being able to supply the requisite cranks shafts from 1972-73 onwards.
16	1.62	Iron & Steel	The Committee note that the Wheel and Axle Plant at Durgapur has the capacity to meet the requirements of the Railways for wheel sets required for wagons and coaches. However, due to qualitative and quantitative deficiencies in production, the Plant has not been able to supply the full quantum of 30,000 wheel sets promised

1	2	3	4
			from 1963-64 onwards. The maximum supply effected was 23,407 in 1965-66 and since then the supplies have been progressively coming down, rendering reliance on foreign suppliers inevitable. How inadequate the progress has been would be evident from the fact that, in 1967-68, the foreign exchange expended on imports of wheel sets, loose wheels, tyres etc. was Rs. 4.20 crores; or nearly as much as that in 1963-64 (i.e., Rs. 5.10 crores).
17	1.63	Iron & Steel	The Committee note that the question of improving the performance of the Wheel and Axle Plant at Durgapur was the subject of study by the Pandey Committee as well as by a team of British experts. The Committee hope that with the implementation of the recommendations of these two teams, the Plant will be geared up to supply quality Wheels and Axles in requisite numbers.

GMGIPND—LS I—3152 (Aii) LS—24-2-70—1334

Sl. No.	Name of Agent	Agency No.
	DELHI	
24.	Jain Book Agency, Connaught Place, New Delhi.	11
25.	Sat Narain & Sons, 3141, Mohd. Ali Bazar, Mori Gate, Delhi.	3
26.	Atma Ram & Sons, Kashmere Gate, Delhi-6.	9
27.	J. M. Jaina & Brothers, Mori Gate, Delhi.	11
28.	The Central News Agency, 23/90, Connaught Place, New Delhi.	15
29.	The English Book Store, 7-L, Connaught Circus, New Delhi.	20
30.	Lakshmi Book Store, 42, Municipal Market, Janpath, New Delhi.	23
31.	Bahree Brothers, 188 Lajpatrai Market, Delhi-6.	27
32.	Jayana Book Depot, Chapparwala Kuan, Karol Bagh, New Delhi.	66
33.	Oxford Book & Stationery Company, Scindia House, Connaught Place, New Delhi—1.	68
34.	People's Publishing House, Rani Jhansi Road, New Delhi.	76
35.	The United Book Agency, 48, Amrit Kaur Market, Pahar Ganj, New Delhi.	88
36.	Hind Book House, 82, Janpath, New Delhi.	95
37.	Bookwell, 4, Sant Naran kari Colony, Kingsway Camp, Delhi-9.	96
	MANIPUR	
38.	Shri N. Chaoba Singh, News Agent, Ramlal Paul High School Annexe, Imphal.	77
	AGENTS IN FOREIGN COUNTRIES	
39.	The Secretary, Establishment Department, The High Commission of India India House, Aldwych, LONDON, W.C.—2.	59

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