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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

APPRAISAL OF PAKISTAN RAILWAYS'

INTERIM PROGRAM

November 18, 1959

Department of Technical Operations

CURRENCY EQUIVALENTS

1 Pakistan Rupee - US\$ 0.21

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Appraisal of Pakistan Railways'
Interim Program

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APPRAISAL OF PAKISTAN RAILWAYS' INTERIM PROGRAM

Summary and Conclusions

- i. The Pakistan Government wishes to borrow US\$ 12.5 million equivalent from the Bank to meet part of the foreign exchange cost of the Railways' interim program of rehabilitation, improvement and expansion, pending the completion of a traffic study and the formulation, based on this study, of a five-year Railway program as part of Pakistan's proposed Second Five-Year Plan 1960-65.
- ii. This report appraises the current position of Pakistan's two State-owned railway systems -- the North Western Railway (NWR) in West Pakistan and the Eastern Bengal Railway (EBR) in East Pakistan - and of the interim program.
- iii. The Railways are well managed and are fairly efficiently run. Improvement in operations is likely with the recent establishment of a semi-autonomous Railway Board. The present cumbersome accounting and budgeting procedures are being revised with the help of outside experts.
- iv. The maintenance of the Railway property is, on the whole, satisfactory. Except for ballast on the EBR, the permanent way shows little deferred maintenance. The average age of locomotives and wagons is high and the percentage of overage rolling stock, requiring extensive maintenance, is still increasing. Replacements under the current Five-Year Plan and the proposed interim program, combined with improved efficiency resulting from the removal of traffic bottlenecks, should lead to a gradual improvement of the rolling stock position. The Railways are aware, however, that much remains to be done in the near future to bring the rolling stock up to satisfactory standards.
- v. The interim program as planned by the Railways is necessary to avoid further delays in present traffic and to meet the essential requirements of the Railways for moving the expected traffic during the time needed to draw up and secure financing for their Second Five-Year Program.
- vi. The Railways' staff is competent to plan and execute the works under the interim program, with the exception of certain special items, for which outside experts will be retained.
- vii. Although the EBR is operating on a marginal basis, the financial position of the Railways taken as a whole is sound. It is expected that the local cost of the program will be adequately covered by depreciation charges and earnings.
- viii. The Railways' interim program is suitable for Bank financing. A loan of US\$ 12.5 million equivalent and a term of 15 years, including a three-year period of grace, appear to be justified. The Government would be the borrower since the Railways have no financial autonomy.

I. INTRODUCTION

1. The Pakistan Government wishes to borrow US\$ 12.5 million equivalent from the Bank to meet part of the foreign exchange costs of the Railways' interim program of rehabilitation improvement and expansion. In 1952 and 1957 Bank loans in the amounts of US\$ 27.2 and US\$ 31 million were made for similar purposes.
2. The proceeds of the loan would be used to procure rolling stock, signalling equipment and track materials for the two State-owned Railways - North Western Railway (NWR) in West Pakistan and Eastern Bengal Railway (EBR) in East Pakistan.
3. This report appraises the present organization, management and operations of the Railways and describes the technical, economic and financial aspects of the interim program. The report is based on the findings of a Bank mission which visited Pakistan during February/March 1959 and on information received subsequently from the Pakistan Railways.

II. PRESENT POSITION OF THE RAILWAYS

Organization and Management

4. Until recently, the Central Government administered both the NWR and EBR through a Railway Division headed by a Director General of Railways (DGR) in the Ministry of Communications. Operating at the same level as the DGR was a Financial Adviser Communications (FAC) who was responsible to the Minister of Finance and had his own staff dealing with financial and accounting matters within the Railway organization.
5. In August 1959 a new organization was established introducing a semi-autonomous Railway Board. The Board refers to the Government only on matters of general policy; it has no financial autonomy and all funds are still under control of the Government, the Railway budget remaining part of the Government budget. The Board has wide powers in matters of management and the previous duality of control by the DGR and the FAC has been eliminated. Tariffs and rates are set by the Board within broad limits specified by the Government.
6. The Board membership comprises the former DGR (Chairman), the former FAC and the Chief Engineer of the Railways. They are assisted by a small technical traffic and operational staff which was previously directly under the DGR. Each Railway has retained its own General Manager who is in charge of daily operations but refers to the Board on matters such as personnel, procurement, and rates.
7. In each province an Advisory Board will be established, consisting of six members to be drawn from commerce, industry and government. A senior railway officer will attend the meetings of these Boards as an observer. Suggestions by the Advisory Boards will be transmitted to the Railway Board for consideration.

8. The new organization should contribute to better management and greater efficiency of operations. It appears to rule out a transfer of the Railways to Provincial control, which formerly had been contemplated.

9. The Railways are capable of directing and executing the interim program without outside help, except for a few special problems mentioned later. The executive officers of both systems are, on the whole, competent; the senior officers have usually been promoted from within the service after long experience. Permanent staff are members of the Pakistan Civil Service and, whereas promotion was formerly based principally on seniority in the Railways' service, the Railway Board now considers capability the governing factor. There is no bar to promotion of meritorious subordinate staff to the officer grades. In fact, 20% of the vacancies in these grades are reserved for the selective promotion of subordinate staff. The normal retirement age of the permanent staff is still 55 years. However, the Railway Board now has authority to defer retirement of employees for periods varying from one to five years. For the Board members such extension needs the approval of the President. By these measures the low retirement age now presents less of a problem.

10. The Management recognizes that some of the lower ranks are over-staffed, particularly in the EBR. This is a burden on the operating budget although the low wages make the effect much less serious than it would be in more industrialized countries with correspondingly higher wage levels. An abrupt release of a large number of employees would create political problems. The ranks involved have therefore been closed to new personnel.

11. A committee was appointed early in 1958 to revise the outmoded rules and regulations still in force governing railway operations. As a result of its recommendations some speed restrictions are being gradually removed. Other factors affecting operational efficiency are being reviewed by committees appointed for the purpose. To speed up the work a request has been made to the German railways for services of experts who will act as advisers.

12. Another shortcoming is the cumbersome accounting and budgeting procedure, which requires overhauling with a view to making the accounts of value to the Management/ⁱⁿcontrolling the current operations of the Railways. Under the recent reorganization the accounting department was put under the Railway Board but the Auditor General of the Government remained responsible for all accounting records and procedures. As a result of the negotiations for the previous loan, assistance of the accounting firm Price Waterhouse & Co., (London), was obtained and in the light of their recommendations a program of improvements will be drawn up. Accounting experts will be periodically consulted during its execution.

13. The Board is empowered to make all purchases for the Railways, including the general stores items formerly bought through the Government's central purchasing agency headed by the Director General Supply and Development. It is expected that the problems of overstocking or shortage of essential goods and undue delays in obtaining supplies, frequent under the previous system, will be gradually eliminated.

14. Management is controlling a number of activities foreign to direct railway administration, such as a fire brick factory, a small steel and rolling mill and, on the EBR, inland water transport and the Port of Chittagong. Products of the factory and the mill are used exclusively in the Railways. There seems to be no good reason for EBR to continue its water transportation services as private enterprise is fully capable of taking over. The Port of Chittagong will be transferred from EBR to the recently established Chittagong Port Commissioners within the next few months.

15. Summarizing, the Railways are functioning in a fairly efficient manner and should improve under the new organization.

Existing Properties

A. North Western Railway

16. This system consists of 5,334 route miles (7,470 track miles) and serves mainly the Eastern, most developed part of West Pakistan (see map). Of the three different gauges, the Broad Gauge (5'6") is by far the most important with 4,635 route miles of which 635 miles are double track. Only 699 route miles are Meter and Narrow Gauge (2'6"), all single track.

17. The mainline track for the greater part has 90-lb. rail, branch-lines having 75-lb. rail. Rail on some of the branch-lines will be changed to 90-lb. and bridges will be strengthened to cater for the increasing traffic (and train loads) which is developing in certain areas due to industrialization. Wooden, steel and cast iron sleepers are used extensively and a concrete sleeper factory has been put into operation producing 50,000 sleepers yearly. The track is well aligned and in good condition; both ballasting and sleepers are satisfactory.

18. Rolling stock as of March 31, 1959, includes 706 steam locomotives partly coal and partly oil-fired; 145 diesel locomotives; 25,800 goods wagons and 2,820 coaching vehicles. By March 31, 1963, when all rolling stock provided for in the interim program will have become available for service, the following stock will be over 45 years of age:

Steam locomotives	:	44%
Coaching vehicles	:	21%
Goods wagons	:	24%

These figures indicate that there will be need for further rehabilitation, especially for locomotives (dieselization) in the near future.

B. Eastern Bengal Railway

19. This network consists of 1,713 route-miles (2,554 track-miles) and serves mainly the northern part of the Province (see map). The inland waterway transport system serves the rest of the territory, sometimes in competition with the railway, and carries about two-thirds of all traffic. The railway system, like the NWR, consists of three sections with different gauges.

Here the Meter Gauge line with 1,145 route-miles is the most important one, followed by the Broad Gauge (5'6") section of 548 route-miles, and some 20 miles of 2'6" gauge.

20. The meter gauge railway network is cut in two parts by the Brahmaputra river and is connected by cumbersome ferry services. This slows down transportation and raises cost. After Partition the system had to be reorientated from its previous port, Calcutta, to the port of Chittagong on the other side of the Brahmaputra river system.

21. The track mainly has 60-lb. rail which is in satisfactory condition. The ballast bed is generally too thin, and in some parts absent altogether, due to the lack of stone in East Pakistan. Building of a ropeway between the railhead at Chhatak and Bholanganj, to exploit shingle and boulder deposits in that region for ballasting, is included in the Railways' interim program. Meanwhile on most sections the sub-grade of silt seems to provide a sufficiently resistant support for the rather light axle loads of the traffic. The condition of the sleepers has been improved; the track rehabilitation program including rail renewals of 130 miles and sleeper renewals of 564 miles has been completed. Taking into account the ballast problem, the alignment and condition of the track is remarkably good.

22. Rolling stock on March 31, 1959, included 385 steam locomotives, partly oil and partly coal-fired; 51 diesel locomotives; 17,750 goods wagons in terms of four-wheelers and 1,350 coaching vehicles. The following stock will be over 45 years of age by March 31, 1963:

Steam locomotives	:	41%
Coaching vehicles	:	37.5%
Goods wagons	:	29%

23. Here also there appears to be need for further rehabilitation in the near future. There has been a considerable reduction in the fleet of goods wagons by the scrapping of those beyond repair, and replacements have not been sufficient to maintain numbers at the 1957 level. The EBR also owns and operates a flotilla of eight tugboats and 32 barges for inland water transport services.

C. General

24. Both networks are at various places interconnected with the Indian Railways and wagons are interchanged on a per diem basis. While traffic from the Indian State of Assam to Calcutta can be routed through Indian territory, a considerable amount follows the shorter way via East Pakistan. A bridge is now being built across the Brahmaputra river in Assam to replace the existing ferry service and it will increase the line capacity through Indian territory for transportation of oil found in Assam. However traffic via the EBR route is not expected to decrease.

25. Buildings, stations and bridges are, on the whole, adequate and well maintained. The layout of workshops for the repair of rolling stock, including steam locomotives, is being improved; in the main NWR workshop at

Moghalpura a production line has been established for manufacturing goods wagons from raw materials at the rate of 1,000 per year. Passenger carriages are assembled in the same shop. The machinery on hand and on order is adequate for maintenance of the present rolling stock, and for the additions provided for in the interim program.

26. The diesel maintenance and repair shop at Karachi is being extended to cater for light and medium repairs; the extension is expected to be completed by June 1960. A second shop is to be erected in Rawalpindi to take care of general overhaul. In East Pakistan a diesel repair shop of ample capacity has been constructed in Pahartali near Chittagong. The shops will provide adequate capacity for the existing fleet of diesel locomotives and for those to be procured under the interim program.

27. The percentage of equipment under repair is not high, considering the rather large amount of over-age rolling stock, and should decrease after the new workshop machinery has been put into operation. Maintenance is carried out on a regular time schedule which tends to keep down the number of vehicles out of service.

Present Traffic

28. Both goods and passengers in West Pakistan are mainly transported by rail. In 1958/59, 3,557 million ton-miles of goods and 5,147 million passenger-miles were achieved, (Annex I). There has been a steady increase in both categories since 1954/55, the beginning of the First Five-Year Plan period. The most important goods are: building materials, agricultural products (mainly wheat, rice and cotton) and coal. What little there is of road competition is not expected to increase considerably, due to Pakistan's limited road system and lack of foreign currency to acquire trucks and fuel.

29. The Railways' position in East Pakistan is very dissimilar. Inland waterway transport is the main carrier of goods and passengers, and only one-third is moved by the Railways. EBR traffic in 1958/59 amounted to 817 million ton-miles of goods and 1,600 million passenger-miles. Since 1954/55 there is a noticeable increase in both goods and passenger traffic. (Annex I). The bulk of the goods transported comprises coal and agricultural products (jute and rice). There are few roads and consequently there is little road competition.

Utilization and Equipment

30. Annexes II and III show statistics of serviceability and utilization of equipment for NWR and EBR respectively. Taking into account the high percentage of overage stock, the serviceability is good and the utilization is satisfactory.

31. Average speed of goods trains on both systems is low, principally because of traffic bottle necks but also because of various speed restrictions on several sections, for which in many cases proposals for alleviation

are under consideration. Wagon miles per day on EBR are low partly due to the necessity of ferrying wagons across the Brahmaputra river.

Earnings and Finance

32. The recent Railway reorganization has not brought about substantial changes in financial procedures. All funds are still under the control of the Government which makes annual appropriations to cover capital and operating expenditure. All cash collected goes directly to the Central Government and expenses are paid by checks drawn against the Central Government. In 1959 the Railways' fiscal year was changed to end at June 30 instead of March 31, in accordance with the change in the fiscal year of the Government.

33. Since Partition the Pakistan Railways as a whole have been operating at a profit. However, the profit was generally produced only by NWR, and was partly offset by losses incurred by EBR which operates under less favorable conditions. Only during recent years has EBR been making small profits.

34. The Railways' accounts show that the net earnings of NWR amounted to Rs. 109.9 million in the year ending March 31, 1958 and have been maintained at approximately the same level since 1955 (Annex IV). Its operating ratio for 1958 was 66%. Net earnings of EBR amounted to Rs. 8.3 million in 1958 but losses were incurred in 1955 and 1957 (Annex V). EBR's operating ratio for 1958 was 85%. Final reports for fiscal 1959 (15 months) are not yet available but the revised budget estimates, which are generally conservative, indicate net earnings of Rs. 126.3 million for NWR and of Rs. 1.2 million for EBR.

35. According to a forecast submitted by the Railways (Annex VI), gross earnings of each railway system would increase by approximately 10% for the period June 1960-1965. Net earnings of NWR would increase at almost the same rate, up to Rs. 136 million per year. However, EBR would show losses, averaging Rs. 3.6 million per year. The forecast seems reasonable in the light of past performance but may have to be revised after completion of the traffic study which is now being undertaken.

36. During the past five years, goods revenue averaged 53% of the gross revenue of NWR and almost 50% of the gross revenue of EBR. The Railways have not yet been able to assess the relative costs of goods versus passenger traffic and relate them to tariffs and rates, which have not been changed substantially during recent years.

37. At the time of Partition in 1947 it was not possible to determine accurately the value of the assets acquired. The net value of all assets including land was assessed at Rs. 1,150 million after deducting Rs. 180 million on account of depreciation and Rs. 170 million as an agreed reduction in the purchase price of a number of strategic lines. Government investment, called "Capital at Charge" was determined at this amount. A physical inventory of the assets has not yet been taken; it may be expected that their true value is larger than the indicated book value.

38. "Capital at Charge" at the time of Partition and on June 30, 1959 for each system is given below:

	<u>NWR</u>	<u>EBR</u>	Port <u>Chittagong</u>	<u>Total</u>
	Rs. 000,000			
August 15, 1947	821.4	321.2	7.4	1,150.0
June 30, 1959	997.7	502.5	125.9	1,626.1

Investments in EBR have been relatively larger because in 1947 Pakistan took over a disrupted system in Eastern Bengal and had to make many new additions, whereas in NWR expenditure was more for renewals and replacements, especially of rolling stock.

39. Interest on capital has been charged against the revenue of each system at 3 $\frac{1}{4}$ % through 1953 and at 3% thereafter. It does not appear that the rate of interest is related to the cost of funds to the Government.

40. Since 1957 depreciation has been computed on an overall basis of one-thirtieth of "Capital at Charge" as compared to one-sixtieth in earlier years. The Railways believe that the previous rate was too low because it did not cover replacement costs. Ad-hoc amounts had already been added to the depreciation reserve in each of the years 1952 through 1957. No interest is payable to the Government on expenditure for replacements and renewals charged to the depreciation reserve.

41. The depreciation policy of the Pakistan Railways is not in accordance with usual business principles. However, by increasing the rate from one-sixtieth to one-thirtieth net operating revenue has been decreased, which resulted in more conservative financial data. Depreciation charges in 1958 amounted to 8.5% of gross earnings which in comparison with other railways does not appear to be unreasonable.

Use of Previous Loans

42. In 1952 the Bank lent \$ 27.2 million to the Pakistan Government for the rehabilitation and improvement of the Railways. The funds were spent mainly for the procurement of diesel locomotives, carriages and wagons. The introduction of diesel traction has resulted in increased operating efficiency and in considerable savings in fuel costs. Because of delays experienced in placing the order for the carriages the loan has not yet been fully disbursed. Some \$ 1.0 million remains to be spent, mainly **money** held until the end of the guarantee period for the carriages and also funds allocated for spare parts.

43. A second loan of \$ 31.0 million was made in 1957 of which about \$ 11.0 million is still undisbursed. The funds are being spent mainly for the procurement of wagons, track materials and the replacement of the Lansdowne Bridge. Most equipment and materials have been delivered; track rehabilitation is making good progress. After rejection of earlier tenders the contract for the new Lansdowne Bridge will be awarded shortly.

III. THE PROJECT

Financial Outline

44. The project consists of the Railways' interim program, as presented to the Bank, and involves the expenditure of the equivalent of almost Rs. 340 million for the rehabilitation, improvement and expansion of its railway facilities, pending the completion of a traffic study and the formulation, on the basis of the study, of a five-year program as part of the Government's proposed Second Five-Year Plan (1960-1965). The placing of orders will be completed by June 30, 1961; expenditure will be divided equally over the years ending June 30, 1961 and 1962. The interim program is summarized below:

	<u>Foreign</u>	<u>Local</u>	<u>Total</u>
	- - Rs. 000,000 - -		
Rolling stock and floating equipment	110.0	31.5	141.5
Track	33.5	19.2	52.7
Bridges	10.8	9.2	20.0
Other Engineering Works*	31.1	73.5	104.6
New Construction	<u>5.1</u>	<u>14.7</u>	<u>19.8</u>
Total	190.5	148.1	338.6
(\$ 000,000)	<u>40.0</u>	<u>31.1</u>	<u>71.1</u>

* Including signalling and Rs. 30.5 million for works not involving foreign expenditure.

45. About 22% of the proposed expenditure is for expansion and improvements and charged to capital; the remainder is for replacements and renewals and charged to depreciation. A breakdown of the interim program is contained in Annex VII.

46. Of this interim program the Pakistan Government has requested the Bank to help finance the following items:

<u>Item</u>	<u>Required Foreign Currency in US\$ 000 equivalent</u>
Goods wagons	6,719
Tugs and motor boats	661
Signalling equipment	2,540
Sleepers	2,392
Unallocated	<u>188</u>
Total	<u>12,500</u>

Financing Plan

47. The requirements in foreign currency, amounting to the equivalent of \$ 40.0 million, will be provided from the proposed Bank loan (\$ 12.5 million) and from a loan granted by the Development Loan Fund (\$ 22.0 million). The balance of \$ 5.5 million may be financed by German credits or will otherwise be provided from the Government's own resources.

48. The local currency requirements amount to Rs. 148.1 million. During the two years ending June 30, 1962, the Railways expect to generate about Rs. 330 million in earnings and depreciation charges. This amount more than covers the local currency requirements of the project and will also be sufficient to provide an amount of Rs. 22.3 million, required in local currency for commitments made under the previous loan, and to be spent after June 30, 1960.

The need for the Interim Program

49. The First Five-Year Plan of the Pakistan Government will end June 30, 1960 and is to be followed by a Second Five-Year Plan, to be finalized by the end of 1960. The Railways have appointed a committee to assess future railway traffic and on the basis of this study they will formulate their program as part of the Second Five-Year Plan. Arrangements for the financing of this railway program are unlikely to be completed before June 1961.

50. In the meantime traffic is expected to follow the trend of the last several years and unless measures are taken to keep pace, the present delays in traffic movement will get worse. The interim program is therefore necessary to meet the essential requirements of the Railways in moving the expected traffic during the time needed to draw up and secure financing for their Second Five-Year Program.

51. The Railways, both the NWR and EER, are essential to the economic life of the country. No other form of transportation could substitute for them at anywhere near the same operational cost.

Procurement and Execution

52. The goods to be financed by the Bank will be obtained through international competitive bidding, this being the Railways' general policy for all its imports.

53. In general the Railways' staff is competent to plan and execute the works under the program. For the installation and operation of modern signaling equipment and of the proposed ropeway between Chhatak and Bholaganj outside expert help will be retained.

Conclusions

54. The Railways are well managed and are functioning fairly efficiently. Their financial position is sound. They are essential to the economic life of the country.

55. The Railways' interim program is suitable for Bank financing. A loan of US\$12.5 million equivalent and a term of fifteen years, including a three year period of grace, appear to be justified. The Government would be the borrower since the Railways have no financial autonomy.

ANNEX I

GOODS AND PASSENGER TRAFFIC

North Western Railway 1/

<u>Year</u>	<u>G o o d s</u>		<u>P a s s e n g e r s</u>	
	<u>Million Tons</u>	<u>Million Ton-Miles</u>	<u>Million Passengers</u>	<u>Million Passenger-Miles</u>
1951-52	8.7	2,523.1	79.1	4,360.3
1952-53	9.0	2,756.3	79.7	4,314.0
1953-54	10.1	3,057.9	80.8	4,137.0
1954-55	9.9	2,826.0	85.5	4,366.2
1955-56	10.7	2,874.0	87.2	4,408.7
1956-57	10.9	3,172.9	95.5	4,800.8
1957-58	11.9	3,362.4	103.2	5,106.9
1958-59	12.6	3,557.4	106.3	5,147.3

Eastern Bengal Railway

1951-52	3.6	544.7	50.7	1,807.5
1952-53	3.7	558.3	47.0	1,609.1
1953-54	3.3	508.7	42.2	1,319.4
1954-55	3.3	472.3	45.7	1,373.3
1955-56	3.9	573.7	51.3	1,479.0
1956-57	4.6	708.9	56.8	1,615.1
1957-58	4.5	723.1	58.8	1,611.3
1958-59	5.1	817.3	61.5	1,600.9

1/ Figures for broad and meter gauge only.

UTILIZATION OF EQUIPMENTNorth Western Railway

	<u>1955/56</u>	<u>1956/57</u>	<u>1957/58</u>	<u>1958/59</u>
<u>Goods Stock</u>				
1. Number of vehicles (units)	24,934	24,303	24,538	25,798
2. Percentage of unserviceable wagons daily (in terms of 4-wheelers) to average total number on line	5.9	6.6	7.2	6.7
3. Wagon miles per wagon day (4-wheelers) all wagons	36.3	40.0	41.6	42.6
<u>Coaching Stock</u>				
1. Passenger carriages (units)	1,652	1,685)	2,756	2,823
Other coaching vehicles	1,014	1,027)		
2. Percentage under or awaiting repairs daily (in units) and average total number on line:				
- Passenger carriages	15.9	17.5	16.5	16.2
- Other coaching vehicles	7.3	11.0	8.8	12.5
3. Vehicle miles per vehicle day	155	n.a.	160	166
<u>Locomotive Stock</u>				
1. Locomotives owned:				
a) Diesel	92	98	120	145
b) Steam	733	721	709	706
c) Total	825	819	829	851
2. Percentage under or awaiting repairs daily to total number on line:				
a) Diesel	10.5	10.2)	14.47	17.1
b) Steam	12.1	12.8)		
3. Engine miles per day per engine on line:				
- Diesel and steam	93	99	101	104
4. Engine miles per day per engine in use:				
- Diesel and steam	125	126	131	133
5. Percentage of work done by diesel locomotives to total work done:				
a) Locomotives (percent of total)	9.9	12.8	n.a.	17.0
b) Train miles	26.0	31.7	n.a.	35.0
c) Gross ton-miles	33.9	41.5	n.a.	41.0

UTILIZATION OF EQUIPMENTEastern Bengal Railway

	<u>1955/56</u>		<u>1956/57</u>		<u>1957/58</u>		<u>1958/59</u>	
	B.G.	M.G.	B.G.	M.G.	B.G.	M.G.	B.G.	M.G.
<u>Goods Stock</u>								
1. Number of vehicles (expressed in terms of 4-wheelers)	3,880	15,291	3,861	15,539	3,626	14,130	3,626	13,996
2. Percentage of wagons under or awaiting repairs daily to average total on line	3.6	3.6	2.6	3.1	3.2	1.6	2.9	2.3
3. Wagon miles per wagon day (4-wheelers)	21	14	20	16	20	16	25	17
<u>Coaching Stock</u>								
1. Number of passenger carriages and other coaches	489	1,024	491	1,024	491	1059	481	1,024
2. Percentage under or awaiting repairs daily to average total on lines								
-Passenger carriages	12.7	14.2	15.1	12.3	14.1	13.5	15.7	14.7
-Other coaching vehicles	11.5	13.2	n.a.	n.a.	12.3	10.6	12.8	14.4
3. Vehicle miles per vehicle day	98	104	104	108	108	113	113	116
<u>Locomotive Stock</u>								
1. Number of locomotives on line	133	274 ^{1/}	133	295 ^{2/}	133	303 ^{2/}	133	303 ^{2/}
2. Percentage under or awaiting repairs daily to total number on line	18.2	15.2	15.3	15.7	13.7	14.2	15.3	15.6
3. Engine miles per engine day:								
a) on line) total	64	81	68	n.a.	71	92	77	94
b) in use) steam and) diesel	113	119	113	n.a.	117	130	116	129
c) on line steam	-	68	-	n.a.	-	79	-	81
d) in use steam	-	103	-	n.a.	-	118	-	116
e) on line diesel	-	210	-	n.a.	-	158	-	158
f) in use diesel	-	241	-	n.a.	-	175	-	181

1/ Includes 25 diesel locomotives

2/ Includes 51 diesel locomotives

NORTH WESTERN RAILWAY

Summary Statement of Earnings
(in millions of Rupees)

	Year ended March 31								Year ended June 30 ^{2/}			
	1955	% ^{1/}	1956	%	1957	%	1958	%	1959	%	1960	%
Operating Revenue												
Passenger	131.3	37	136.4	38	148.5	38	158.8	38	204.2	37	171.5	37
Goods	189.5	54	197.1	54	204.9	53	221.2	53	289.2	52	242.4	53
Other	32.2	9	28.2	8	35.8	9	38.9	9	58.6	11	43.5	10
Total	353.0	100	361.7	100	389.2	100	418.9	100	552.0	100	457.4	100
Operating Expenditure												
Administration	28.2	8	31.3	9	32.8	8	32.5	8	45.7	8	37.7	8
Repairs and maintenance	70.0	20	71.1	20	73.5	19	81.6	19	120.6	22	97.5	21
Operating staff	34.9	10	36.3	10	37.2	9	38.1	9	56.1	10	45.2	10
Fuel (operating)	46.7	13	54.1	15	61.7	16	70.9	17	88.8	16	71.7	16
Other Operating Costs	6.0	2	9.1	2	6.2	2	9.2	2	14.4	3	10.8	2
Miscellaneous Expenses	10.1	2	11.2	3	10.8	3	11.4	3	13.9	2	13.4	3
Depreciation	30.7	9	25.2	7	44.0	11	32.2	8	42.7	8	34.3	8
	226.6	64	238.3	66	266.2	68	275.9	66	382.2	69	310.6	68
Net Operating Revenue	126.4	36	123.4	34	123.0	32	143.0	34	169.8	31	146.8	32
Non-Operating Charges												
Int. on Govt. capital	27.1	8	27.9	8	28.8	7	30.2	7	38.6	7	32.0	7
Other	3.7	1	1.8	-	2.9	1	2.9	1	4.9	1	3.2	1
	30.8	9	29.7	8	31.7	8	33.1	8	43.5	8	35.2	8
Net Earnings	95.6	27	93.7	26	91.3	24	109.9	26	126.3	23	111.6	24

^{1/} Expressed as percentage of total operating revenue.

^{2/} Revised budget estimates for fifteen months' period ended June 30, 1959 and budget estimates for twelve months' period ending June 30, 1960.

EASTERN BENGAL RAILWAY

Annex V

Summary Statement of Earnings
(in millions of Rupees)

	Year ended March 31								Year ended June 30 ^{2/}			
	1955	^{1/} %	1956	%	1957	%	1958	%	1959	%	1960	%
<u>Operating Revenue</u>												
Passenger	43.8	39	50.0	39	54.8	38	55.2	36	68.6	36	60.6	37
Goods	51.7	47	63.7	50	71.9	49	76.4	50	101.3	52	81.6	51
Other	15.7	14	14.7	11	19.1	13	21.5	14	24.1	12	19.4	12
Total	111.2	100	128.4	100	145.8	100	153.1	100	194.0	100	161.6	100
<u>Operating Expenditure</u>												
Administration	18.4	17	18.5	14	20.0	14	18.9	12	27.2	14	22.7	14
Repairs and maintenance	34.3	31	38.1	30	39.4	27	41.7	27	50.1	26	42.8	27
Operating staff	20.8	19	20.9	16	21.3	15	21.0	14	30.5	16	23.9	15
Fuel (operating)	13.8	12	10.7	8	17.7	12	18.6	12	25.4	13	19.3	12
Other operating costs	5.0	4	4.3	4	7.0	5	4.4	3	6.8	4	5.0	3
Miscellaneous expenses	7.0	6	6.8	6	6.8	4	8.4	6	10.8	5	12.8	8
Depreciation	16.2	15	13.3	10	22.4	15	16.3	11	20.9	11	17.2	11
	115.5	104	112.6	88	134.6	92	129.3	85	171.7	89	143.7	89
Net Operating Revenue or (Loss)	(4.3)	(4)	15.8	12	11.2	8	23.8	15	22.3	11	17.9	11
<u>Non-operating Charges</u>												
Int. on Govt. Capital	14.3	13	14.6	11	14.9	10	15.2	10	18.9	10	15.7	10
Other	0.6	-	0.3	-	0.5	1	0.3	-	2.2	1	0.3	-
	14.9	13	14.9	11	15.4	11	15.5	10	21.1	11	16.0	10
Net Earnings or (Loss)	(19.2)	(17)	0.9	1	(4.2)	(3)	8.3	5	1.2	-	1.9	1

^{1/} Expressed as percentage of total operating revenue.

^{2/} Revised budget estimates for fifteen months' period ended June 30, 1959 and budget estimates for twelve months' period ending June 30, 1960.

PAKISTAN RAILWAYSForecast of Earnings 1960-65
(in millions of Rupees)

	Year ending June 30				
	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
<u>NORTH WESTERN RAILWAY</u>					
Total Operating Revenue	477.0	487.2	497.4	510.2	522.6
Operating Expenditure	281.8	287.4	294.6	299.8	305.0
Depreciation	35.0	35.6	37.5	39.5	41.5
Total Operating Expenditure	316.8	323.0	332.1	339.3	346.5
Net Operating Revenue	160.2	164.2	165.3	170.9	176.1
Non-operating Charges	35.4	36.6	37.9	39.2	40.5
Net Earnings	124.8	127.6	127.4	131.7	135.6
<u>EASTERN BENGAL RAILWAY</u>					
Total Operating Revenue	160.8	164.5	168.3	173.5	178.3
Operating Expenditure	132.4	134.0	136.4	136.9	138.7
Depreciation	17.5	17.8	18.8	19.8	20.8
Total Operating Expenditure	149.9	151.8	155.2	156.7	159.5
Net Operating Revenue	10.9	12.7	13.1	16.8	18.8
Non-operating Charges	16.8	17.4	18.0	18.7	19.3
Net Earnings or (Loss)	(5.9)	(4.7)	(4.9)	(1.9)	(0.5)

BREAKDOWN OF THE FOREIGN COST OF PAKISTAN
RAILWAYS' INTERIM PROGRAM

(US\$ 000)

Rolling stock and floating equipment:

55 diesel locomotives	9,187
10 locomotive boilers	164
140 passenger carriages	5,201
75 other coaching vehicles	506
2,400 wagons*	6,719
4 railcars and 8 trailers	672
2 tugs and 2 motorboats*	661
	<hr/>
	23,110

Track:

Rails and fittings	4,646
Sleepers*	2,392
	<hr/>
	7,038

Bridges:

Structural steel	2,269
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Other Engineering Works:

Signalling*	2,540
Other works for increase of line capacity	3,235
Diesel shop and equipment	420
Other works	339
	<hr/>
	6,534

New Construction:

Ropeway	420
Other works	651
	<hr/>
	1,071




Total

40,022

* Items to be financed from the proposed Bank loan.

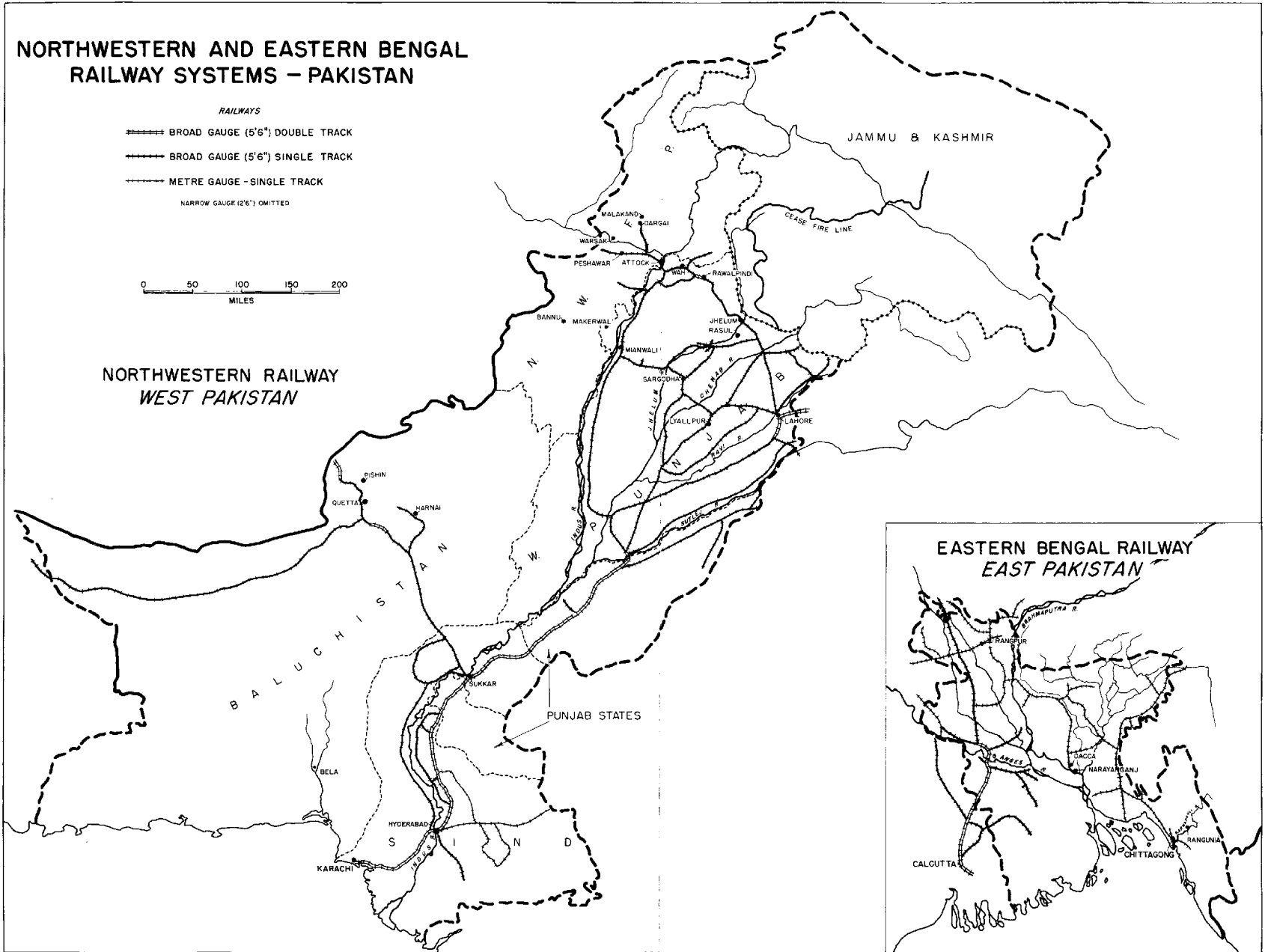
NORTHWESTERN AND EASTERN BENGAL RAILWAY SYSTEMS - PAKISTAN

RAILWAYS

-  BROAD GAUGE (5'6") DOUBLE TRACK
-  BROAD GAUGE (5'6") SINGLE TRACK
-  METRE GAUGE - SINGLE TRACK
- NARROW GAUGE (2'6") OMITTED



NORTHWESTERN RAILWAY WEST PAKISTAN



EASTERN BENGAL RAILWAY EAST PAKISTAN

